

ASTRA

COMPLETE COVERAGE OF MONTHLY CURRENT AFFAIRS

FEBRUARY 2023



Corp. Office: # 61/3rt, 2nd Floor, SR Nagar, Near Community Hall, Hyderabad, Telangana - 500 038.
Main Campus: Padmashali Seva Samajam, Opp: St. Martin's Engg. College, Dulapally Road, Kompally, Hyderabad, Telangana - 500 100. Phone: 7997992479 / 80 / 82 / 83 | Website: igniteias.com

HISTORY AND CULTURE

Irula Community	4
Toto Language	4
Dayanand Saraswati & Arya Samaj	4
Dhamaals	5
Mehrauli	5
Lavani Dance	5
Arts mentioned in Mann Ki Baat	6
Saint Valentine's	6

GEOGRAPHY & ENVIRONMENT

Microquakes	7
Western Disturbance	7
The Energy and Resources Institute (TERI)	7
Protecting the Ocean Ecosystem	7
First FAO Global assessment of Soil Carbon in Grasslands	7
E-Waste Issue in India	7
India's first Marine Spatial Planning	9
Hydrogen for Heritage	10
Vermin	10
Glasgow Financial Alliance for Net Zero (GFANZ)	10
Ocean Carbon Dioxide Removal	11
Wasp named after Soligas	11
Bharatpur Sanctuary	12
Climate Feedback Loop	12
Canine Distemper Virus (CDV)	12
Sundarbans	13
Bisphenol A	13
Asian Rhino Range Countries Meeting	13
Solar Geo-engineering	14
Whale Stranding	14
Great Backyard Bird Count (GBBC)	14
Asiatic Black Bear	15

POLITY & GOVERNANCE

Revised Guidelines on MPLADS 2023	16
Right to be Forgotten	16
Disclosure of Chargesheets	17
Second edition of the Foundational Literacy and Numeracy (FLN) report	17
Corrupt Practices in Representation of People Act, 1951	18
Draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill	19
Post Retirement Appointment of Judges	20
Death Penalty in India	21
Section 69(A) of IT Act	21
Prohibition of Child Marriage Act, 2006	22
Office of Deputy Speaker	22
Office of Profit	23
Sansad Ratna Awards	23
22nd Law Commission of India	23
National Commission for Scheduled Tribes	24

ECONOMY

Municipal Bond Index	25
Mahila Samman Savings Certificate (MSSC)	25
Repo Rates	25
Adani-Hindenburg Saga	26
Market Access Initiative (MAI) Scheme	27
Green Debt Swaps	27
Special Rupee Vostro Accounts	28
World Economic Situation & Prospects report-2023	28
Free Trade Agreements to Lift Textile Exports	29
UPI for NRIs	30
UPI –Paynow Linkage	30
Additional Surveillance Mechanism	31
Follow on Public Offer	31
Primary Agricultural Credit Societies	32

INTERNATIONAL RELATIONS

EU's Trade & Technology Council (TTC) with India	33
Northern Ireland Protocol	33
QUAD Cyber Challenge	34
India-ASEAN Digital Work Plan 2023	34
iCET dialogue	34
REAIM 2023	35
Munich Security Conference (MSC)	35
Global Biofuel Alliance	36
Chicago Convention	36

SCIENCE & TECHNOLOGY

Automatic Train Supervision(ATS)	37
Lithium Reserves in India	37
QR Code-based Coin Vending Machines (QCVM)	38
CCR5 Receptors	38
Responsible Artificial Intelligence in the Military Domain(REAIM)	39
IEEE C-DOT Certified Telecom Expert Program (ICCTEP)	39
NISAR Satellite	39
Crew Module Recovery Model	40
Kilonova	40
Quaoar	41
Giant Metrewave Radio Telescope	41
ALMA Telescope	41

SCHEMES

Eastern Rajasthan Canal Project	42
MIIRA	42
DHARA 2023	42
Aadi Mahotsav 2023	43
Suposhit Maa Abhiyan	43
Clean Plant Centres	43
PARAKH	44

INTER + IAS | DEGREE + IAS | Direct IAS (Day Cum Residential)



Experience the Best Campus Amenities!

- Digital AC classrooms
- Digital Library
- Career Enhancement Initiatives
- Sports and Gym Facility
- Separate Campus for Boys and Girls

**— ADMISSIONS ARE LIMITED!
DON'T WASTE YOUR TIME
— AND REGRET LATER —**



Follow us



+91 7997992479 / 80 / 81



www.igniteias.com

Why in news?

- Mr. Vadivel Gopal and Mr. Masi Sadaiyan of the Irula community, this year's Padma Shri recipients, have been part of Irula Snake Catchers' Industrial Cooperative Society.

About Irula community

- Irulas are one of India's oldest indigenous communities and they are a particularly vulnerable tribal group.
- They live primarily in the northern districts of **Tamil Nadu**, as well as in parts of **Kerala and Karnataka**.
- They speak Irula, which is related to **Dravidian languages** like Tamil and Kannada.
- Irulas have traditionally caught snakes and rats, but they also work as labourers.
- Irulas' knowledge of snakes and snake venom is legendary. They can even locate snakes based on their tracks, smell, and droppings.
- The Irula Snake Catchers' Industrial Cooperative Society is a major producer of anti-snake venom (ASV) in the country.

Why in news?

- Dhaniram, a Toto (Dengka) language preserver is a recipient of Padma Shri award in the field of Literature & Education.

About language

- The Toto is a primitive and isolated tribal group of population of only 1,632 people.
- They are residing only in a small enclave called Toto Para in Alipurduar district in West Bengal.
- Toto Para is located at the foot of the Himalayas just to the south of the borderline between Bhutan and West Bengal (on the western bank of Torsa River).
- They speak the eponymous language called Toto language.
- Toto Language** - Toto language belongs to Tibeto-Burman family of sub- Himalayan group, as classified by Hodgson and Grierson.
- The Toto language does not have their own script.
- Dhaniram has created the Toto language script and Toto alphabet, for which he received 'Padma Shri'.
- At present, poems and novels are written in Toto.

Why in news?

- Prime Minister Narendra Modi has recently paid tribute to Dayanand Saraswati, a social reformer on his 200th birth anniversary.

About the Samaj

- Swami Dayanand Saraswati** was born on 12th February 1824 in Tankara, Gujarat.
- He was earlier named Mool Shankar Tiwari.
- He was an Indian philosopher, social leader and founder of the Arya Samaj.
- He believed in the infallible authority of the Vedas.
- Dayananda advocated the doctrine of Karma and Reincarnation.
- He emphasized the Vedic ideals of brahmacharya, including celibacy and devotion to God.
- Denouncing the idolatry and ritualistic worship, he worked towards reviving Vedic ideologies.
- He was the first to give the call for "India for Indians" (swaraj) in 1876, a call later taken up by Lokmanya Tilak.
- Sarvapalli Radhakrishnan, India's second President and an influential educationist, called Dayanand Saraswati "a maker of modern India".
- He established the Vedic schools for the education of girls and boys of all castes.
- The **DAV (Dayanand Anglo Vedic) schools** came into existence in 1886 to realize the vision of Swami Dayanand Saraswati.

