CURRENT AFFAIRS WEEKING



MAINS

- GS-I
- **B** SANTHAL REVOLUTION (1855-56)
- GS-II
- **D** SCO SUMMIT 2023
- MARITIME COOPERATION BETWEEN INDIA AND PHILIPPINES
- INDIA REFINERS START YUAN PAYMENTS FOR RUSSIAN OIL IMPORTS
- PANCHAYATS TO GET UPI-ENABLED DIGITAL TRANSACTIONS FACILITY
- WORLD DRUG REPORT 2023
- CONSTRUCTION WORKERS CANNOT BE DEPRIVED OF 'RIGHT TO PENSION'

GS- III

- CENTRE IDENTIFIED 30 CRITICAL MINERALS
- **□** GREEDFLATION
- THE ROAD FROM PARIS TO DUBAI FOR CLIMATE FINANCE
- **□** GOVT IDENTIFIES 9 'DARK

 PATTERNS' ON ONLINE PLATFORMS
- SOLAR RADIATION MANAGEMENT (SRM)

PRELIMS

GEOGRAPHY

- Indian Ocean Geoid Low (IOGL)
- Human existence in Tam
 Pà Ling Cave
- Chennai-Vladivostok Sea Route

INTERNATIONAL RELATIONS

 India, China ramp up infra on north bank of Pangong Tso lake

POLITY &

GOVERNANCE

- Government launches
 Bharat 6G alliance
- National Research
 Foundation
- Government rolls out scheme to help minor rape survivors

ECONOMY

 Cabinet approves PM-PRANAM Yojana

SCIENCE &

TECHNOLOGY

- Webb makes first detection of key carbon molecule
- Scientists see early universe in slow-motion
- Tejas completes 7 years of service
- ESA launches Euclid spacecraft
- CMV and ToMV (mosaic viruses)

ENVIRONMENT

 Deep sea mining permits may be coming soon

NEWS IN SHORT

- Art and Culture
- Kharchi Puja 2023
- Colombo Security Conclave (CSC)
- UN chief appoints Indian-origin satellite expert
- SC sets up Bench to hear pleas against Article 370 abrogation
- Tushar Mehta reappointed as Solicitor General of India
- Capex push sees India Inc's debt rise
- Zombie drug epidemic in US
- India tops global charts for childhood diabetes

- India's largest radio telescope
- Google allows data scraping
- Small Finance Banks (SFBs)
- Wage-price spirals
- Asian Kabaddi Championship 2023
- Alluri Sitarama Raju (1897-1924)
- Dadabhai Naoroji (1825-1917)
- White-rumped vulture (Gyps bengalensis)
- Bald Eagle (Haliaeetus leucocephalus)
- West Bank city
- Cauvery
- Debrigarh Wildlife Sanctuary

SPECIALS

Affirmative Action:
 Democratic Conservatism in India and the US



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- Disclaimer -

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.



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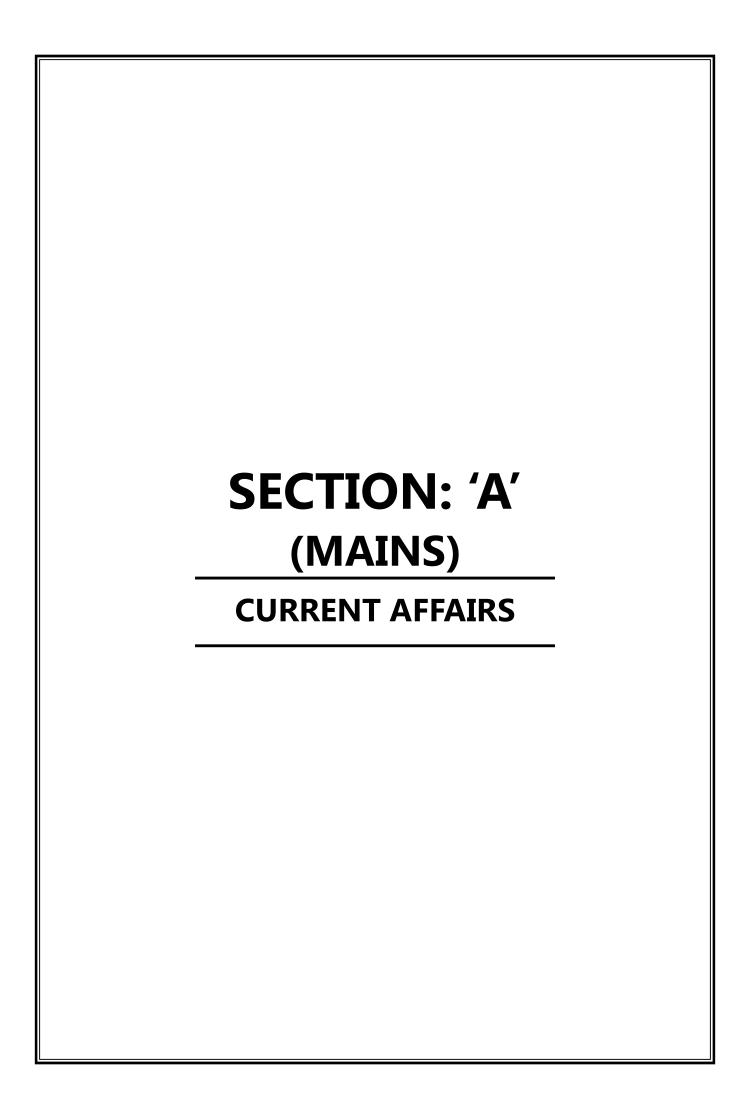


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MAINS





SANTHAL REVOLUTION (1855-56)

Context

The Santhal revolution took place on June 30, 1855.

What was the revolution all about?

Santhal Tribe is the third-largest scheduled tribe community in India after the Gonds and Bhils.

- ♦ The Santhal Hul (revolution) was a tribal revolt and holds a lot of significance to the **Santhal tribe**.
 - ➤ Forefront: At the forefront of it were the Santhal Adivasis and lower-caste peasants.
 - ➤ **Against:** The movement was against the atrocities of the upper-caste landlords, moneylenders, traders, police, and administrative officials from the East India Company in the erstwhile Bengal presidency.
- Led by: Murmu brothers (Sidho Murmu and Kanhu Murmu), Chand and Bhairab

What led to the revolt (Background)?



In the late 1700s, the Santhals were driven out of Birbhum by the wealthy zamindars (landlords) and were forced to settle in an area known as Santhal Parganas which is in present-day Jharkhand.

- They cleared the dense jungles and were provided land for settlement in the foothills for rent.
- Once the land was cleared, their rent was increased by the zamindars and the moneylenders took control of their land and forced them into bonder labour.
- The Santhals believed that since they cleared the land and inhabited it, it belonged to them.
- However, it was not easy to raise their voices against the landlords and moneylenders and the British administration paid no heed to their pleas.

How was the revolution kicked off?

- Beginning: On 30 June 1855, the Murmu brothers (Sidho Murmu and Kanhu Murmu) mobilised around 10,000 people against the zamindars, moneylenders, and British in the village of Bhognadih in present-day Jharkhand.
- Increasing numbers: The Santhals started marching to Calcutta and were joined by other tribes and lowercaste groups.
- Arrest and further spread: A Santhal head man, Harma Desmanjhi, was arrested in Panchkatia in present-day West Bengal and this led to the rebellion spreading further.

How women participated in the revolt?

- The women also played an important role.
- Phulo Murmu and Jhalo Murmu, sisters from the same family, participated in the Hul, inspiring women to join the rebellion.

How did it conclude?

- In the conflict, the tribes fought British troops with bows and arrows.
- In November 1855, martial law was introduced to curb the revolt and the Hul was quashed by early 1856.
- It led to the formation of the Santhal Parganas and the passing of the Santhal Pargana Tenancy Act, 1876, which outlawed the transfer of Adivasi land to non-Adivasis.

| | MAJOR TRIBAL UPRISINGS | | |
|---------------------------|-------------------------------|---|--|
| Year | Year Tribal Uprising Features | | |
| 1776 | Chuar Uprising | It was initiated by indigenous tribespeople of Midnapore , in response to land revenue demands and economic hardships . | |
| 1818- 1831 and 1913 | Bhil Uprising | The Uprising took place in the Western Ghats as a resistance against the rule of the Company. It resulted in the formation of Bhil Raj . In 1913, under the leadership of Govind Guru , the Bhil community reorganized and continued their fight for the establishment of Bhil Raj . | |



| 1820–37 | Ho and Munda Uprisings | The Ho and Munda Uprisings were initiated by the Ho tribals under the leadership of Raja Parahat in the Singhbhum and Chottanagpur regions . These uprisings were in response to the implementation of a new farming revenue policy. Over time, the Ho uprising transformed into the Munda rebellion . | |
|---------------|---------------------------|---|--|
| 1822-29 | Ramosi Uprising | It was led by the Ramosi tribals residing in the Western Ghats. Under the leadership of Chittur Singh, they revolted against the British occupation of the region. | |
| 1829 | Koli Uprising | The Uprising witnessed multiple revolts by the tribal communities of Gujarat and Maharashtra. They rebelled against the control of the East India Company in the years 1829, 1839, and once more during the period of 1844-48. | |
| 1832 | Kol Rebellion | It occurred when the tribal communities of Chottanagpur , led by Buddho Bagat , revolted against the British colonial rule and oppressive money lenders. | |
| 1837-56 | Khond Rebellion | The Rebellion saw the tribal communities residing in the hills from Tamil Nadu to Bengal, led by Chakra Bisoi , rise up against the interference in their tribal customs and the imposition of new taxes. | |
| 1899- 1900 | Munda Rebellion | It involved the tribal population of the Chotanagpur area who, under the leadership of Birsa Munda, revolted against the 'Dikus' (a term used to refer to outsiders or non-tribal people). | |
| 1879-80 | Koya Uprising | The Uprising witnessed the tribal communities of the eastern Godavari region, led by Tomma Sora and Raja Annantyar , rebelling against the oppressive actions of the police and moneylenders. | |
| 1910 | Bastar Revolt | The Revolt was staged by the tribal population of Jagdalpur as a protest against the imposition of new feudal and forest levies. | |
| 1921-22 | Chenchus Uprising | The Uprising took place when the tribal community of Nallamalla Hills , led by K. Hanumanthu , revolted against the forest laws imposed by the British authorities. | |
| 1922-24 | Rampa Rebellion | It was led by Alluri Sitaraman Raju, a member of the Koya tribe in Andhra Pradesh. The rebellion was launched in response to British interference in the region. | |

Important Leaders

- Birsa Munda: spearheaded an Indian tribal religious Millenarian movement during British rule in the late 19th century across the tribal belt of modern-day Jharkhand and Bihar.
- Shaheed Veer Narayan Singh: Considered the Pride of Sonakhan in Chhattisgarh, he looted trader's grain stock and distributed them amongst the poor after the 1856 famine. He became the first martyr from Chhattisgarh in the independence struggle of 1857.
- Shri Alluri Seetha Ram Raju: Best remembered for leading the Rampa Rebellion against the British in which he organised the tribal people of Visakhapatnam and East Godavari districts to revolt against the foreigners.
- Rani Gaidinliu: He was a Naga spiritual and political leader who led a revolt against British rule in India.



SCO SUMMIT 2023

Context

India hosted leaders of the Shanghai Cooperation Organization for a virtual summit. The virtual summit under India's presidency was attended by leaders of Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Iran as well.

Major highlight from PM Modi's address at SCO:

- ♦ **Terrorism:** Prime Minister Narendra Modi gave a clarion call for SCO member nations to stand against terrorism for regional and global peace.
- India's AI-based language platform Bhashini at SCO: He also talked about the impact of language barrier on the functioning of multi-nation platforms

like SCO, and how India's AI-based language platform Bhashini will help overcoming the obstruction. He said that Bhashini can become an example of digital technology and inclusive growth.