Dhamaals

History, Art & Culture

Why in news?

- Recently, a new documentary has focused on the music and dance performances of the Siddis community in Gujarat, called Dhamaals.

About Dhamaals

- Dhamaal is a mix of Sufi and African (mostly East African) musical and dance traditions.
- It refers particularly to the spiritual practices of the Siddis of Gujarat.
- The Siddis begin almost every Dhamaal song by blowing into a conch shell. This is often followed by the slow playing of East African percussion instruments like the musindo and the slow thumping of feet that marks the onset of the singing and dancing Dhamaals.
- The ritual of foot thumping is a crucial part of spiritual East African dance and musical traditions.
- The Siddis are followers of Islam and arrived in India from Muslim communities in East and Central Africa.
- Dhamaals are performed in memory of their spiritual leaders, among them Bava Gor, Mai Misra, Baba Habash and Sidi Nabi Sultan.

Mehrauli

History, Art & Culture

Why in news?

- Recently, Delhi Development Authority (DDA) is undertaking a drive to clear unauthorized encroachments in the Mehrauli Archaeological Park.

Evolution of Mehrauli

- It was founded as Lalkot in the 11th century by Anangpal II, a ruler of the Rajput Tomar dynasty.
- This was later christened Quila Rai Pithora by Mughal court historian Abu'l Fazl in his epic hagiography, 'Ain-i-Akbari'.
- This city then passed hands from the Tomars to the Chauhans, who are credited to have further fortified the complex.
- The city then fell into the hands of the Mamluk dynasty (Slave dynasty) in 1192.
- Later, Qutubudin Aibak, the first ruler of the Slave dynasty, began construction of Qutub Minar as well as the Quwwat-al-Islam Mosque, the oldest known mosque in north India.
- Mehrauli is also a spiritual centre, home to both Hindu and Muslim shrines.
- The annual community celebration of 'Phool Walon ki Sair' or Sair-e-Gulfaroshan (walk of the flowers) is a witness to Mehrauli's cosmopolitanism.
- This 19th-century Mughal-era festival has become the symbol of the city's communal harmony since 1962.

Lavani Dance

History, Art & Culture

Why in news?

- Recently a noted Lavani dancer Megha Ghadge raised the issue of obscenity and vulgarity in dance performances under the name of Lavani programmes.

About the dance

- It is traditional folk-art form of Maharashtra with an aesthetical combination of singing, enactment and dance.
- The word Lavani comes from 'lavanya' or beauty.
- Lavani has attained particular popularity in the Peshwa era in the 18th century.
- Traditionally, performances were held in front of kings, and for the entertainment of tired soldiers resting during breaks in fighting.
- There are several sub-genres of Lavani, of which the most popular is the Shringarik (erotic) kind.



Why in news?

- In Mann Ki Baat Prime Minister spoke about Ustad Bismillah Khan Yuva Puraskar awardees and their art forms.

Mandolin

- Mandolin is a stringed instrument, usually with 8 strings that are plucked with a pick, similar to a lute.
- The Mandolin is a moderately sized instrument, smaller than the Veena, Sitar, or guitar, and was developed in Europe in the 18th century as an evolution of the older Mandora (Mandola).
- The greatest exponent of the Mandolin in Indian classical music was the late Uppalapu Srinivas, often known as 'Mandolin' Srinivas who, however, used the electric instrument rather than the acoustic one.
- Uppalapu Nagamani, a mandolin player is the winner of the Ustad Bismillah Khan Yuva Puraskar 2021 for Carnatic Instrumental.

Saint Valentine's

History, Art & Culture

Why in news?

- Saint Valentine's is known for being associated with the Valentine's Day, its origins also have a darker side

About Saint Valentine

- Saint Valentine is believed to be a **third-century Roman Catholic priest**, who died on February 14 in 270 AD.
- It is said that he defied emperors' orders and secretly married couples.
- Soldiers were not allowed to get married because the emperor thought single men were more devoted fighters. Valentine disagreed with the idea. For this defiance, **he was beheaded by Emperor Claudius II Gothicus**.
- But this is not the only theory and another reference to weddings is found.
- Allegedly, it was an attempt by the Church to spread its influence over Lupercalia, an ancient Roman festival held around the same time.
- The Roman celebration honoured Faunus, the god of agriculture, as well as Romulus and Remus, the Roman founders.
- Men would pick names of women from a box, and they would become a couple through the event.
- However, Pope Gelasius picked the period of Lupercalia celebrations as the day to remember Saint Valentine towards the end of the 5th century, resulting in the association of Valentine's Day with love and romance.
- **How did Valentine's Day become a global celebration?**
- **Valentine, who died in 270 AD, was canonised by the Roman Catholic Church, as he may have also served as a priest who helped Christian couples get married in secret.** And the legend grew.
- **Through the works of Geoffrey Chaucer and William Shakespeare, the concept was romanticised and popularised in Europe and the English-speaking world.**
- According to the British Library, **the idea that Valentine's Day is a day for lovers is thought to originate with Chaucer's Parliament of Fowls, a poem written in the late 14th century.**
- The poem describes a group of birds which gather together in the early spring – on 'seynt valentyne's day' – to choose their mates for the year. It seems that the poem sparked a tradition.
- **In 'A Midsummer Night's Dream', Shakespeare makes a reference to Valentine's Day.**
- There is also the reason behind why Cupid, another popular icon, is represented as a child – a break from earlier representations of the Roman god of desire.

Microquakes

Geography & Environment

- Micro quakes are preventing any large-scale earthquakes in India

About Microquakes

- **Micro Earth Quake** (Microquake) - It is a very low intensity earthquake with a magnitude of 2.0 or less.
- India is located in a seismically active region where 59% of India's land mass is prone to earthquakes.
- But frequent occurrences of micro earthquakes in India which releases the stored-up energy in a consistent time interval prevents any large-scale disasters.
- **Triple Junction** - It is a point where 3 tectonic plates meet and interact.
- These are important areas of geological activity that are rigid, compact and withstand a lot of stress.
- If it breaks, the entire stress is released, causing a lot of damage.
- The breaking of this tri-junction led to the recent [massive earthquake in Turkey and Syria](#).
- In India, the triple junction on India's western border with Pakistan was prevented by the micro-level earthquakes that often releases energy.
- **Couple Zone** - It is a region where 2 tectonic plates horizontally slide past each other.
- India is divided into four seismic zones based on the potential for earthquake activity in each region.
- **Seismic Zone** - It is an area where there is a high probability of earthquakes due to the area's geology.