- Opportunities for youngsters from SCO: He mentioned about platforms like the Young Scientist Conclave, Authors Conclave, Startup Forum, and Youth Council.
- Five pillars of cooperation within the SCO: PM elaborated upon the role of India in establishing five pillars of cooperation within the SCO. The five pillars he mentioned were Startup and innovation, traditional medicine, youth empowerment, digital inclusion, and shared Buddhist heritage.
- Food, fuel and fertiliser big challenge for world: In his opening remark, PM Modi mentioned the major challenge of food, fuel and fertilisers lying ahead of all the countries in the world that are surrounded by controversies, tensions and epidemics. He called for united efforts to deal with such problems.

What is 'New Delhi declaration'?

- SCO members adopt 'New Delhi declaration'.
- "New Delhi declaration" coined by the Indian government proposed at SCO summit to fight against terrorism.
- ♦ It also proposed four other joint statements on
 - ▶ de-radicalisation
 - sustainable lifestyle to tackle climate change
 - production of millets
 - > digital transformation



What is India's take on BRI?

India once again refused to endorse China's Belt and Road Initiative, becoming the only nation at the Shanghai Cooperation Organisation (SCO) summit not to sign an agreement in support of the ambitious project. All member nations barring India supported China's BRI in a joint declaration.

The declaration issued at the end of the summit, hosted by India, said Russia, Pakistan, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan and Uzbekistan reaffirmed their support for the BRI.



MARITIME COOPERATION BETWEEN INDIA & PHILIPPINES

Context:

Recently, the External Affairs Minister of India attended 5th meeting of the Joint Commission on Bilateral Cooperation with Philippines where his counterpart Enrique Manalo mentioned that there is a lot of scope for expansion of defence cooperation between both the countries especially in maritime security, including the potential for joint sales as well as joint patrols.

Highlights of the meet:

- Both the nations looked at expanding cooperation in existing domains like the economy, defence, education, people-to-people relations, antiterrorism measures, and maritime cooperation.
- They discussed for expansion of new areas including cyber security, artificial intelligence, and space cooperation.
- **♦ Focus on Defence cooperation:**
 - ➤ The key dialogue was cooperation through training courses, greater military exchanges and in future joint exercises, the source said, stressing that it was a process which would continue and not be limited to single sales of equipment.
- Shared view on Indo-Pacific: They took up common cause against China's long-running territorial claims in the South China Sea, asserting shared interest in a "free, open and inclusive" Indo-Pacific.
- Adherence to international law: India joined the Philippines in calling for adherence to international law, namely
 - the United Nations Convention on the Law of the Sea
 - A 2016 international arbitration ruling in Manila's favour and against Beijing's claims of large swathes of the **South China Sea**. Beijing's claims in the South China Sea centre on a **nine-dash line** surrounding several islands and waters of disputed sovereignty. The 2016 ruling in the Hague case rejected the legality of the nine-dash line.



UN Convention on the Law of the Sea

• The UN Convention on the Law of the Sea, an international agreement first adopted in 1982, lays out rules governing all uses of the oceans and their resources, including freedom of navigation.

 With 169 parties, UNCLOS prescribes a 200-nautical-mile exclusive economic zone from the continental coast of a sovereign state.

• The US is not a signatory to UNCLOS.

South China Sea (part of global commons)

- The South China Sea, an arm of the western Pacific Ocean in Southeast Asia, south of China, east and south of Vietnam, west of the Philippines and north of the island of Borneo.
- Nine dash line represents the median line between the islands within the South China Sea and the large landmasses comprising the sea's littorals.



- On Maritime Cooperation: Both nations emphasized the utility of Maritime Domain Awareness (MDA).
 - It is defined by the International Maritime Organization (IMO) as the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment.
 - The maritime domain is defined as "all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo, and vessels and other conveyances."

Indian naval ships **INS Ranvijay and INS Kora** are currently deployed to the Western Pacific with an aim to strengthen maritime security collaboration with partner nations.

- On Economic cooperation: Both the countries agreed to renegotiate their bilateral investment promotion and protection agreement.
- On Peace and regional stability: They also underlined the need for peaceful settlement of disputes and for adherence to international law, especially the United Nations Convention on the Law of the Sea (UNCLOS) and the 2016 Arbitral Award on the South China Sea.
- On Technology Transfer:
 - India also agreed for exchange of intelligence and Technology related to cyber security and cyber threats to Philippines.
 - ➤ The Philippines concluded a **375 million dollars** deal with India for the purchase of **three batteries** of the shore-based anti-ship variant of the **BrahMos supersonic cruise missile**.

India-Philippines relations:

India and the Philippines have Sixty years of diplomatic relations, celebrated in 2009.



- When India launched, the Look East Policy and intensified partnership with ASEAN in the early 90s, this also resulted in intensified relations with countries in the region including Philippines, both bilaterally and as a regional grouping.
- The relationship with Philippines has intensified since then in political-security; economic and people-topeople interactions.

India is the **fifteenth largest trading partner** for the Philippines, with trade worth around **\$3 billion last year**.

Coupled with current developments in the Philippines, the stage appears to be set for a further intensification in bilateral relations, covering the broad canvas of consultations and cooperation on matters related to foreign policy, security, defence, trade, tourism, people-to-people relations and culture.



Furthermore, strengthened ASEAN-India relations have had a positive impact on bilateral relations, especially with accelerated impetus given to trade and investment.



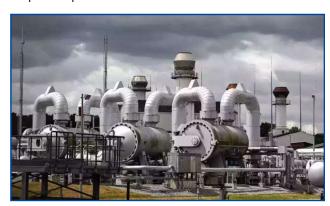
INDIA REFINERS START YUAN PAYMENTS FOR RUSSIAN OIL IMPORTS

Context

Indian refiners have reportedly started using Chinese yuan to pay for some of their oil imports from Russia. This shift comes as Western sanctions against Moscow and its customers make it necessary to find alternatives to the US dollar for settling payments.

Background

India has become a top customer of Russia's crude, alongside China, after the Western sanctions and the price cap on Russian oil.



- India's crude oil imports from Russia are estimated to have hit a new record high of 2.2 million barrels per day (bpd) in June, having risen in 10 consecutive months.
- More than a year since the Russian invasion of Ukraine began, India has turned from a marginal buyer of Russian crude to the most important market for Moscow's oil alongside China.

The changing payment method

- Traditionally, the US dollar has been the dominant currency for global oil transactions, including those made by India.
- The first preference of the Indian refiners is to pay in U.S. dollars, but if that's not possible, for example, banks unwilling to settle trades with Russia in dollars, payments in other currencies are being made, such as in UAE dirhams or Chinese yuan.
- The yuan payments for Russian crude oil are part of both Russia and China's efforts to sideline the U.S. dollar as the currency of choice in international trade.

Will India continue to use yuan?

- Unfavourable exchange rate: The refiners are unlikely to use the yuan for multiple cargoes from Russia as higher demand for the currency will make the exchange rate unfavourable.
- Unnecessary promotion of Chinese currency: Selling dollars to buy yuan would also result in India effectively helping China further its currency agenda, potentially a politically unpalatable step.

Is the world moving towards de-dollarisation?

De-dollarisation refers to the replacement of the U.S. dollar by other currencies as the global reserve currency.

- The emergence of parallel currencies in international trade has fuelled the ongoing heated debate over de-Dollarization, with recent events providing additional ammunition to those critical of US dominance.
- Countries are increasingly seeking to reduce their reliance on the US dollar.
 - ► **Examples** include China and France's yuan-settled LNG trade, Russia turning to China's yuan amid geopolitical tensions, and China and Brazil's deal to trade in their own currencies.

| | HOW WOULD IT IMPACT (IF BECOMES REALITY)? | | | | | | |
|---|---|---|--|--|--|--|--|
| | Positive side | Negative side | | | | | |
| • | exporters and importers to balance risks have more certainty about the revenues and sales diversified risks strengthened national currencies increased monetary policy independence reduced vulnerability to US sanctions | erosion of the US dollar's dominance emergence of parallel currencies impact on a country's networking effect and create substantial barriers heavy toll on countries reliant on imported essentials (fuel and food), rendering them exorbitantly expensive transition challenges, potential short-term instability limited global acceptance of alternative currencies | | | | | |





PANCHAYATS TO GET UPI-ENABLED DIGITAL TRANSACTIONS FACILITY

Context: As per the letter issued by the Panchayati Raj Ministry, all Panchayats across the country will mandatorily use digital payments for development work and revenue collection and become fully UPI-enabled.

What is the need?

- Universal coverage of digital payments: Nearly 98% of panchayats have already begun using UPIbased payments.
 - Payments worth approximately Rs 1.5 lakh crore have been processed through the Public Financial Management System (PFMS).
 - ➤ Contribution of rural and peri-urban areas in digital transactions is around 50 per cent.
- The government has planned to create a centralised dashboard for monitoring transactions in real time of digital transactions in Panchayats.
- Significance: It will help in checking corruption in Panchayats.

Public Financial Management System (PFMS)

- It is a web-based application for payment, accounting and reconciliation of Government transactions and integrates various existing standalone systems.
- Aim: To bring in better transparency and strengthening of the e-Governance in Panchayati Raj Institutions (PRIs) across the country through decentralized planning, progress reporting and work-based accounting.

How would this development benefit?

- Harness Internet users: Rural India is expected to leapfrog urban India and constitute nearly half of all Indian internet users by 2020.
- Help for easy access to services: Digitisation can facilitate some of the key needs of rural India including e-governance services, banking and financial services, educational and healthcare services, mobile/DTH recharge, e-ticketing services, online shopping, etc.
- Boosting rural entrepreneurship: Over 10 years ago, the government, through its flagship National e-Governance Plan, envisaged to empower rural citizens by making available various government services to them via electronic media and created

access points, i.e. common service centres run by **village-level entrepreneurs (VLEs)** at the village and gram Panchayat level.

Government Steps taken in the direction:

- Digital India Campaign: Digital India is a campaign launched in 2015. The motto of the campaign is "Power to empower". The initiative includes plans to connect rural areas of India within the circumference of high-speed internet networks
- e-Panchayat Mission Mode Project (MMP): Under Digital India Programme, Ministry is implementing e-Panchayat MMP with the aim to transform the functioning of Panchayati Raj Institutions (PRIs) by making them more transparent, accountable, and effective.
- eGramSwaraj: Building on the achievements in the past, the Ministry launched eGramSwaraj, a workbased comprehensive application for PRIs under the e-Panchayat Mission Mode Project on 24th April 2020.
- Pradhan Mantri Gramin Digital Saksharta Abhiyan: The Scheme is aimed at empowering the citizens in rural areas by training them to operate computers or digital access devices.
- SAMARTH Campaign: Under the SAMARTH Campaign, the government seeks to foster the adoption of digital transactions in 50,000 Gram Panchayats across India.

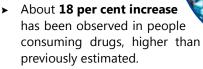


WORLD DRUG REPORT 2023

Context: Recently, the World Drug Report 2023 was launched by the UN Office on Drugs and Crime (UNODC).

Key Highlights:

New estimates of people who inject drugs are higher than previously estimated as treatment services and other interventions fall short, including for record numbers of displaced people due to humanitarian crises.



➤ Globally, over **296 million people used drugs in 2021,** an increase of 23 per cent over the previous decade.



MAINS

CURRENT AFFAIRS
WEEKLY

 "Cheap and easy" synthetics changing drug markets was found.

- Drug trafficking accelerated environmental devastation and crime in the Amazon Basin.
- More monitoring of public health impacts needed amid rapid regulatory changes and clinical trials with psychedelics was poor.
- The report also highlights how social and economic inequalities drive – and are driven by – drug challenges; the environmental devastation and human rights abuses caused by illicit drug economies; and the rising dominance of synthetic drugs.
- Youth populations are the most vulnerable to using drugs and are also more severely affected by substance use disorder in several regions.
 - ➤ In Africa, 70 per cent of people in treatment are under the age of 35.

According to **World Drug Report 2022**, India has the **fourth largest quantity of opium seized** in 2020 at 5.2 tons and the **third-highest amount of morphine** was also seized in the same year at 0.7 tons.