Western Disturbance

Geography & Environment

- A fresh Western Disturbance (WD) has recently hit northern India for which authorities have forecast moderate rainfall and snowfall at higher altitudes.

About Western Disturbances

- **Western Disturbance (WD)** – It is the term used to describe an extratropical storm that brings sudden winter rain and snow to the north-western parts of the Indian subcontinent.
- This is a non-monsoonal precipitation pattern driven by the Westerlies.
- The moisture in these storms usually originates over the Mediterranean Sea and the Atlantic Ocean.
- Extratropical storms are a global phenomenon with moisture usually carried in the upper atmosphere (unlike tropical storms where it is carried in the lower atmosphere).
- They usually influence the weather of the
- north and north-western regions of India by increasing the monsoon activity.
- It was found that if the frequencies of formation and movement of depression over the Bay of Bengal in a particular year increase, then the frequencies of Western Disturbances in the same year decrease.
- They are important to the development of the Rabi crop in the northern subcontinent, which includes the locally important staple wheat.

The Energy and Resources Institute (TERI)

Geography & Environment

Why in news?

- 22nd edition of the annual flagship event of **The Energy and Resources Institute (TERI)** —the World Sustainable Development Summit (WSDS) was held from 22-24 February 2023 in New Delhi.

About the WSDS

- The Summit is TERI's annual flagship multi stake holder event and is the only independently convened event of such scale in the Global South that brings together world leaders, thinkers, scientists, industry and government representatives to work towards long-term solutions for the planet's health.
- WSDS brings together political leaders, decision-makers from bilateral and multilateral institutions, business leaders, high-level functionaries from the diplomatic corps, scientists and researchers, media personnel, and members of civil society on a common platform.
- The key discussion agenda at the WSDS 2023 held in New Delhi was the importance of sustainable living.
- Another point that was stressed as a point of discussion was the need for an integrated approach to mainstreaming sustainable life.



- **Theme for 2023: Mainstreaming Sustainable Development and Climate Resilience for Collective Action.**
- **During the valedictory session of WSDS 2022, the Act4Earth initiative was launched.**

Protecting the Ocean Ecosystem

Geography & Environment

Why in news?

- While the high seas make up more than 60% of the world's oceans, they have long drawn far less attention than coastal waters and the UN wants to protect them in a global treaty.
- **Need for global treaty**
- Fishing, shipping, tourism and ocean protection is currently controlled by around 20 organizations.
- However, their regulations only apply to a distance of 200 nautical miles (370 kilometres) from the coast and individual states have no power in international waters.
- Illegal and overfishing, and other forms of damage such as deep-sea mining, oil and gas drilling, can hardly be monitored or prosecuted.
- To address this, officials from 51 countries have come together to negotiate the High Seas Treaty at the United Nations in New York.

Protecting Ecosystems

- **Sustainable fishing** - Every year, 10mn tons of fish was tossed away because of bad fishing practices and processing.
- This could be prevented, and in turn directly decrease pressure on our oceans.
- **Sustainable Sewage systems** - Around 80% of global wastewater is currently being diverted into oceans, unfiltered.
- Building sustainable sewage systems would contribute to better drinking water supplies.

First FAO Global assessment of Soil Carbon in Grasslands

Geography & Environment

Why in news?

- Food and Agriculture Organization of the United Nations (FAO) has published its first Global Assessment of Soil Carbon in Grasslands.

About FAO assessment

- **It measured the baseline of stocks of Soil Organic Carbon (SOC).**
- **The study found that if the SOC content in the 0–30 cm depth layer of available grasslands increased by 0.3 per cent after 20 years** of the application of management practices that enhance soil organic carbon sequestration, 0.3 tonnes C/ha per year could be sequestered.
- **The Livestock Environmental Assessment and Performance Partnership (FAO LEAP Partnership) funded this study** to illustrate the state of soil carbon stocks in grassland systems and their potential to sequester carbon in the soil.
- **Soils can act as both sources and sinks of carbon, and many grasslands, which contain approximately 20 percent of the world's SOC,** have suffered losses because of human activities such as intensive livestock grazing, agricultural activities and other land-use activities.
- According to the report, **most of the world's grasslands have a positive carbon balance**, meaning the land is stable or well-maintained.

E-Waste Issue in India

Geography & Environment

What is the issue?

- The extraction from the discarded e-wastes which is usually performed by children, is a crude and hazardous process that goes unregulated in India.

About E-waste

- **E-waste-** E-waste (electronic waste) is used to describe old, end-of-life or discarded electric and electronic appliances.



- This e-waste is comprised of 21 types of electrical and electronic equipment (EEE) notified Under the **E-Waste (Management) Rules, 2016**.
- E-waste includes components, consumables, parts and spares of
- Information technology and communication equipment
- Consumer electrical and electronics
- It releases toxic elements such as Lead, Mercury, Cadmium, Chromium, Polybrominated biphenyls and Polybrominated diphenyl.
- Many children suffer from serious skin diseases and chronic lung infections due to continuous exposure to chemical-laden toxins found in the metals.

E-Waste (Management) Rules, 2016

- **EPR** - The Rules extend the responsibility to producers to manage a system of e-waste collection, storage, transportation, and environmentally sound dismantling and recycling through Extended Producer Responsibility (EPR).
- **E-waste collection** - The rules also promote and encourage the establishment of an efficient e-waste collection mechanism.
- **Dismantling and recycling**- The dismantlers and recyclers have to obtain authorisation from concerned State Pollution Control Boards (SPCBs) or Pollution Control Committees (PCCs).
- They grant authorisation after ensuring that the dismantlers and recyclers have the facilities as per the guidelines of the Central Pollution Control Board (CPCB).
- **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)**
- The amended SPECS provides a financial incentive of 25% on capital expenditure for setting up modern recycling facilities for the extraction of precious metals from e-waste.
- A policy paper on circular economy (CE) in the EEE sector says e-waste mining offers an opportunity to secure the supply of resources needed for manufacturing EEE products.

India's first Marine Spatial Planning

Geography & Environment

Why in news?

- Puducherry has launched the country's first Marine Spatial Planning (MSP) framework as part of a pact under the Indo-Norway Integrated Ocean Initiative.

About Marine Spatial Planning

- Marine Spatial Planning is an **inter-sectoral and participatory planning process and tool** that seeks to **balance ecological, economic, and social objectives**, aiming for sustainable marine resource use and prosperous blue economies.
- The **Indo-Norway Integrated Ocean Initiative** led to the MSP framework to balance growth alongside sustainable management of ocean resources and coastal environment preservation.
- **The Ministry of Earth Sciences** is overseeing the implementation of the framework and **Puducherry and Lakshadweep** were chosen for the pilot MSP initiative.

Significance of MSP Framework

- MSP will ensure the emergence of a **blue economy** characterised by a sustainable and equitable ocean resource management, instead of an environmentally unsustainable "**brown economy**."
- MSP helped identify sites for new and emerging uses following an ecosystem-based approach.
- In many instances the demands for tourism growth tend to conflict with the livelihood concerns of fisher communities in terms of the use of coastal land and marine waters.
- MSP can help balance economic development and environment preservation of nearly 7500 kilometres coastline of India.
- There was no scientific mapping conducted before MSP that showed that roughly 50% of Puducherry's 42 km coastline was vulnerable to moderate to severe sea erosion.

Why in news?

- The Union Minister of Railways gave information about "Hydrogen for Heritage" in a written reply to a question in Rajya Sabha.

About the hydrogen for heritage

- Indian Railways has envisaged to run 35 Hydrogen trains under 'Hydrogen for Heritage'.
- Under 'Hydrogen for Heritage' hydrogen trains are run on various heritage and hilly routes in India.
- The trains under 'Hydrogen for Heritage' will run at an estimated cost of Rs 80 crores per train while the cost of ground infrastructure will be Rs 70 crores.
- The operation of the hydrogen-powered train is in line with the government's green growth mission.
- Use of Hydrogen as fuel provides larger benefits in the direction of green transportation technology.
- In a pilot project, an existing Diesel Electric Multiple Unit (DEMU) is retro fitted with Hydrogen Fuel cell.
- **Benefits**
 - Hydrogen as fuel is a clean energy source.
 - Provides larger benefits for green transportation technology.
 - Supports zero carbon emission goals.

Why in news?

- The Wildlife Institute of India (WII) is working to develop immuno-contraceptive measures for population management of species that have become problematic for humans in many parts of the country.

About Vermin

- Nilgai antelope and wild boar have become a menace in many areas of India, destroying crops and causing human-animal conflict.
- The Union Ministry of Environment (MoEF&CC) approved the 10-year research project for developing the immuno-contraception in 2016.
- Reduce reproduction in the species by making the female sterile.
- This will be done by injecting a vaccine made from a hormone derived from the ovary lining of pigs.
- The MoEF&CC had approved a project of Rs 10.65 crore for Wildlife Institute of India (WII), Dehradun, for vermin control.
- The project deals with population management of species involved in human-wildlife conflict.
- It includes a study on immune-contraceptive measures for population management of 4 species namely elephant, wild pig, Rhesus macaque and Nilgai.
- - The wild animals listed in Schedule V of the Wildlife (Protection) Act, 1972 are called Vermin.
- The vermin can be hunted or culled such as common crows, fruit bats, rats and mice.
- The central government has the power to declare any wild animal, other than those specified in Schedule I and Schedule II as 'vermin' for any area and a specified period.
- The wild animal should not be those specified in Schedule I and Part II of Schedule II of Wildlife (Protection) Act, 1972.
- The Wild Life (Protection) Amendment Bill, 2021 brings in a major change by reducing the number of schedules from six to four.

Why in news?

- A recent analysis comparing industry pledges to climate action by the France-based group Reclaim Finance shows banks and financial institutions, a part of the GFANZ initiative, continue to invest billions in fossil fuels.

GFANZ

- It is a global coalition of leading financial institutions committed to accelerating the decarbonization of the economy.

- **GFANZ was launched in April 2021 by the UN Special Envoy on Climate Action and Finance and the COP26 presidency, in partnership with the UNFCCC Race to Zero campaign**, to coordinate efforts across all sectors of the financial system to accelerate the transition to a net-zero global economy.
- Achieving the objective of the Paris Agreement to limit global temperature increases to 1.5°C from pre-industrial levels requires a whole economic transition.
- Every company, bank, insurer, and investor will need to adjust their business models, develop credible plans for the transition to a low-carbon, climate-resilient future, and then implement those plans.
- It provides the tools and resources the financial sector needs to implement its net-zero commitments.
- It estimates a requirement of USD 100 trillion of finance for global net zero by 2050.
- **It was founded for two equally important purposes:**
 - To expand the number of net zero-committed financial institutions and
 - To establish a forum for addressing sector-wide challenges associated with the net-zero transition, helping to ensure high levels of ambition are met with credible action.
- GFANZ brings together independent, sector-specific alliances to tackle net-zero transition challenges and connects the financial community to the Race to Zero campaign, climate scientists and experts, and civil society.

Ocean Carbon Dioxide Removal

Geography & Environment

Why in news?

- The ocean twilight zone could store vast amounts of carbon captured from the atmosphere which might help to slow climate change.

About Carbon Dioxide Removal

- Ocean carbon dioxide removal (ocean CDR) is a method which uses the ocean's natural ability to take up carbon on a large scale and amplifies it.
- Carbon gets into the ocean from the atmosphere in two ways.
 - **First Method** - Air dissolves into the ocean surface.
 - Winds and crashing waves mix it into the upper half-mile of slightly alkaline seawater.
 - The carbon dioxide is absorbed into the ocean.
 - **Second Method** - It involves the biologic pump.
 - The ocean is a living medium consisting of algae and fish and whales.
 - When an organic material is eaten or dies, it rains down to ocean twilight zone.
- Removing carbon dioxide from the atmosphere is a necessary pathway to keep global warming under 1.5° Celsius.
- The ocean's natural ability to take up more carbon can be enhanced in 3 methods to achieve this.
 - Enhancing ocean alkalinity.
 - Adding micronutrients to the surface ocean.
 - Growing kelp in the ocean.

Wasp named after Soliga

Geography & Environment

- scientific community has named a new genus of wasp after Soliga, who are the indigenous community of Biligiri Rangan Hills in Karnataka, in recognition of their conservation of forests and biodiversity.

About new genus of wasp

- These specimens were collected 15 years ago, as a part of ATREE's Western Ghats Insect Inventory Program.
- Additional specimens of the same species were collected from the secondary wet forest habitat of Nagaland.
- **The species is named as 'ecarinata' denoting the absence of ridges** in certain body regions and this new insect is strikingly colourful and distinct from all its relatives.
- **This new wasp belongs to the subfamily Metopiinae of Darwin wasps family Ichneumonidae.**
- The subfamily Metopiinae has 862 species in 27 genera including two fossil genera, most of those are seen only in Palearctic region, Neotropical and Nearctic regions.
- **This is the second genus of this subfamily reported from India and the first from South India.**
- **The entomologists at Ashoka Trust for Research in Ecology and the Environment (ATREE), decided to name the new genus as Soliga ecarinata in an acknowledgement of the Soliga lifestyle which is rooted in the philosophy of sustainability since ancient days and is the mantra in modern times.**

Why in news?