Drug menace in India:

Types of Drugs:

- They are **chemical substances** that affect the normal functioning of the **body and/or brain**.
- In 2016, 6 drug types accounted for nearly all drug trafficking offenses:

Methamphetamine: 33.6%

Cocaine: 19.8%
 Marijuana: 17.6%
 Heroin: 14.4%
 Crack: 8.1%

➤ Oxycodone: 2.8%

➤ Other: 3.7%

- India is sandwiched between two largest Opium producing regions of the world that is the Golden triangle on one side and the Golden crescent on other
 - ➤ The golden triangle area comprises Thailand, Myanmar, Vietnam and Laos.
 - ➤ The golden crescent area includes Pakistan, Afghanistan and Iran.
- India is one of the world's single largest opiate markets in terms of users and would likely be vulnerable to increased supply.
- This is because of the intensification of trafficking in opiates originating in Afghanistan may be taking

place eastwards, in addition to southwards and westwards along the traditional Balkan route.

Why controlling drug menace is difficult?

- Over the counter and easy availability
- Porous international borders
- ♦ **Detached lifestyles**: loss of morals and family support
- Variation in Drug control Policy: Cultivation and sale of opium poppy husk is legal in Rajasthan and Madhya Pradesh, accounting for the presence of these two substances in abundance in the districts near Rajasthan, such as Bathinda, Fazilka and Mansa.
- There is hardly any coordination among the police, the BSF, and the state and central intelligence agencies for curbing the problem.

Efforts to combat drug problem:

- Narcotics Drugs and Psychotropic Substance (NDPS) Act, 1985: It prohibits a person from producing, possessing, selling, purchasing, transporting, storing, and/or consuming any narcotic drug or psychotropic substance.
 - ➤ The NDPS Act has since been amended thrice in 1988, 2001 and 2014.
- Nasha Mukt Bharat: The 'Nasha Mukt Bharat', or Drug-Free India Campaign which focuses on community outreach programs.
- National Action Plan for Drug Demand Reduction (NAPDDR) is an umbrella scheme of the Ministry of Social Justice & Empowerment (MoSJ&E) under which financial assistance is provided to State Governments/ Union Territory (UT) Administrations for Preventive Education and Awareness Generation.
- Global stance: India is signatory of the following international treaties and conventions to combat the menace of Drug Abuse:
 - United Nations (UN) Convention on Narcotic Drugs (1961)
 - ► UN Convention on Psychotropic Substances (1971)
 - ➤ UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988)
 - ► UN Convention against Transnational Organized Crime (UNTOC) 2000.

UN Office on Drugs and Crime (UNODC):

- The agency's focus is the trafficking and abuse of illicit drugs, crime prevention and criminal justice, international terrorism, and political corruption.
- It is a member of the United Nations Development Group.







CONSTRUCTION WORKERS CANNOT BE DEPRIVED OF 'RIGHT TO PENSION'

Context:

Recently, the Delhi High Court has ruled that, Construction workers cannot be deprived of their right to pension "merely due to hyper-technical issues" or requirements such as "production of original MR Slips or serial number of the notary records".

Construction workers in India:

The building and other construction workers (BOCW) are the most vulnerable segment of the unorganized sector workers in India.

- They work under aggravating conditions with uncertain future.
- A large chunk of them are migrant labourers working in different states far away from their native places.
- They play a significant role in nation-building yet find themselves on the margins of the society.

Key-highlights of the ruling:

- The observations were made while granting relief to a construction worker who had applied to the **Delhi Building and Other Construction Workers Welfare board** for release of her pension as per **Rule 372** but the pension benefits were not released.
- The application for pension of the petitioner was rejected on the ground that she was not a member of the Board on the 'date of superannuation'.
- The Petitioner in this petition fulfilled the conditions laid down in the Act and the Rules for release of pension and other benefits.
- Reviewing the situation, court mentioned that the period of contribution extended by beyond her retirement or that the renewal of membership was done after the age of superannuation cannot lead to the denial of pensionary benefits.

The BOCW boards are meant to **carry out welfare activities for workers** from the cess on construction collected by States.

- The court also observed that "The Delhi (Right of Citizen to Time Bound Delivery of Services) Act, 2011, entry 372, specifies 30 days as the period during which the pension application has to be processed.
- ♦ The SOP of the **BOCW Board** stipulates disposal within 60 days.
- Thus, it is clear that once a pension benefit application is made by the construction worker, bearing in mind the financial status of such workers, the said application ought to be processed without any delay.
- Accordingly, there is **no justification** for not processing the application for pension of the Petitioner.

Basis of Judicial Intervention:

For Fundamental Rights –
The exclusion of gig workers
from the category of
unorganised workers
violates their
fundamental rights
under Articles
14 and 21 of the
Constitution.

♦ Against Forced labour – Denial of social benefits amounts to exploitation through forced labour, within the meaning of Article 23.

About the Building and Other Construction

Workers Act, 1996: Enacted to regulate the employment and conditions

- **of service** of these workers and to provide for their safety, health and welfare measures.
- Under the Act, the State Governments through their State Welfare Boards are mandated to frame and implement welfare schemes for construction workers.
- The fund, under the legislation, comprises the Cess @1% of construction costs which is levied and collected by the State Governments and remitted to the Welfare Fund.

What is the proposed law for gig workers?

- National Commission on Labour It recommended to consolidate central labour laws.
 - Hence, the Ministry of Labour and Employment introduced the Code on Social Security,
 2020 which brings workers within the ambit of labour laws for the first time.
- Social Security Schemes The Code stipulates that Central and State Governments must frame suitable social security schemes for gig workers.



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The Code also mandates the compulsory registration of all gig workers to avail of benefits under these schemes.

National Social Security Board – The Code also envisages the constitution of a National Social Security Board by the Central government to monitor the implementation of such schemes.



CENTRE IDENTIFIED 30 CRITICAL MINERALS

Context:

The Centre recently released a list of '30 critical minerals' that it considers essential for economic development and national security of the country.

Key-highlights:

- The list of thirty critical minerals, was identified in a report titled "Report of the Committee on Identification of Critical Minerals" prepared by an expert team constituted by the Ministry of Mines.
- Measures for capacity building: The report also recommends measures for capacity building in the emerging sector of critical minerals.

CSIRO is the largest minerals research and development organisation in Australia and one of the largest in the world.

- Centre of Excellence on Critical Minerals: Establishing a 'National Institute' or 'Centre of Excellence on Critical Minerals' on the lines of Commonwealth Scientific and Industrial Research Organisation (CSIRO).
 - CECM will periodically update the list of critical minerals for India, preferably every three years, and notify the critical mineral strategy from time to time.

What is a Critical Mineral?

- A mineral is labelled as critical when the risk of supply shortage and associated impact on the economy is (relatively) higher than the other raw materials.
- Put simply, the report defines critical minerals as "those minerals which are essential for economic development and national security, the lack of availability of these minerals or even concentration of existence, extraction or processing of these minerals in few geographical locations may lead to supply chain vulnerability and disruption".

What are the selected elements?

The elements/minerals selected as critical have either high economic importance, high supply risk, or have both parameters high.

| 1. | Antimony | 15 | Nickel | • | Neodymium | 20 | Rhenium |
|-----|------------|-----|--------------|---|------------|-----|-----------|
| 2 | Beryllium | 16 | PGE | • | Promethium | 21 | Seelenium |
| 3. | Bismuth | • | Platinum | • | Samarium | 22 | Silicon |
| 4. | Cadmium | • | Polladium | • | Europium | 23. | Strontium |
| 5. | Cobalt | • | Rhodium | • | Gadolinium | 24. | Tantolum |
| 6. | Copper | • | Ruthenium | • | Terbium | 25. | Tellurium |
| 7. | Gallium | • | Iridium | • | Dysprosium | 26. | Tin |
| 8 | Germanium | • | Osmium | • | Holmium | 27. | Titanium |
| 9. | Graphite | 17. | Phosphorous | • | Erbium | 28. | Tungsten |
| 10. | Hafnium | 18. | Potash | • | Thulium | 29. | Vanadium |
| 11. | Indium | 19. | REE | • | Ytterbium | 30. | Zirconium |
| 12. | Lithium | • | Lanthanum | • | Lutetium | | |
| 13. | Molybdenum | • | Cerium | • | Scandium | | |
| 14. | Niobium | • | Praseodymium | • | Yttrium | | |

- A total of 30 minerals were found to be most critical for India, out of which two are critical as fertiliser minerals:
 - Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium,

Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium and Cadmium.



Import-dependence

Ten minerals on the list are 100 per cent importdependent. These are lithium cobalt, nickel, vanadium, niobium, germanium, rhenium, beryllium, tantalum, and strontium.

| MINERAL | MAJOR APPLICATION |
|-----------|---|
| Lithium | Rechargeable batteries, ceramics |
| Cobalt | Rechargeable batteries and superalloy |
| Nickel | Stainless steel, superalloys, rechargeable batteries |
| Vanadium | Alloying agent for iron and steel, batteries |
| Niobium | Steel and superalloys, construction, transportation |
| Germanium | Fiber optics and nigh vision applications |
| Rhenium | Superalloys, aerospace and machinery use |
| Beryllium | Alloying agent in aerospace and machinery use |
| Tantalum | Electronic components, mostly capacitors and in superalloys |
| Stronium | Aluminium pigments and fillers, gas, magnets |

The need

- Required to fulfil requirements and commitments: India needs vast amounts of these minerals for meeting its requirements for energy transition and net-zero commitments.
- Strategic value chains: Critical Minerals forms part of multiple strategic value chains, including clean technologies initiatives such as zero-emission vehicles, wind turbines, solar panels; information and communication technologies, including semiconductors; and advanced manufacturing inputs and materials such as defence applications, permanent magnets, and ceramics.
- Critical for major sectors: Similarly, certain other elements are critical for progress in electronics, defence and agriculture sector.
- Required for effective policy formulation: In the absence of a list of minerals critical for the country, it has been difficult to formulate policy measures to secure the country from supply chain vulnerability of these minerals.
- To deal with global market dynamics: One of the key challenges in the critical mineral supply chain lies

in the global market dynamics, which can result in **price volatility and supply disruptions**.

India's exploration Update:

- The Geological Survey of India, an attached office of Ministry of Mines, has carried out a G3 stage mineral exploration (fairly advanced) in Salal-Haimna areas of Reasi district, Jammu & Kashmir, and estimated an inferred resource of 5.9 million tonnes of lithium ore.
- Lithium reserves were also discovered on Revant hill in **Degana in Rajasthan's Nagaur district** by the GSI. It is believed that these reserves can meet 80% of the country's demand.

Critical Minerals in major economies:

- The US has declared 50 minerals critical in light of their role in national security or economic development.
- The UK considers 18 minerals critical, the European Union has declared 34 minerals critical, and Canada and Japan 31 each.
- Australia has 26 critical minerals.
 - ➤ India-Australia Critical Minerals Investment Partnership: India and Australia recently decided to strengthen their partnership in the field of projects and supply chains for critical minerals. Australia will commit 5.8 million dollars to the three-year India-Australia Critical Minerals Investment Partnership.



GREEDFLATION

Context

During a recent surge in inflation, the prices of tomatoes have experienced a significant increase within a month, affecting multiple cities in India the most. Although there is a reasonable explanation for this price surge, some speculate that it could be attributed to a phenomenon known as 'greedflation'.



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What is Greedflation?

Greedflation is currently on the rise in the United States and is one of the primary reasons why prices are being driven up in the country.

- ♦ In basic terms, is the inflation and hike in prices not driven by economic flow, but by corporate greed.
- It is termed as the inflation in prices of basic commodities which is driven by the companies to increase their profit margins.
- Greedflation simply means big corporations squeezing out money from customers by jacking up the prices of their products, only to increase their profit margins.

Other related terms

- **Disinflation** refers to the trend when the inflation rate decelerates. Suppose it was 10% in April, 7% in May and 5% in June.
- **Deflation** is the exact opposite of inflation. Imagine if the general prices level in June was 5% lower than what it was in June last year. That's deflation.
- Reflation typically follows deflation as policymakers try to pump up economic activity either by government spending more and/or interest rates being reduced.
- Shrinkflation: It refers to a reduction in the quantity or quality of a product while the price remains the same. Production costs increase to a lesser extent while e-commerce businesses maintain the same retail price.