- The Rajasthan state Forest Department has proposed to construct a zoo in Bharatpur, Rajasthan.

About the sanctuary

- The zoo is called Wetland ex-situ Conservation Establishment (WESCE) and it is part of the Rajasthan Forestry and Biodiversity Development Project (RFBDP).
- The zoo aims to rejuvenate the bio-diversity of Keoladeo National Park, thereby boosting its outstanding universal values.
- Several facilities are planned inside Keoladeo national park. These include:
- A breeding and re-introduction centre for locally extinct species, such as otters, fishing cats, blackbucks, hog deer, etc.
- An aquarium for indigenous species like Gangetic Dolphin, crocodiles.
- Enclosures for the display of large wetland species like Indian Rhino, Water Buffalo, Barasingha (swamp deer).
- An aviary, a reptile house and a veterinary care facility.

Climate Feedback Loop**Geography & Environment****Why in news?**

- A recent report has warned that the Earth's climate may be on the edge of permanent change due to 'dangerous' feedback loops.

About Feedback loop

- They are the climate's equivalent of a vicious cycle.
- It refers to a change in one metric which accelerates or decelerates the warming trend of the planet.
- Melting of ice caps, wildfires, thawing etc.
- As the world gets hotter, ice melts, exposing the darker-coloured land or water.
- The dark surface absorbs more light, which in turn contributes to warming and the ice melts at a much more rapid pace.
- The burning of dry vegetation introduces poisonous gases such as CO₂ which accelerates the greenhouse effect and will result in another wildfire event.
- The report also warned about the interaction of various feedback loops.
- It may result in a sequence of catastrophic climate tipping points which will be self-sustaining.
- It refers to the loops which absorb planet-heating carbon emissions.
- The scientists also came out with 7 dampening feedback loops.

Canine Distemper Virus (CDV)**Geography & Environment****Why in news?**

- Recently there were reports from Maharashtra and Karnataka where leopards entered human habitations and were later captured.

About CDV

- Canine Distemper Virus (CDV) was suggested as the cause for these human animal conflict.
- CDV makes these big cats less fearful of humans.
- CDV is also known as canine morbillivirus, is a highly infectious single-stranded RNA virus.
- CDV is a viral disease that infects the gastrointestinal, respiratory, and central nervous systems.
- Dogs who have not been vaccinated for Canine Distemper are the most at-risk.
- Predation of CDV affected dogs is the major route of getting the infectious virus.

Why in news?

- The National Green Tribunal has recently ordered to demolish buildings in Sundarbans in violation of environmental norms.

About Sundar Bans

- Sundarbans was a Critically Vulnerable Coastal Area (CVCA) under the coastal regulation zone notifications.
- No construction was permissible in a CVCA.
- Sundarbans, the world's largest delta, spans 10,200 square kilometres of Mangrove Forest in India and Bangladesh.
- Sundarbans National Park, located in the southern part of West Bengal, is a part of the forest within Indian Territory.
- Sundari trees can be found in abundance throughout the forest.
- The Royal Bengal tigers are well-known in Sundarbans.
- The Sundarbans is the world's largest delta and mangrove forest.
- The Sunderban Tiger Reserve, is a world heritage site and a Ramsar Site.
- The Muriganga River runs through the Indian Sundarbans on the west, and the Harinbhahga and Raimangal Rivers run through it on the east.
- Saptamukhi, Thakuran, Matla, and Goasaba are some of the other major rivers that flow through this eco - system.

Why in news?

- A study conducted in Thiruvananthapuram, Kerala, suggests Bisphenol A can indirectly aid in the spread of vector-borne diseases in humans and animals.
- The bisphenol A, or BPA is a human-made chemical.
- The chemical is widely used to soften plastics, paints and other products.
- BPA has adverse effect on human health.
- When ingested, it disrupts the endocrine system by interfering with the hormones and affects the brain and prostate gland of fetuses, infants and children.
- The chemical can cause high blood pressure, diabetes and cardiovascular disease in adults.
- BPA is known to impair reproduction and development in aquatic organisms.
- For example, BPA exposure delays larval development and pupation time in common fruit fly (*Drosophila melanogaster*).
- The study establishes that BPA can significantly shorten the breeding time of southern house mosquitoes and thereby aid in its quick multiplication.

Why in news?

- The 3rd Asian Rhino Range Countries Meeting was held recently in Chitwan National Park, Nepal.

About the

- The meeting was attended by delegates from Rhino range countries as well as rhino experts, including the International Rhino Foundation (IRF).
- Rhino Range Countries are India, Bhutan, Indonesia, Malaysia and Nepal.
- The participating countries exchanged experiences to conserve rhino population.
- The 1st meeting held in Indonesia and 2nd held in India.
- **Target** - The participants agreed to achieve at least a 3% annual growth rate of Greater One-Horned, Javan and Sumatran Rhinos.

Conservation in India

- In line with the Chitwan Declaration, Bihar government has recently decided to increase its rhino population by 3% annually.
- It also decided to increase rhino-bearing areas in Valmiki Tiger Reserve (VTR) by 5% in the next 2 years.

Why in news?

- Geoengineering means manipulating the earth's climate to lower its temperature in a bid to counter global warming.

Types of solar Geoengineering

- **Stratospheric Aerosol Injection** - It includes spraying large quantities of tiny particles into the earth's stratosphere to reflect sunlight and keep the earth cooler.
- The compounds used are Sulphur dioxides or finely powdered calcium carbonate, as aerosols.
- **Natural Aerosol** - Sulphur clouds released during volcanic eruptions has particles that reflect sunlight and cause a cooling effect.
- **Marine Cloud Brightening** - It proposes spraying sea salt into low-lying clouds to increase their brightness and the ability to reflect sunlight.
- **Challenges**
 - Solar geoengineering is not a permanent solution to global warming or climate change.
 - **Net Heating Effect** - Stratospheric Aerosol Injection is particularly controversial because the reflective effect of aerosols wears off after some time, leading to a net heating effect.
 - **Real time Impacts** - There is also not enough evidence to show how altering the atmosphere can affect regional as well as global precipitation cycles.

Whale Stranding**Geography & Environment**

- 14 pilot whales were stranded near the shore of Kalpitiya, a town located on Sri Lanka's west coast.