Is greedflation happening in India?

- Greedflation is on the rise in the United Kingdom and the US, but has not taken a fast pace in India yet.
- Nowever, due to the increasing privatization of

industries in India, it is likely that greedflation will make its entry into the country soon if the government doesn't regulate the prices to prevent the gouging out of customers.



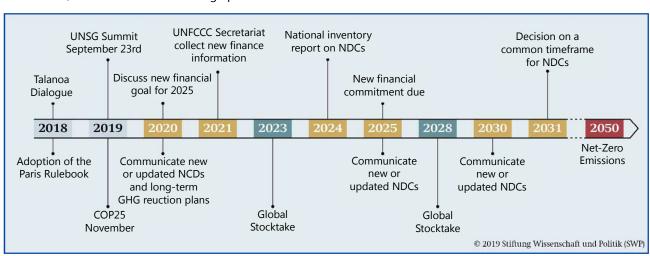
THE ROAD FROM PARIS TO DUBAI FOR CLIMATE FINANCE

Context:

In a two-day summit in Paris involved 40 world leaders where a plan to overhaul the world's financial system to tackle climate change and poverty and left work for negotiations schedule leading up to the UN COP28 summit in Dubai.

Highlights of the Paris summit:

- The Paris summit ended recently and failed to address the underlying problems and preventing developing countries from investing in development and climate measures.
- Developing nations called for a "transformation" of the world's financial system where the French President called for a New Global Financing Pact.
- The International Monetary Fund mentioned that it reached a target of making 100 billion dollars in special drawing rights (SDRs), a reserve currency, available to climate-vulnerable countries.
- Also the World Bank said developing nations hit by climate disasters would be able to suspend debt repayments.
- Rich countries announced a 2.5 billion Euros clean energy agreement with Senegal and Zambia struck a deal to restructure 6.3 billion dollars of its debt.



Upcoming Dubai Summit (UN COP28):

The 28th Conference of the Parties on Climate Change (COP 28) will take place in Dubai from November 30 to December 23, 2023.

This international conference will bring together the signatory countries of the United Nations



Framework Convention on Climate Change as well as climate actors.

Hosted by: United Arab Emirates, will host 28th Conference of Parties (COP28).



- The UAE will take over the UN climate talks presidency from Egypt at the end of November when it will host the summit on the site of the Dubai Expo.
- The UAE, the first country in the region to ratify the 2015 Paris Agreement, has committed to reach net zero emissions by 2050.

♦ Objectives:

- ➤ Calls for Action and Investment in Climate Resilient Health Systems:
- ➤ The anticipated Health Day at COP28 is expected to stimulate an impartial increase in climate action and guarantee the establishment of a future where people can prosper.
- ➤ Direct damage costs to health are estimated to be between 2-4 billion dollars per year by 2030, according to the World Health Organization (WHO).
- ➤ The WHO has also highlighted the dangerous climate and health nexus, emphasizing that the effects of global warming will accelerate unless there is action to tackle the root cause of climate change.
- ➤ These factors make it critical to adopt strategies to mitigate the impact of climate change, such as investing in climate resilient health systems and having a well-trained and decentrally paid health workforce.

Green Initiatives by UAE:

- In its announcement **about al-Jaber**, more than \$50bn in renewable energy projects across 70 countries, with plans to invest a minimum of 50bn dollars over the next decade.
- Al-Jaber also led green initiatives including a \$22bn "carbon-neutral" city on Abu Dhabi's outskirts.
 The project was halted after the global financial crisis that struck the Emirates hard beginning in 2008.



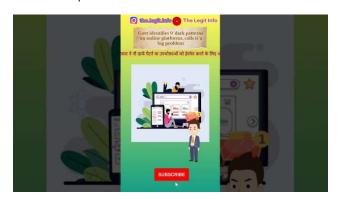
GOVT IDENTIFIES 9 'DARK PATTERNS' ON ONLINE PLATFORMS

Context

The government has identified nine 'dark patterns', or tactics used by online platforms to manipulate consumers. The Centre has asked e-commerce companies to not use "dark patterns" on their platforms that may deceive customers or manipulate their choices.

What are dark patterns?

Dark patterns, also known as deceptive patterns, is the term used to describe the ways in which websites or apps make their users do things that the users do not intend to do or would not otherwise do, as well as to discourage user behaviour that is not beneficial for the companies.



Some patterns include

- creating a false sense of urgency
- ► adding products to the cart without consent
- forcing users to sign-up to access content
- confirm shaming
- hidden costs and nagging
- The term dark patterns was coined by Harry Brignull, a London-based user experience (UX) designer, in 2010.

Examples of dark patterns

- The Internet is replete with examples of dark patterns.
- Think of that annoying advertisement that keeps popping up on the screen, and one can't find the cross mark 'X' to make it go away because the mark is too small to notice (or to click/ tap). Worse, when one try to click/ tap on the tiny 'X', they sometimes end up tapping the ad instead.



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What are types of dark patterns?

The Consumer Affairs Ministry has identified nine types of dark patterns being used by e-commerce companies.

- ♦ **False urgency:** Creates a sense of urgency or scarcity to pressure consumers into making a purchase or taking an action.
- Basket sneaking: Dark patterns are used to add additional products or services to the shopping cart without the user's consent.
- Confirm shaming: Uses guilt to make consumers adhere; criticises or attacks consumers for not conforming to a particular belief or viewpoint.
- ♦ **Forced action:** Pushes consumers into taking an action they may not want to take, such as signing up for a service in order to access content.
- Nagging: Persistent criticism, complaints, and requests for action.
- Subscription traps: Easy to sign up for a service but difficult to quit or cancel; option is hidden or requires multiple steps.
- Bait & switch: Advertising a certain product/ service but delivering another, often of lower quality.
- Hidden costs: Hiding additional costs until consumers are already committed to making a purchase.
- Disguised ads: Designed to look like content, such as news articles or user-generated content.



SOLAR RADIATION MANAGEMENT (SRM)

Context

The United States is eyeing a controversial tool to counter global warming: Solar radiation management (SRM), which involves reflecting a small fraction of sunlight into space.

What is solar radiation management (SRM)?

Aerosols are tiny particles suspended in a gas form which reduce the heat intensity.

- The Solar radiation management (SRM) is part of a controversial concept called 'geoengineering'.
- SRM aims at injecting the atmosphere with aerosols or using giant mirrors to reflect the sunlight back.
- By reducing the load of greenhouse gas (GHG) emissions, the SRM is being sold as a futuristic

technology that will reduce soaring temperatures in Africa to make it relatively cooler.

- Popular theoretical ideas for SRM include:
 - modifying cloud structures
 - spraying aerosols into the stratosphere



What is Geoengineering?

- 'Geoengineering' literally means interventions that change the way the Earth's systems work.
- Category: Geoengineering is broadly divided into two categories —
 - technologies for capturing carbon (carbon dioxide removal)
 - methods for managing how much of the Sun's heat reaches the Earth
 - preventing the Sun from heating up the Earth (solar radiation management)
 - removing heat from the Earth's atmosphere into space (Earth radiation management)

What is the need?

- The call to pursue geoengineering is spurred by the urgency of tackling the fallout of climate change.
- As the world continues to heat, with no end in sight for fossil fuel emissions, solar and other forms of geoengineering are starting to occupy more mainstream space in climate discussions.

Marine Cloud Brightening (MCB)

- Clouds are natural umbrella (white), they reflect sunlight, keeping the Earth cool.
- Clouds that are present above the oceans cool the surface below substantially.
- There are proposals to further "whiten" these clouds and expand their cover, through a process called marine cloud brightening (MCB).

Is it regulated?

 Ideas associated with geoengineering have not been tested or executed yet.



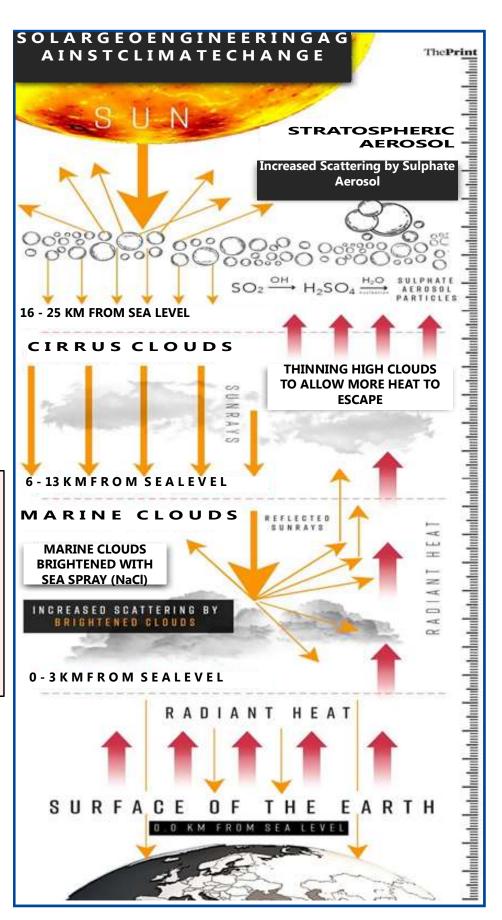
 A draft EU report had flagged the risks associated with geoengineering and called for talks towards an international framework to govern such technologies.

How would it impact?

- This is not only dangerous but also frightening and inequitable.
- By dimming the incoming sunlight can upset the anthropogenic equilibrium and, thereby, have a devastating impact by way of:
 - ▶ disrupting monsoons
 - altering cropping patterns
 - causing unforeseen problems for the local and regional biodiversity
 - extended droughts and incessant rains

Major processes of natural SRM

- Planting more plants, especially suitable ones with lighter coloured leaves
- Increasing the coverage of water ice. Sea ice is the best known natural surface for reflecting light and heat, sending back nearly 90 percent of energy.







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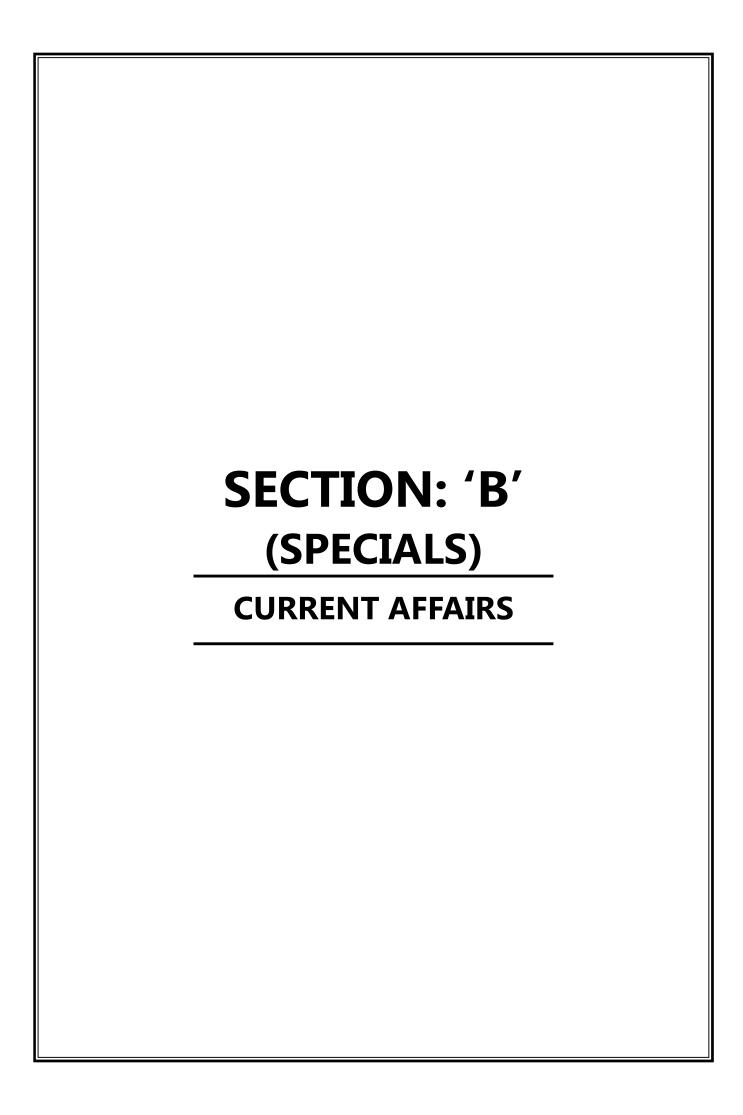


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SPECIALS





AFFIRMATIVE ACTION: DEMOCRATIC CONSERVATISM IN INDIA & THE US

Context: The Supreme Court of the United States of America has decided to strike down raceconsciousness in college admissions and mentioned that 'race' can no longer be considered as a factor in university admissions.