About Whale standing

- Whale stranding, also known as beaching, is a phenomenon in which whales are stuck on land, usually on a beach.
- Other aquatic animals like dolphins and porpoises are also known to beach.
- Most of the stranding events involve single animals but sometimes, mass strandings can also happen.
- **Potential Hotspots** - Tasmania, New Zealand's Golden Bay and Massachusetts's Cape Cod in the United States.
- This region's tidal variation (deep water becomes shallow abruptly) is one of the main reasons for whale stranding.

Great Backyard Bird Count (GBBC)**Geography & Environment****Why in news?**

- Birdwatchers across 35 States and Union Territories uploaded more than 46,000 bird lists, making India take the second spot after the United States of America.

About GBBC

- The Great Backyard Bird Count (GBBC) was launched in 1998.
- GBBC India is the Indian implementation of the global Great Backyard Bird Count, which runs for 4 days every February.
- Indian birders have participated in the GBBC since the event went worldwide in 2013.
- These annual snapshots of bird populations help answer a variety of important questions, including how birds are distributed across the country, how they are affected by changes in habitat and weather, and whether populations and distributions might be changing from year to year.
- GBBC India is coordinated by the Bird Count India collective, a coming-together of a number of groups and organisations that are interested in birds, nature and conservation.

Why in news?

- The Kashmir Valley has bucked the trend of Asiatic black attacks on humans rarely reported throughout the animal's global range.

About Asiatic bear

- Asiatic black bear (*Ursus thibetanus*) is also as Moon bear.
- The Asiatic black bear has 7 subspecies, out of which the subspecies Himalayan Black Bear (*Ursus thibetanus laniger*) is found in India.
- **Features** - The Asiatic Black Bear has a coat of smooth black fur and can be distinguished by a V of white fur on its chest.
- **Distribution** - The species occupies a narrow band from south-eastern Iran to Myanmar, across the foothills of the Himalayas.
- **In India** - Arunachal Pradesh, Assam, Sikkim, and the union territory of Jammu and Kashmir (J&K).
- **Diet** - Omnivorous. Mainly fruits.
- **Threats** - Hunting, poaching, habitat loss and climate change.
- In Kashmir Valley, the conversion of the bear's natural habitat to orchards and farmlands is a major threat.

**DON'T DELAY YOUR ADMISSION.
JOIN US BEFORE THE SEATS FILL OUT.**

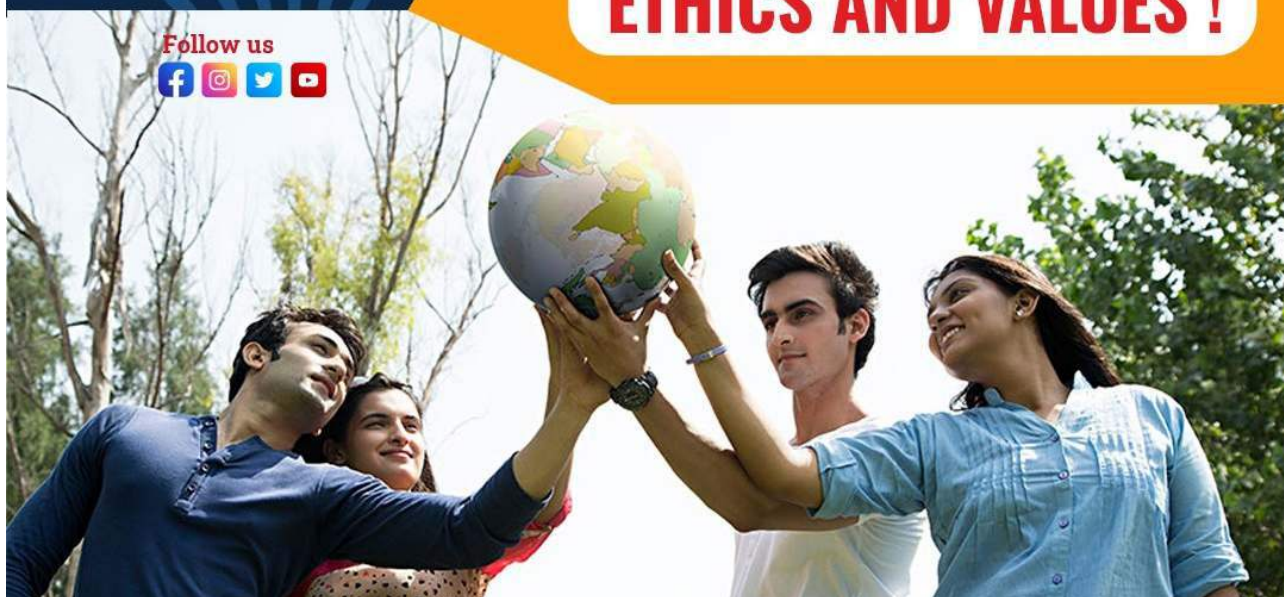
HURRY UP!



Ignite IAS
IGNITING INTELLECTUALISM IN YOUNG MINDS

**A LEARNING ENVIRONMENT
THAT INCULCATES
ETHICS AND VALUES !**

Follow us



Ignite IAS
IGNITING INTELLECTUALISM IN YOUNG MINDS



igniteias.com

15

Why in news?

- Ministry of Statistics & Programme Implementation has recently released the Revised Guidelines on Members of Parliament Local Area Development Scheme (MPLADS)-2023.

About the revised Guidelines

- The revised set of guidelines **aims to broaden the scope of the Scheme** so as to **enable the Hon'ble MPs to recommend the developmental works as per the changing needs of the community**; with an emphasis on improving the functioning, implementation and monitoring of the MPLAD scheme.
- A new Web-Portal, for implementation of the Revised Fund Flow Procedure under MPLADS was also launched.
- The entire process of fund flow under the revised guidelines will operate through the web portal**, which will facilitate **real-time monitoring**, greater transparency and accountability in the system, and improved efficiency and effectiveness of the MPLAD Scheme.

About MPLAD Scheme

- The scheme was launched in 1993-94.
- The objective is to enable the Members of Parliament (MP) to suggest & get executed developmental works of ca
- Under the scheme, each MP has the choice to suggest to the District Collector for works to the tune of Rs.5 Crores per annum to be taken up in his/her constituency.
- The Rajya Sabha MPs can recommend works in one or more districts in the State from where he/she has been elected.
- The Nominated Members of the Lok Sabha and Rajya Sabha may select any one or more Districts from any one State in the Country for implementation of their choice of work under the scheme.
- The Members of Parliament Local Area Development Division, Ministry of Statics and Programme Implementation is entrusted with the responsibility of implementation of the scheme.
- MPs can recommend work of upto 25 lakh for Natural Calamity in the state and upto Rs. 1 crore in the country in case of Calamity of Severe Nature.
- MPs need to recommend work worth at least 15% and 7.5% of their funds to create assets in areas inhabited by SCs and STs respectively.
- Funds for MPLADS can be converged with MGNREGA for creating more durable assets and with the National Program for Development of Sports (Khelo India).
- The annual entitlement of Rs 5 crore shall be released, in two equal instalments of Rs 2.5 crore each, by Government of India directly to the District Authority of the Nodal District of the Member of Parliament concerned.
- The District Authority shall be responsible for timely and effective implementation of such works.