This decision marks a departure from long-standing US policies on "affirmative action", also known as positive discrimination, and has ignited widespread debate.

What is an Affirmative action?

- In the context of higher education, affirmative action refers to admissions practices that seek to increase the representation of Black, Hispanic and other minority students in colleges and universities.
- The objective of implementing race-conscious admissions policies is to foster diversity among students, with the aim of enhancing the overall educational experience.

Does it is required in present times?

- The majority of lower castes and marginalised groups have stepped up the social ladder and are now on an equal status compared to the general population.
- Hence, there is no need for reservation anymore.
- A reservation only provides a limited and short-term solution to the historical injustice issues.
- Reservation is obviously a tool to address social and educational backwardness; however, it does not have solutions for all social and economic ailments.
- There are much better and innovative ways to solve those issues. However, reservation prevents the leadership to come up with viable solutions.

Why such rules were made?

Affirmative action or Reservation policies seek to rectify historical discrimination and promote inclusivity in educational

institutions.

The intention is to create a level playing field by considering various aspects of

applicant's profile, including their **race or social background**, in order to address systemic disadvantages faced by certain groups.

Affirmative action and reservation systems serve as tools to promote equal representation and opportunities for historically-marginalised communities.

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Like the US, India has long had programs designed to help members of historically disadvantaged groups (through reservation system).

How Affirmative action does relate to India?

In India, reservations were introduced in the constitution shortly after independence, with the aim of acknowledging historical injustices faced by backward groups and providing them with improved access to resources and opportunities. Concerns related to reservation system in India:

Castes that should be actually benefitted are not being benefitted; instead, others are reaping the benefits of the reservation system.

The reservation system has just become an instrument for politicians to gain vote

banks.

Where does India need improvement?

- India's definition of 'other backward classes (OBCs)' includes both non-Dalit Hindu communities (castes) as well as socially and educationally laggard Muslim communities.
- India's Supreme Court has already ruled in favour of OBC quotas but cautioned against its "creamy layer" usurping it.
- Measurement of creamy layers: That is where the executive administration needs to strike a balance between the principles of the legislature (political) and the judiciary. In simple terms, we need to revisit the idea of affirmative action time and again to calibrate policies and measure outcomes.



Conclusion:

- The exploitation has not been stopped, feeling of alienation by the section of society, has only gone worse thus, reservation is the only silver lining in this dark sky. Yes, there is a section of people facing injustice and is under a shadow even today because they don't have anyone to speak for them, the data
- should be rectified and we should check who needs the reservation.
- Today the reservation has been made as a political agenda and politicians are using this as a vote bank and after sitting on that powerful chair, they pay nothing as a return to the people. However, the need is to maintain the rights and justice both for the people.

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INDIAN OCEAN GEOID LOW (IOGL)

Context:

Researchers at the Indian Institute of Science have revealed the secrets of the giant gravity hole that rests in the Indian Ocean.

What is the Indian Ocean Geoid Low (IOGL)?

- There is an enigmatic "gravity hole" in the Indian Ocean
- It is not the kind of "hole" that would allow the entire ocean to be drained. However, there is a massive anomaly in the Earth's crust that has a much weaker gravitational attraction than usual.



- It is located about 600 miles below the surface of the Earth.
- This "gravity hole" is actually the Indian Ocean Geoid Low (IOGL), which spans an area of more than two million square miles.
- **♦ Type of structure:** Humongous structures
- Shape: The gravity hole is not actually a perfect sphere, as Earth's gravitational field is not uniform due to variations in density and mass distribution.

What forms it?

- The distribution of mass within Earth is not homogeneous, with denser regions in some areas and less dense regions in others.
- These variations in density and mass create differences in gravitational attraction, leading to the formation of the geoid.
- The irregularity in the gravitational field causes anomalies, resulting in differences in the strength of gravity at different locations on the Earth's surface, which influences the Earth's shape.
- ♦ The shape is also affected by the planet's rotation, gravitational forces, and internal structure.

How are they formed (Key-findings)?

- The scientists looked inside Earth's surface, nearly 1,000 kilometers beneath the crust where once an ancient ocean plunged nearly and stirred up hot molten rock, nearly 30 million years ago.
- The team then looked at how the tectonic plates moved along each other in the past 140 million years when the Indian plate had just begun separating from the larger Gondwanaland.
- Every time for the gravity hole anomaly to form plumes of hot, low-density magma was required, and the first such plume appeared nearly 20 million years ago, and as the plumes intensified so did the gravity hole.
- Low density anomalies: The researchers found that 'low density anomalies' or the presence of lighter materials in the upper to mid mantle below the IOGL, were responsible for the gravity low in this region.
- Mantle plumes: Plumes are integral in generating the IOGL. Mantle plumes or the rising up of abnormally hot rock within the Earth's mantle can result in low density anomalies.



HUMAN EXISTENCE IN TAM PÀ LING CAVE

Context:

According to a recent research published in *Nature Communications*, it was found that more human remains found in Tam Pà Ling and even more is about to get disclosed in the region about human existence.

Key findings:



- Humans were present in the vicinity of Tam Pà Ling Cave for roughly 56,000 years.
- Far from reflecting a rapid dump of sediments, the site contains sediments that accumulated steadily over some 86,000 years.





- The age of the lowest fossil, a fragment of a leg bone found seven metres deep, suggests modern humans arrived in this region between 86,000 and 68,000 years ago.
- Even researchers found a tooth some 150,000 years old belonging to a 'Denisovan'. This suggests the site may lie on a previously used dispersal route among hominins.

Hominin – The group consisting of modern humans, extinct human species and all our immediate ancestors (including members of the genera **Homo, Australopithecus, Paranthropus and Ardipithecus**).

Key Facts about Tam Pà Ling Cave:

- It is a sloping cave situated high in the Annamite mountain range in Northern Laos.
- The stratigraphy of the site indicates formation by periodic slope wash deposition from the muddy slope at the entrance of the cave.

Who are Denisovans?

- They are **extinct human relatives** otherwise known only from remains found in **Siberia and Tibet.**
- They lived lakhs of years ago, coexisting with Neanderthals in some regions and interbreeding with early modern humans in some cases.
- They were first identified as a separate species in 2010, following the discovery of a fragment of a finger bone and two teeth, dating back to about 40,000 years ago, in the Denisovan Cave in Siberia.

Why these findings are significant?

- It was known that **Denisovans** were only found in cold and high-altitude regions such as in Siberia and the Himalayas.
- This discovery proves that they were also adapted to a warm environment.
- Meaning that they had very large flexibility of adaptation.



CHENNAI-VLADIVOSTOK SEA ROUTE

Context

India and Russia have scheduled a stakeholder meeting in September 2023 to work out the details for operationalising the 'Chennai-Vladivostok maritime route'.

History

The Chennai-Vladivostok maritime link is not a new phenomenon — it did operate for a few years during the **Soviet period.**



- It was very much operational between 1967 and 1969; and the shipment took nearly 90 days given the shipping technology at work then following the maritime route Nakhodka, Hong Kong, Singapore, Calcutta, and Madras.
- Recent development: The Chennai-Vladivostok maritime connectivity was first crystallised at the policy level during the visit of Prime Minister Narendra Modi to Vladivostok in 2019 to attend both the Eastern Economic Forum (EEF) and the annual Indo-Russia bilateral summit.
 - It was during this visit that the two sides signed a Memorandum of Intent (MoI) on the Development of Maritime Communications between the Port of Chennai and the Port of Vladivostok.

About the route

- The Chennai-Vladivostok Maritime route connects Chennai on India's east coast with Vladivostok, Russia's eastern port city, opening a plethora of opportunities for trade and investment for both countries.
- Vladivostok is the end point of the Trans-Siberian Railway, the fourth in terms of cargo turnover, and the first free seaport of the Far East.
- The Vladivostok-Chennai route passes through the Sea of Japan past the Korean peninsula, Taiwan and the Philippines in the South China Sea, past Singapore and through the Strait of Malacca, to emerge into the Bay of Bengal and then cuts across through the Andaman and Nicobar archipelago to Chennai.
- ♦ This sea route covers a distance of approximately 5,647 nautical miles or about 10,500 km.



Present route



- At present, the two countries are linked through the traditional European route which passes through Red Sea, Mediterranean Sea and Baltic Sea.
- Operationalised in 2000, the circuitous route spans from the Nhava Sheva Port in Mumbai to the Port of St. Petersburg in Russia and goods take an average of 40 days to cover the distance of 8,675 nautical miles or about 16,000 km.

The need of new route

- Lack of connectivity is one of the reasons for limited trade between India and Russia, which has for the past few years hovered around the US \$12-13 billion level
- Reduced transportation time: The proposed route will bring down transport time to 12 days, almost a third of what is taken under the existing popular route from St. Petersburg to Mumbai.

Far East

- The Far East is the easternmost part of Russia.
- The macro-region borders two oceans, the Pacific and the Arctic, and five countries — China, Japan, Mongolia, the United States and the DPRK.
- Located on the Golden Horn Bay north of North Korea and a short distance from Russia's border with China, the region extracts 98 per cent of Russian diamonds, 50 per cent of Gold, 14 per cent of Tungsten, and 40 per cent of fish and seafood and has about one-third of Russia's coal reserves.
- Reduced cost: Costs are expected to experience a substantial decrease, by 30-odd per cent.
- Presence in South East Asian region: The new route would also give India the largest presence in the South East Asian region.
- Ideal gateway: The strategic location of Chennai Port on the Bay of Bengal makes it an ideal gateway for trade with Southeast Asian countries like Thailand, Vietnam, and Indonesia.

Immense opportunities: Similarly, the Port of Vladivostok in Russia provides access to the resourcerich Far East region, offering immense opportunities for Indian businesses to tap into the market sectors like energy, mining, and technology.



INDIA, CHINA RAMP UP INFRA ON NORTH BANK OF PANGONG TSO LAKE

Context

Three years after the violent clash in Galwan, both India and China are busy with construction in the area. China is building a bridge across Pangong Tso while India is constructing a road on the north bank.

Chinese Construction Update:

- Main bridge construction underway, secondary bridge completed.
- Recent large-scale construction activity observed on the north bank.
- Road connectivity work along the south bank towards Shandong village in progress.
- Chinese air defence site located east of the Khurnak fort
- Construction of a 22 km-long tunnel along the G-0177 expressway at Yuli, connecting to the G-216 highway in Tibet.
- Ongoing Deployments and Friction Points: Over one lakh troops remain deployed on both sides of the lake since 2020. Corps Commander-level talks have reached a stalemate due to remaining friction points at Depsang and Demchok.
- Demchok Situation: In Demchok, China has set up tents on the Indian side of Charding nala. Varying claims exist in the Charding La area, contributing to the ongoing dispute.

Pangong Lake and Border Disputes:

- India holds one-third of the 135 km-long Pangong Lake, with the disputed area known as the "fingers".
- Indian claims extend till Finger 8, the perceived Line of Actual Control (LAC), while historically holding territory till Finger 4.
- Initial clashes in May 2020 occurred on the north bank, which has more significant differences in LAC perceptions compared to the south bank.
- Indian Army has a permanent position near Finger 3, while the Chinese have a base east of Finger 8.



Pangong Lake

 Pangong Lake, situated at a height of almost 4,350m, is the world's highest saltwater lake.



- Its water, which seems to be dyed in blue, stand in stark contrast to the arid mountains surrounding it.
- Extending to almost 160km, one-third of the Pangong Lake lies in India and the other two-thirds in China.

How India is focusing on strategic road network development?

- ♦ Increased budgetary allocation: Budget allocation for Border Roads Organisation (BRO) has significantly increased in recent years. In 2023-24, BRO's capital budget was ₹5,000 crore, a 43% increase from the previous year's ₹3,500 crore.
- ICBR Plan: Focus on the India-China Border Roads (ICBR) plan, with substantial investments made.
- Connectivity projects: BRO is nearing completion of key infrastructure projects in the eastern sector. Notable projects include the Sela, Nechipu, and Sela-Chhabrela tunnels, enhancing all-weather connectivity along the LAC.



GOVERNMENT LAUNCHES BHARAT 6G ALLIANCE

Context:

The government has launched the Bharat 6G alliance to drive innovation and collaboration in next-generation wireless technology.

What is Bharat 6G Alliance (B6GA)?

The Bharat 6G Alliance (B6GA) is a collaborative platform consisting of public and private companies, academia, research institutions, and standards development organisations. Global Alliance: B6GA will forge coalitions and synergies with other 6G Global Alliances, fostering international collaboration and knowledge exchange.

- ➤ The Alliance will enable India to become a leading global supplier of IP, products and solutions of affordable 5G and 6G and other future telecom solutions.
- ♦ The aims and objectives of the B6GA include:
- ♦ To deploy 6G technologies to act as a powerful force multiplier for India by 2030;
- ♦ To support and energise Indian participation in standard development organisations;
- ♦ To build coalitions with similar 6G Global Alliances and other global technology alliances and associations;
- To address India's priorities for contribution to 6G and other future technology-related global standards, deployments, products, operations and services
- To promote the ecosystem for research, design, prototyping, development, proof of concept testing, IPR creation, field testing, security, certification and manufacturing of telecom products, end-to-end Solutions, Use-cases, Pilots, among other things.
- ♦ To study and recommend national requirements and enable their inclusion in Indian and international standardisation bodies:
- ♦ To develop recommendations for Bharat 6G Vision implementation readiness in India;

What is 6G?

- A 6G network is defined as a cellular network that operates in untapped radio frequencies and uses cognitive technologies like AI to enable highspeed, low-latency communication at a pace multiple times faster than fifth-generation networks.
- India's tryst with 5G
- As of 2023, 5G networks are rapidly being rolled out worldwide.
- India has witnessed one of the swiftest rollouts of 5G networks, with the establishment of 2.70 lakh 5G sites within a span of nine months.

Other Important Developments

- Further, with a grant of Rs 240.51 crore under the Telecom Technology Development Fund (TTDF), two agreements were signed for two technology projects.
- The projects include a 6G THz testbed with Orbital Angular Momentum (OAM)
- Multiplexing through consortium of SAMEER, IIT Madras, IIT Guwahati and IIT Patna.



CURRENT AFFAIRS WEEKLY

About Telecom Technology Development Fund (TTDF)

- Telecom Technology Development Fund (TTDF) scheme was launched by DoT in 2022.
- The scheme is envisaged to bridge digital divide by developing and manufacturing state-of-the-art technologies and to form synergies among academia, start-ups, research institutes, and the industry to build and develop the telecom ecosystem.



NATIONAL RESEARCH FOUNDATION

Context

The National Research Foundation Bill was recently approved in Parliament to give high-level strategic direction to scientific research in the country, as per the National Education Policy's recommendations.

What is National Research Foundation?

The establishment of the National Research Foundation (NRF) will be a huge boost to the field of research in India.



- ♦ **Objective:** Its core aim is to sow the seed and enable the growth of research and development in the country and facilitate the creation of a culture of research and innovation in the academic circuit of India.
- Scope: The NRF's scope is vast and it will encompass and wide range of fields.
- NRF will become the highest authority to give a strategic blueprint for scientific research in India.
- ♦ **Costing:** The NRF will develop the **research facilities** in the country at a total estimated cost of Rs 50,000 during a span of five years, from 2023 to 2028.
- It will join hands with academicians and research institutions, among other educational bodies to create an environment in the country where interested people can pursue research works without any hazard.
- It will form a policy framework and implement regulations to encourage more spending on research and development in the country.

What about SERB?

The Science and Engineering Research Board (SERB) which was formed in 2008 will be repealed and subsumed into the NRF whose area of work is much bigger than that of the SERB.

How it would be structured?

- Administration: The NRF will have an administrative department named the Department of Science and Technology (DST).
- Governance: A governing body will operate it, and it will be made up of distinguished researchers and professionals across fields.
- Executive Council: An executive council headed by the central government's Principal Scientific Adviser will govern the functioning of the NRF.
 - The Prime Minister of India will act as the ex-officio President of the Board.
 - The Union Minister of Science and Technology and the Union Minister of Education will act as the exofficio Vice-Presidents.



GOVERNMENT ROLLS OUT SCHEME TO HELP MINOR RAPE SURVIVORS

Context

The Centre has approved a scheme that will provide support to minor rape survivors who have been abandoned by their family, often due to pregnancy, and have no other means to support themselves.

About

- The "scheme for critical care and support for accessing justice to rape/gang rape survivors or minor girls who get pregnant" will provide shelter, food, safe transportation for court hearings, and legal aid.
- Ministry: Women and Child Development (WCD) Ministry
- Funding: A fund of ₹74.1 crore has been allocated for the scheme.
- ♦ The support will be provided under aegis of the **Nirbhaya scheme**.
- The Ministry has additionally leveraged the administrative structure of **Mission Vatsalya** in collaboration with state governments and child care institutions (CCIs) to actualise this support to minor victims on the ground.



ABOUT THE SCHEMES

Nirbhaya scheme

- The Government of India established the Nirbhaya Fund in response to the Nirbhaya Case in 2013.
- It is aimed specifically at projects for improving women's safety and security and is managed by the **Ministry of Women and Child Development (MWCD).**

Mission Vatsalya

- Mission Vatsalya is a scheme that focuses on aligning development and child protection priorities with the **Sustainable Development Goals (SDGs).**
- Its primary objectives include promoting child rights, advocating for awareness, and strengthening the **juvenile justice care and protection system**, all aimed at ensuring that every child is supported and not left behind.

The need

- The minor victims of aggravated sexual assault undergoes the physical and emotional trauma.
- ♦ In some cases, they become pregnant.

The numbers

- As per the National Crime Records Bureau report, 51,863 Protection of Children from Sexual Offenses (POCSO) Act cases were lodged in 2021, out of which 64% were of penetrative sexual assault, aggravated penetrative assault and has become pregnant due to such assault or rape is covered under the scheme.
- As per the guidelines the child should either be an orphan, abandoned by the family or does not wish to live with the family.
- It is **not mandatory** for the girl child victim to have a copy of the FIR for availing the benefits under the scheme.

- promoting balanced/sustainable use of chemical fertilisers
- adopting alternate fertilisers such as organic, bio and nano fertilisers
- > promoting natural and organic farming

- This scheme strives to decrease the usage of chemical fertilisers in the states.
- Financing: The scheme will not have a separate budget and will be subsidized by the savings of existing fertiliser assistance under schemes run by the Department of fertilisers.
 - ➤ Under the PM-PRANAM, 50 per cent of the fertiliser subsidy saved by a State or Union Territory in a particular financial year by way of a reduction in consumption of chemical fertilisers (**Urea, DAP, NPK, MOP**) compared to the previous 3 years' average consumption, will be given to that state or UT as a grant. The grant will be provided during 2023-2026.



CABINET APPROVES PM-PRANAM YOJANA

Context

The Union Cabinet gave its nod to PM PRANAM — the scheme designed for balanced use of fertilisers by farmers. With this scheme the reliability of chemicals by the farmers will be reduced.

What is PRANAM?

- The Yojana's full form is 'Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth' (PRANAM).
- The scheme is to incentivise States and Union Territories to promote alternative fertilisers and counteracted use of chemical fertilisers.
- Aim: The PM-PRANAM is aimed at restoring the "health of Mother Earth" through:

Union Finance Minister Nirmala Sitharaman in **Budget 2023**, had announced the launch of "**PM Pranam Yojana**" for the promotion of alternative Fertilisers and balanced use of chemical fertilisers.

Government initiatives for promoting green agriculture

- National Mission for Sustainable Agriculture (NMSA): It is one of the National Missions under National Action Plan on Climate Change (NAPCC). NMSA aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate.
- The various components being implemented in this regard are:
 - ➤ Rainfed Area Development (RAD)
 - On Farm Water Management (OFWM)
 - ➤ Soil Health Management (SHM)





- ➤ Soil Health Card (SHC)
- Paramparagat Krishi Vikas Yojana (PKVY)
- Mission Organic Value Chain Development in North Eastern Region(MOVCDNER)

- ➤ Submission on Agro forestry (SMAF)
- Per Drop More Crop (PDMC) under Pradhan Mantri Krishi Sinhchayee Yojana (PMKSY)



WEBB MAKES FIRST DETECTION OF KEY CARBON MOLECULE

Context

The CH3+ molecule has been detected in space for the first time by the James Webb Space Telescope (JWST).

What has been found?

- Known as methyl cation (CH3+), the molecule was detected in a young star system, with a protoplanetary disk, known as d203-506, which is located about 1,350 light-years away in the Orion Nebula.
- The findings, published in the journal Nature, showed that although the star in d203-506 is a small red dwarf, the system is bombarded by strong ultraviolet (UV) light from nearby hot, young, massive stars.

Organic Molecule

- Organic molecules are carbon based. They contain carbon atoms bonded to hydrogen atoms but can also bond to other elements, such as oxygen, nitrogen or phosphorus.
- Everything that makes us and all life on Earth is carbon based.

What is carbocation CH3+?

- The methyl cation, also known as the carbocation CH3+ is a very simple organic molecule, just one carbon atom and 3 hydrogen atoms.
- But it reacts with other molecules to form more complex ones.
- The CH3+ consists of a positively charged carbon atom (C+) with three hydrogen atoms (H) attached to it.
- It is the simplest carbocation and belongs to the alkyl cation family.
- This simple molecule has a unique property: It reacts relatively inefficiently with the most abundant element in Universe (hydrogen) but reacts readily with other molecules and therefore initiates the growth of more complex carbon-based molecules.

Why is the discovery important?

While carbon compounds form the foundations of all known life, the new molecule is important because it aids the formation of more complex carbon-based molecules.

Webb Telescope

 The world's premier space science observatory, Webb Telescope is an international programme led by NASA with its partners, ESA (European Space Agency) and the Canadian Space Agency.



SCIENTISTS SEE EARLY UNIVERSE IN SLOW-MOTION

Context

Researchers observed data from quasars - objects powered by "supermassive" black holes at the centre of early galaxies - using them to measure time near the beginning of the universe

Key-findings

- The scientists used observational data from 200 quasars. Using this data, they were able to measure this immense time dilation.
- The ancient slow-motion universe: Scientists were able to observe an early moment during the universe's evolution when it was running in extreme slow motion (five times slower).
- This time dilation shows that massive black holes in the ancient universe behave just as Einstein's general theory of relativity predicts.

Einstein's general theory of relativity

According to Einstein's general theory of relativity, we should observe the distant and ancient universe running at a much slower rate than the present-day universe. Observing such an ancient period of our universe has proved challenging, though.

What is time dilation?

- Time dilation refers to the phenomenon whereby different objects experience time differently based on their relative speeds or gravitational potentials.
- This is observable, for example, in the fact that geosynchronous satellites experience time differently from a clock on Earth.



What are Quasars?

- Quasar is short for quasi-stellar radio source.
- ♦ A quasar is a supermassive black hole feeding on gas at the center of a distant galaxy.
- They are tremendously active supermassive black holes millions to billions of times more massive than Sun, usually residing at centers of galaxies.
- They devour matter drawn to them by their immense gravitational pull and unleash torrents of radiation including jets of high-energy particles, while a glowing disk of matter spins around them.



TEJAS COMPLETES 7 YEARS OF SERVICE

Context

Indigenous Light Combat Aircraft (LCA) Tejas completed seven years of service in the Indian Air Force (IAF) on July 1.