Right to be Forgotten

Polity & Governance

Why in news?

- The Delhi High Court is set to hear a doctor's plea for enforcement of his 'Right to be Forgotten'.

About the verdict

- In Dr. Ishwarprasad Gilda vs. Union of India & Others, a practicing doctor was accused of offenses under the Indian Penal Code (IPC)
- Section 304A - causing death by negligence
- Section 417 - cheating
- Section 170 - personating a public servant
- The doctor was accused of illegally procuring medicines from abroad and administering them to HIV patients in India.
- The doctor approached the Delhi High Court seeking directions to remove all irrelevant news or to pass any other order to safeguard his dignity, including availing his Right to be Forgotten.

Courts opinion

- The right is not recognized by a law or a statute in India expressly.
- The courts have repeatedly held it to be endemic to an individual's Right to Privacy under Article 21.
- The Supreme Court in *K.S. Puttaswamy vs UOI* referred to the European Union Regulation of 2016 which recognized the right to be forgotten as an individual's right to remove personal information from the system.
- However, the court also recognized that such a right can be restricted by the right to freedom of expression and information or for compliance with legal obligations.
-
- **What is the 'Right to be Forgotten' under European law?**
- The right to be forgotten empowers individuals to ask organisations to delete their **personal data**.
- It is provided by the EU's General Data Protection Regulation (GDPR), a law passed by the 28-member bloc in 2018.
- "personal data" means "any information relating to an identified or identifiable natural person ("data subject")", and "controller" means "the natural or legal person, public authority, agency or any other body which... determines the purposes and means of the processing of personal data".

Disclosure of Chargesheets

Polity & Governance

Why in news?

- The Supreme Court had recently held that the state is not obliged to provide the public free access to chargesheets by uploading them on police or government websites.

Supreme Court (SC) observation

- The Court ruled that a charge sheet filed against an accused in a criminal case is **not a public document** within the meaning of the Right to Information Act 2005 or the Indian Evidence Act.
- It declared chargesheets to be **private documents**.
- It had held that putting up chargesheets for public viewing would **violate the rights** of the accused, victims and even the investigating agency.
- It would also be **contrary to the scheme of the Code of Criminal Procedure**.
- **Impacts** - It may be a **setback in ushering transparency** in the criminal justice administration.
- The Supreme Court's order is a wake-up call to all investigating agencies, including the Central Bureau of Investigation, which have often been assaulted by courts for **delays** in filing a charge sheet or for the **poor quality of investigation**.

Contradictory judgements

- **Youth Bar Association of India vs Union of India (2016)** - It directed that the First Information Report (FIR) should be on the relevant investigating agency's website within 24 hours of its registration for public perusal and appropriate action.
- **FIR vs chargesheet** - But now the SC differentiated the chargesheet from the FIR stating that the latter had vital information such as a list of prosecution witnesses.

Second edition of the Foundational Literacy and Numeracy (FLN) report

P & G

Why in news?

- The second edition of the FLN report was released by Dr Bibek Debroy, Chairman, Economic Advisory Council to the Prime Minister (EAC-PM).

Key highlights of the report

- The report was released at #TheIndiaDialog organised by Institute for Competitiveness and US-Asia Technology Management Center, Stanford University, on February 23 & 24, 2023.
- It highlights the **focus on language as a critical foundational skill** and its importance in acquiring early literacy.
- **A special section in the report covers insights into states/UTs to assess children's learning outcomes** on the National Achievement Survey (NAS) and Foundational Learning Study (FLS) 2022.



- **State profiles and their performance on Distance from the Frontier are covered**, enabling states/Union Territories to track progress on foundational learning.
- **It captures the role of language in education and focuses on improving the learning outcomes** using appropriate assessments and medium of instruction.
- It captures the fundamental concepts children require to become skilled readers and highlights distinct challenges faced in a multilingual environment.
- **A section of the report explicitly focuses on the numerous initiatives currently implemented** at the national and state level in collaboration with public-private organizations, demonstrating their efforts in achieving foundational learning goals as outlined in NIPUN.
- **The report continues to be a benchmark for states and union territories** to track their performance relative to their peers in achieving universal foundational learning by 2026-27.
- **West Bengal maintained its lead while Uttar Pradesh stood at the bottom among large state** categories on the second edition of the FLN index.
- **Among smaller states, Punjab was at the top** of the index while Telangana was at the bottom while Puducherry topped the index among union territories while Ladakh was the worst performer.
- **Among north-eastern states, Sikkim was at the top** while Meghalaya was at the bottom of the index. There are four categories in which regions have been divided, large states, small states union territories and north-east, for indexation.
- As per the report, **India's overall average score was 44.48 and 18 out of 36 state/UTs have scored above country average in FLN index.**
- The index has ranked states on five key parameters and 36 indicators. These include educational infrastructure, access to education, basic health, learning outcomes and governance.
- The report's findings cover the role of nutrition, access to digital technology and language-focused instructional approach.
- It is further recommended to undertake various assessments pertaining to the linguistic system (includes phonology, vocabulary/lexicon, and syntax), the orthographic system (includes symbols and mapping principles), and the writing mechanisms and move the focus to improving the periodicity of NAS and the sample size of FLS for assessing the learning outcomes effectively.
- And finally, the need for data monitoring at a disaggregated level for FLN outcomes is also required to be integrated into the system, along with clearly defined outcome-based indicators on pedagogical framework and education in India.

Corrupt Practices in Representation of People Act, 1951

Polity & Governance

Why in news?

- The Supreme Court observed that providing false information about an electoral candidate's qualifications cannot be considered a corrupt practice.

About the present case

- In 'Anugrah Narayan Singh v. Harsh Vardhan Bajpayee', a bench of the Apex Court heard a plea challenging a 2017 Allahabad High Court ruling.
- The ruling was regarding, dismissing a similarly titled petition to declare the election of an MLA as null and void.
- However, the Apex Court refused to interfere with the High Court's order of dismissal.
- The petition argued that the MLA indulged in a corrupt practice under Section 123(2) and Section 123 (4) of the RPA, 1951.
- The Allahabad High Court held that inaccuracy or concealment regarding educational qualification of the respondent did not amount to unduly influencing the voters.