Daggers'.

➤ In 2020, the No.18 squadron 'Flying Bullets' became the second squadron to start operating the jet.

What is Tejas Mk-1?

- The Tejas Mk-1 is light supersonic multirole jet, capable of doing multiple missions including
 - air-defence (air-to-air)
 - ▶ intelligence, surveillance and reconnaissance (ISR)
 - air-interdiction (striking enemy targets deep into enemy territory)
 - ➤ maritime strike and reconnaissance missions
- The jet carries, an Israeli laser designating pod, multi-mode radar, helmet mounted display system and self-protection suite.
- ♦ Tejas Mk-1A: Its other variant Tejas Mk-1A 83

Background

- ♦ The Light Combat Aircraft (LCA) program was started in the early 1980s, with the Government of India (GoI) establishing the project in 1983 to replace Mig-21 fighters.
- The first prototype took its first flight in January 2001 and the fighter was named Tejas.

♦ Induction:

After more than a decade of trials, the first jet was finally inducted by the IAF in 2016 in the No. 45 squadron 'Flying







of which the IAF ordered from Hindustan Aeronautics Limited (HAL) in a deal worth Rs 48,000 crore in 2021, will be even more advanced.

- ➤ **Tejas Mk-1A** will have 40 major improvements compared to the Tejas Mk-1.
- ➤ It will have an active electronically-scanned array radar for detecting enemy aircraft at greater ranges and resistance to jamming, a new advanced self-protection jamming suite (ASPJ), digital flying control computer (DFCC), as well as, faster turnaround times for each aircraft after every sortie.

Current status of fighter jets

- The IAF presently has 32 squadrons (16-18 planes each) of fighter jets against the 42 needed to tackle a collusive two-front threat against Pakistan and China.
- Over the next two-three years, all four squadrons (each one has 16-18 planes) of the Soviet-era MiG-21 fighter jets will retire.
- The IAF's Jaguar, MiG-29 and Mirage 2000 jet fleets — all inducted in phases during the 1980s are slated to retire in batches beyond 2029-30.
- ♦ These four types of jets are about 250 in number and are operating on an extended lifecycle.



ESA LAUNCHES EUCLID SPACECRAFT

Context

The European Space Agency launched its Euclid spacecraft on a SpaceX Falcon 9 rocket to chart the history of the universe as far back as 10 billion years ago.

What is Euclid Mission?

- The European Space Agency's Euclid mission is designed to study the so-called "dark universe."
- 3D map of the Universe: Euclid will observe billions of galaxies out to 10 billion light-years to create the largest, most accurate 3D map of the Universe, with the third dimension representing time itself.
- ♦ This detailed chart of the shape, position and movement of galaxies will reveal
 - ➤ **Matter distribution:** how matter is distributed across immense distances
 - ➤ **Evolution:** how the expansion of the Universe has evolved over cosmic history, enabling astronomers to infer the properties of **dark energy and dark matter**

- This will help theorists to improve understanding of the role of gravity and pin down the nature of these enigmatic entities.
- Developed by: Euclid was designed and built entirely by ESA, with the US space agency, NASA, supplying photodetectors for its near-infrared instrument.
- Euclid is a medium-class mission in ESA's Cosmic Vision Programme.

Spacecraft and instruments:

- ♦ The Euclid spacecraft is approximately 4.7 m tall and 3.7 m in diameter. It consists of two major components: the service module and the payload module.
- Payload module: The payload module comprises a 1.2-m-diameter telescope and two scientific instruments:

The name game

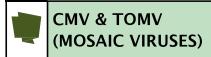
- The mission is named after the father of geometry, the ancient Greek mathematician Euclid.
- He lived around the year 300 BCE in the city of Alexandria, which was founded by Alexander the Great in 330 BCE.
- Visible-wavelength camera (1.2-m reflecting telescope that feeds the two innovative scientific instruments): It takes very sharp images of galaxies over a large fraction of the sky and can view the universe in visible and near-infrared light
- Near Infrared Spectrometer and Photometer (NISP) instrument: It can analyse galaxies' infrared light by wavelength to accurately establish their distance.
- Service module: The service module contains the satellite systems: electric power generation and distribution, attitude control, data processing electronics, propulsion, telecommand and telemetry, and thermal control.

What is Dark Matter?

- Dark matter is the predominant form of matter in the universe.
- Without it, the stars probably would not have formed in the early universe, and the presence of dark matter across the universe is essential to all cosmic structure formation
- Dark matter is not visible and does not absorb radiation.
- It deflects light because of its gravitational pull and deforms the shape of the galaxies as seen by the observer.
 - ➤ This effect is called **gravitational weak lensing**.



PRELIMS



Context

Farmers in Maharashtra have said their tomato crop was impacted by attacks of the cucumber mosaic virus (CMV), while growers in Karnataka blamed the tomato mosaic virus (ToMV).

What are CMV and ToMV?

The two plant pathogens have similar names and cause similar damage to crops, but they belong to different viral families, and spread differently.

Significant plant virus diseases in India

- Begomoviruses
- Badnaviruses
- Cucomoviruses
- Potyviruses
- Ilarviruses

Tomato mosaic virus (ToMV)

- It belongs to the Virgaviridae family and is closely related to the tobacco mosaic virus (TMV).
- Host: ToMV hosts include tomato, tobacco, peppers, and certain ornamental plants.
- Spread: Through infected seeds, saplings, agricultural tools and often, through the hands of nursery workers.

Cucumber mosaic virus (CMV)

- It belongs to the genus Cucumovirus (family Bromoviridae).
- Host: Cucumber, melon, eggplant, tomato, carrot, lettuce, celery, cucurbits (members of the gourd family, including squash, pumpkin, zucchini, some gourds, etc.), and some ornamentals.
- **CMV** was identified in cucumber in 1934, which gave the virus its name.
- **Spread:** by aphids (sap-sucking insects), human touch (extremely low chances).
- Impact: Both viruses can cause almost 100 per cent crop loss unless properly treated on time.



DEEP SEA MINING PERMITS MAY BE COMING SOON

Context

The International Seabed Authority (ISA) is preparing to resume negotiations that could open the international seabed for mining, including for materials critical for the green energy transition.

What is Deep Sea Mining?

- Deep sea mining involves removing mineral deposits and metals from the ocean's seabed.
- **Types:** There are three types of such mining:
 - taking deposit-rich polymetallic nodules off the ocean floor
 - > mining massive seafloor sulphide deposits
 - > stripping **cobalt crusts** from rock
- Utilisation: These nodules, sulphide deposits and crusts contain materials, such as nickel, rare earths, cobalt and more.
 - ➤ They are needed for batteries and other materials used in tapping renewable energy and also for everyday technology like cellphones and computers.

Deep Sea Mining Regulations

- Countries manage their own maritime territory and exclusive economic zones, while the high seas and the international ocean floor are governed by the United Nations Convention on the Law of the
- It is considered to apply to states regardless of whether or not they have signed or ratified it.
- Under the treaty, the seabed and its mineral resources are considered the "common heritage of mankind" that must be managed in a way that protects the interests of humanity through the sharing of economic benefits, support for marine scientific research, and protecting marine environments.
- Technology used for deep sea mining:
 - massive pumps
 - artificial intelligence-based technology
 - deep sea robots to pluck nodules from the floor
 - advanced machines that could mine materials off side of huge underwater mountains and volcanoes

What are the Environmental Concerns?

Damage to ecosystem: The ecosystems can be damaged by mining, especially without any environmental protocols.



PRELIMS



 Damage from mining can include noise, vibration and light pollution, as well as possible leaks and spills of fuels and other chemicals used in the mining process.

Threat to species: Slurry sediment plumes are sometimes pumped back into the sea that can harm filter feeding species like corals and sponges, and could smother or otherwise interfere with some creatures.

International Seabed Authority (ISA)

- ISA is the international organization established in 1994 to regulate mining and related activities in the international seabed beyond national jurisdiction.
- The ISA came into existence upon the entry into force of the 1982 United Nations Convention on the Law of the Sea, which codified international law regarding territorial waters, sea-lanes, and ocean resources.
- The ISA is headquartered in Kingston, Jamaica, and has more than 150 state members.

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22JUNE





Kharchi Puja 2023



India's north-eastern state Tripura recently celebrated Kharchi Puja, dedicated to the **deity of the royal dynasty.**

About.

- The word 'Kharchi' is derived from two Tripuri words— 'khar' or kharta meaning sin and 'chi' or is meaning cleaning.
- Also called the 'Festival of 14 Gods', Kharchi Puja is observed on the eighth day of the new moon in July or August every year.
- During the festival, the people of Tripura also worship the earth along with their 14 deities.
- Although the festival has tribal origins, it is celebrated by both tribal and non-tribal people of **Tripura**.
- Kharchi Puja is primarily dedicated to the deity of the royal dynasty, Tripura Sundari, also known as Kharchi or Kharcha Baba.
- Deity: The festival is centred on the worship of Chaturdasa Devata, the ancestral deity of the Tripuri people.

Colombo Security Conclave (CSC)



In a landmark event concerning maritime collaboration under the framework of **Colombo Security Conclave (CSC)** between the nations of Indian Ocean Region, scientists from Bangladesh and Mauritius embarked onboard India's research vessel **'Sagar Nidhi'** to participate in the joint ocean expedition.

About

- Formed in: 2011
- The Colombo Security Conclave (CSC) is a grouping of India, Sri Lanka, Maldives, and Mauritius (newest member).
- Bangladesh and Seychelles are observers.
- The Conclave underlines regional cooperation and shared security objectives concerning all littoral nations in the Indian Ocean Region (IOR).
- It aims to make maritime security, marine pollution response and maritime search & rescue priorities for the region.

UN chief appoints Indian-origin satellite expert

The Indian-origin satellite industry expert Aarti Holla-Maini recently got appointed as 'Director' of the **United Nations Office for Outer Space Affairs (UNOOSA)** in Vienna.



SHORT NEWS WARREN



United Nations Office for Outer Space Affairs (UNOOSA):

- The United Nations Office for Outer Space Affairs (UNOOSA) is the United Nations office responsible for promoting international cooperation in the peaceful uses of outer space.
- UNOOSA serves as the secretariat for the General Assembly's only committee dealing exclusively with international cooperation in the peaceful uses of outer space: the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS).

SC sets up Bench to hear pleas against Article 370 abrogation



The Supreme Court set up a fresh **five-judge bench** to hear from July 11 a batch of petitions, questioning validity of the decision of August 5, 2019 to scrap the special status to Jammu and Kashmir under **Article 370** of the Constitution.

Key-highlights

- The Bench will take up a batch of over two dozen petitions that seek to challenge the legal validity of
- The Jammu and Kashmir Reorganisation Act, 2019divided J&K into two Union territories.
- The 5 August 2019 presidential order- nullified Article 370 of the Constitution (which gave special status to the erstwhile state).

Composition

- The five-judge Constitution bench will be led by Chief Justice D.Y. Chandrachud.
- The bench will also comprise the top four senior-most judges after the CJI — Justices Sanjay Kishan Kaul, Sanjeev Khanna, B.R. Gavai and Surya Kant.

Tushar Mehta reappointed as Solicitor General of India



The Appointments Committee of the Cabinet has approved re-appointment of the Tushar Mehta as Solicitor General of India.

About

- Solicitor General is the second most senior law officer after Attorney General.
- He is **sub-ordinate** to the **Attorney General of India**.
- Constitutional Backing: However, unlike to Attorney General (Constitutional post under Article 76 of the Constitution), the post of Solicitor General is statutory.
- Appointment: Appointments Committee of the Cabinet (ACC) recommends the appointment and officially appoints the Solicitor General.



Capex push sees India Inc's debt rise



Indian corporates hit a record debt level of Rs 36.63 trillion in FY23, up 12.6% from the previous year, driven by increased **capex** in anticipation of an economic recovery and growing demand.

What Are Capital Expenditures (CapEx)?

- Capital expenditures (CapEx) are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment.
- CapEx is often used to undertake new projects or investments by a company.
- Difference from revenue expenditure: Unlike capital expenditure, which creates assets for the future, revenue expenditure is one that neither creates assets nor reduces any liability of the government.

Zombie drug epidemic in US



USA's zombie drug epidemic has claimed nine lives and led to 150 cases of overdose in a Florida county in the last 18 months alone.

About

- Zombie drug xylazine is an animal tranquilizer, also known as "tranq".
- Laced with fentanyl and sold on the streets, it is known for leaving addicts hunched over like zombies, besides rotting flesh at the site of injection.
- Besides rotting the flesh, this zombie drug causes low blood pressure, slow heart rate and difficulty breathing.
- Since xylazine is not an opioid, it also does not respond to the overdose-reversing drug naloxone, which is commonly sold under the brand name Narcan.

India tops global charts for childhood diabetes



India saw the highest number of childhood **diabetes** cases and deaths in 2019 in the world, according to a new study. The country also has the highest **disability-adjusted life-years (DALY).**

What is diabetes?

- Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar), which leads over time to serious damage to the heart, blood vessels, eyes, kidneys and nerves.
- Forms of diabetes
- Type 1 diabetes: It occurs when the pancreas does not produce enough of a hormone called insulin. This stops the body from being able to use sugar, which then build up in the bloodstream. These sugars (also called glucose) that cannot be used by the body pass out of the body in the urine and take water with it



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 Type 2 diabetes: Type 2 diabetes was once called "adult onset" diabetes, because children hardly ever got it. With rising rates of childhood obesity, however, a growing number of children are being diagnosed with this form of the disease.

One DALY represents the loss of the equivalent of one year of full health, according to the World Health Organization.

Small Finance Banks (SFBs)



The Reserve Bank of India (RBI) rejected applications received to start small finance banks in the private sector under the guidelines for on-tap licensing of small finance banks.

What are SFBs?

- Small Finance Banks are government authorized entities aimed at offering basic banking facilities to unserved & underserved areas.
- Regulated by: RBI under Banking Regulations Act, 1949;
 RBI Act, 1934 and others
- Credit creation: SFBs offer Credit facilities
- Demand deposits: Demand deposits are acceptable by SFBs

Google allows data scraping



Google has updated its privacy policy to allow 'data scraping' for **artificial intelligence (AI)** training purposes.

What is data scraping?

- Data scraping involves pulling information out of a website and into a spreadsheet.
- It is also known as web scraping.
- These data include specific information from web pages, such as text, images, prices, or contact details, and storing it for further analysis or use.
- Ethical considerations in data scraping: The unethical data scraping are acts like copyright infringement, terms of service violations, and data privacy breach.
 - Potentially violate the terms of service or the policies of a website, leading to legal implications.
- Concerns regarding the accuracy and reliability on the data collected through scraping.

Wage-price spirals

The **wage-price spiral** describes a perpetual cycle whereby rising wages create rising prices and vice versa.

 Central banks use monetary policy, the interest rate, reserve requirements, and open market operations to curb the wage-price spiral.



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About:

- The wage-price spiral is a macroeconomic theory used to explain the cause-and-effect relationship between rising wages and rising prices, or inflation.
- The wage-price spiral suggests that rising wages increase disposable income raising the demand for goods and causing prices to rise.
- Rising prices increase demand for higher wages, which leads to higher production costs and further upward pressure on prices creating a conceptual spiral.

India's largest radio telescope



Recently, an international team of astronomers from **India, Japan and Europe** has published the results from monitoring pulsars, called **'nature's best clocks'**, by using six of the world's most sensitive radio telescopes, including India's largest telescope, the **Pune-based 'uGMRT'**.

About:

- India's Giant Metrewave Radio Telescope (uGMRT)
 is among the world's six large telescopes that played a
 vital role in providing evidence confirming the presence
 of gravitational waves using pulsar observations.
- Pulsars are a type of rapidly rotating neutron stars that are essentially embers of dead stars which are present in our galaxy.
- A pulsar is like a cosmic lighthouse as it emits radio beams that flash by the Earth regularly akin to a harbour lighthouse.
- As these signals are accurately timed, there is a great interest in studying these pulsars and to unravel the mysteries of the Universe.
- In order to detect gravitational wave signals, scientists explore several ultra-stable pulsar clocks randomly distributed across our Milky Way galaxy and create an 'imaginary' galactic-scale gravitational wave detector.

Asian Kabaddi Championship 2023



India has been the most successful men's team in the **Asian Kabaddi Championship**, winning seven titles in eight editions.

About Asian Kabaddi Championship 2023:

- It featured 6 nations: India, Iran, the Republic of Korea, Japan, Chinese Taipei, and Hong Kong.
- The continental kabaddi championship was conducted in two phases - a single-headed round robin league phase and a final.



SHORT NEWS WALLES



Facts about Kabaddi:

- With a 4000-year-long history, the **traditional Indian sport of kabaddi** is one of the oldest in the world.
- The four outer lines of the kabaddi mat are called **boundaries or end lines.** The play needs to be restricted within the four boundary lines at any time.
- The rectangular court is divided into two equal identical halves by a mid-line, drawn parallelly to the shorter end lines of the mat.
- After appearing as a demonstration sport at the Asian Games in 1951 and 1982, kabaddi finally became a medal event at the continental showpiece from 1990 and has been a permanent fixture since then.

Alluri Sitarama Raju (1897-1924)

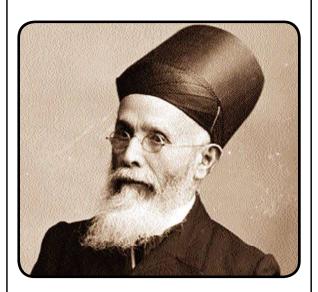


Celebration of the **125th birth anniversary** of the freedom fighter **Alluri Sitarama Raju** in Hyderabad.

About

- Born on July 4, 1897, Alluri Sitarama Raju is remembered for his fight against the British, in order to safeguard the interests of the tribal communities in the Eastern Ghats region (in Andhra Pradesh).
- He had led the Rampa rebellion, which was launched in 1922.
- He is referred to as "Manyam Veerudu" (Hero of the Jungles) by the locals.
- Every year, the Government of Andhra Pradesh commemorates his birth date, the 4th of July, as a state festival.

Dadabhai Naoroji (1825-1917)



June 30 is the observed as death anniversary of Dadabhai Naoroji.

About:

- Dadabhai Naoroji (1825-1917) was born in Mumbai in a Gujarati-speaking Parsi family.
- In 1855 he was appointed Professor of Mathematics and Natural Philosophy at Elphinstone College in Mumbai.
- The first Indian to be given an academic appointment, he was called 'The Promise of India' by another professor at the institution.
- He opened his **own cotton trading company**, Dadabhai Naoroji & Co.
- Known as the '**Grand Old Man of India'**, Naoroji became a well-known public figure.

Contributions in Indian freedom struggle:

 He took an active part in the political mobilization against the British rule.



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- He was instrumental in the formation of the 'London Indian Society' in 1865. The aim of the Society was to deliberate on Indian social, political and other scholarly subjects.
- He helped establish the 'East India Association' in 1867, which aimed to expose the British people to the Indian perspective.
- Dadabhai Naoroji also formed the Bombay Presidency Association, which became the predecessor of the Indian National Congress as well as the Indian National Congress.
- He also founded the Gyan Prasar Mandali for Women's Education.
- Through his publications such as 'Rasta Goftar', he shaped the various reforms (such as simultaneous examinations, reorganization of legislative councils, and the election of Indian parliamentarians to the British Parliament) proposed by the Congress towards a broader sound political goal of selfgovernment.

White-rumped vulture (Gyps bengalensis)



Even with protective measures in place, the future of the critically endangered white-rumped vulture (Gyps bengalensis) in the Sigur plateau of the Nilgiris remains highly precarious.

About

- The white-rumped vulture (Gyps bengalensis) is an Old World vulture native to South and Southeast Asia.
- It is the smallest of the Gyps vultures, but is still a very large bird.
- A medium-sized vulture with a silvery bill, a dark body, a grayish shine on the wings, a white back, and a distinctive white collar on the neck.
- It has been listed as Critically Endangered on the IUCN Red List since 2000.
- It is closely related to the **European griffon** vulture (Gyps fulvus).

Bald Eagle (Haliaeetus leucocephalus)



The population of **American bald eagle**, removed from the United States' list of endangered species in 2007, has quadrupled since 2009.

About:

• The bald eagle is a sea eagle (Haliaeetus species).

Dichloro-diphenyl-trichloroethane (DDT) had a catastrophic impact on the bald eagle population in 1940s.

 It is the national bird of USA and a classic icon, standing for strength, courage, and freedom.



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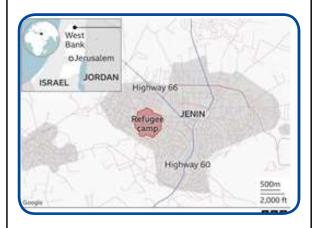
- Bald eagles are large, predatory raptors that are recognizable for their brown body and wings, white head and tail, and hooked yellow beak.
- Their feet, which are also yellow, are equipped with sharp black talons.
- Bald eagles grow to about 2.5 to 3 feet (0.7 to 0.9 meters) in height, and they have an impressive wingspan of 6.5 feet (two meters).
- **Female bald eagles** are larger than the males, but share the same coloration.
- IUCN Status: Least Concern

Eagle

- Eagle is the large birds of prey that belong to the *Accipitridae* family.
- There are 24 species of Eagle found in India.

LOCATION IN NEWS

West Bank city



Israeli forces launched its **largest military operation** in the **occupied West Bank city of Jenin** in more than 20 years, killing at least nine people and injuring about 100 others.

About

- The West Bank is a chunk of land east of Israel.
- The West Bank stretches across the eastern border of Israel along the west banks of the Jordan River and most of the Dead Sea, thus how it received its name.
- The holy city of Jerusalem is considered by international law as part of the West Bank, with East Jerusalem being claimed as the capital by both Israelis and Palestinians.
- It is home to nearly three million Palestinians, and would make up the heart of any Palestinian state.
- Israel took control of it in 1967 and has allowed Jewish settlers to move in, but Palestinians (and most of the international community) consider it illegally occupied Palestinian land.

Cauvery



Tamil Nadu government has objected to the **inadequate** water received from Karnataka and requesting the release of **Tamil Nadu's rightful share** for July as per the agreed schedule.

About

- Cauvery is an easterly flowing river of the Peninsular India.
- It runs across three of the southern Indian states i.e.
 Karnataka, Tamil Nadu, Kerala and a Union Territory of Puducherry.



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- It originates in **Talakaveri** (**Brahmagiri** ranges of the Western Ghats) and merges with the **Bay of Bengal**.
- Geologically, the basin forms a part of the South Indian Shield.
- Principal soil types found in the basin are red soils, black soils, laterite, alluvial soils, forest soils and mixed soils.

Debrigarh Wildlife Sanctuary



Debrigarh, a wildlife sanctuary in **Odisha's Bargarh district**, has been made completely free from any human settlement.

About

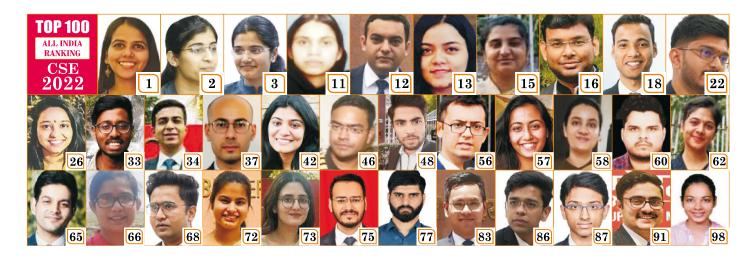
- Located in the **western part of Odisha**, it is nestled between the **Hirakud Dam and Reservoir**.
- It is a dry forest.
- Historical connection: It finds a special place in the national map because of its historic association with the freedom fighter, Surendra Sai.
 - ► He took shelter here while planning his rebellion against the British.
- **Major species:** Tigers, leopards, bison, hyena, spotted deer, Indian hare, monitor lizard and chameleons, among other animals.

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