DISQUALIFICATION FOR CORRUPT PRACTICES UNDER THE RPA, 1951

- Section 123 of the Representation of people Act (RPA) deals with the corrupt practices.
- The broad definition of different corrupt practices as per Section 123 are as under:
- Bribery: It is any gift, offer or promise by a candidate or his agent or by any other person with the consent of a candidate or his election agent of any gratification, to any person whomsoever, with the object, directly or indirectly of inducing a person to withdraw or not to withdraw from being a candidate at an election or an elector to vote or refrain from voting at an election.

- Undue influence: Any direct or indirect interference or attempt to interfere on the part of the candidate or his agent, or of any other person with the consent of the candidate or his election agent, with the free exercise of any electoral right.
- The appeal by a candidate or his agent to vote or refrain from voting for any person on the ground of his religion, race, caste, community or language or the use of, or appeal to religious symbols or the use of, or appeal to, national symbols, such as the national flag or the national emblem.
- It is to be noted that no symbol allotted under this Act to a candidate shall be deemed to be a religious symbol or a national symbol for the purposes of above clause.
- The promotion of, or attempt to promote, feelings of enmity or hatred between different classes of the citizens of India on grounds of religion, race, caste, community, or language, by a candidate or his agent.
- The propagation of the practice or the commission of sati or its glorification by a candidate or his agent.
- The publication by a candidate or his agent, of any statement of fact which is false, and reasonably calculated to prejudice the prospects of other candidate's election.
- The hiring or procuring, whether on payment or otherwise, of any vehicle by a candidate or his agent or the use of such vehicle for the free conveyance of any elector (other than the candidate himself the members of his family or his agent) to or from any polling station.
- The incurring or authorizing of expenditure in contravention of section 77.
- The obtaining or attempting to obtain or procure by a candidate or his agent any assistance (other than the giving of vote) from any person in the service of the Government.
- Booth capturing by a candidate or his agent or other person
-
- Section 8A deals with the disqualification on ground of corrupt practices.
- The case of every person found guilty of a corrupt practice by an order under section 99 shall be submitted within a period of three months from the date such order takes effect, by such authority as the Central Government may specify in this behalf, to the President for determination of the question as to whether such person shall be disqualified and if so, for what period:
- Provided that the period for which any person may be disqualified under this sub-section shall in no case exceed six years from the date on which the order made in relation to him under section 99 takes effect.
- Any person who stands disqualified under section 8A of this Act as it stood immediately before the commencement of the Election Laws (Amendment) Act, 1975, may, if the period of such disqualification has not expired, submit a petition to the President for the removal of such disqualification for the unexpired portion of the said period.
- Before giving his decision on any question mentioned or on any petition, the President shall obtain the opinion of the Election Commission on such question or petition and shall act according to such opinion.

Draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill

P & G

Why in news?

- Ministry of Mines has recently notified the draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill.

Key features of the bill-

- **Declaration of Geoheritage sites** : The central government may declare a site as a geoheritage site of national importance.
- Geoheritage sites must contain features of geological significance, such as geo-relics or natural rock sculptures.
- **Geo-relics are movable relics such as fossils or meteorites.**
- **Protection of Geoheritage sites** : The draft Bill empowers the central government to acquire, preserve, and maintain geoheritage sites.
- Director General of the **Geological Survey of India** will be given powers for this purpose, such as surveying and excavation.
- **Construction on these sites will be prohibited.**
- **Protection of Geo-relics** The central government may declare that a **geo-relic cannot be moved from its site, by notification, unless permitted by the Director General.**

- The Director General may direct the acquisition of a geo-relic to protect it.
- **Offences & Penalties** : Offences under the Bill include (i) destruction or misuse of a geoheritage site, (ii) illegal construction, and (iii) damaging or illegally moving a geo-relic.
- These offences are punishable with a fine of up to five lakh rupees or imprisonment of up to six months, or both.

Geo-heritage Sites and Geo-relics

- **The draft bill defines Geoheritage sites as "sites containing geo-relics and phenomena, stratigraphic type sections, geological structures** and geomorphic landforms including caves, natural rock-sculptures of national and international interest; and includes such portion of land adjoining the site," that may be required for their conservation or to access to such sites.
- **A Geo-relic is defined as "any relic or material of a geological significance or interest like sediments, rocks, minerals, meteorite or fossils". The GSI will have the power to acquire geo-relics "for its preservation and maintenance".**
- According to a 2016 press release by the Ministry of Mines, **the Geological Survey of India (GSI) declares geo-heritage sites/ national geological monuments for protection and maintenance.** The GSI or the respective state governments take necessary measures to protect these sites.
- Coming under the Ministry of Mines, the GSI was established in 1851 to investigate and assess coal and other mineral resources of the country through regional-level exploration.
- The 32 geo-heritage sites spread across 13 states include the Volcanogenic bedded Barytes of Mangampeta in Cuddapah district of Andhra Pradesh, the Akal Fossil Wood Park in Jaisalmer, Rajasthan and others.

Post Retirement Appointment of Judges

Polity & Governance

Why in news?

- Within a month of retiring from the Supreme Court of India, Justice S. Abdul Nazeer's appointment as Governor of Andhra Pradesh has stirred debates on post retirement appointments.

About the post retirement jobs for judges

- Justice Nazeer (ret'd), was part of the five-judge bench that delivered the November 2019 Ayodhya verdict.
- The former Supreme Court judge also headed the five-judge Constitution bench that upheld the Centre's decision to demonetise Rs 500 and Rs 1000 currency notes in 2016.
- Opposition leaders questioned the appointment of a former Supreme Court judge as a Governor as the move signals that **pre-retirement judgments are influenced by the desire of a post-retirement job.**
- Appointment of Justice P. Sathasivam as Governor of Kerala and Justice Ranjan P. Gogoi as a member of the Rajya Sabha has already stirred the debate.

Issues with appointments

- Corrupt the judges
- Encourage a culture of sycophancy to get advantage
- Affect the independence of the judiciary
- Makes the public have less faith in the judiciary
- Against the separation of powers
- Undermine the constitutional values of impartiality in the dispensation of justice

Dealing with this issue

- **Clear demarcation** - The Indian judiciary must distinguish between political favours and other post-retirement employment opportunities.
- There needs to be a demarcation between roles where the presence of a judicial authority is clearly valuable.
- **Role of judicial community** - The judicial community should take a concerted decision of not taking up any appointments upon retirement stemming from political patronage.
- **Cooling period** - A cooling period of about 2 years should be considered a mandatory minimum before a judge agrees to take on any post-retirement adjudicatory role.

Law Commission Recommendation

- In its 14th report in 1958, the Law Commission noted that retired Supreme Court judges used to engage in two kinds of work after retirement. One was "chamber practice" (a term which would, today, mean giving opinions to clients and serving as arbitrators in private disputes) and second was "employment in important positions under the government". The Law Commission frowned upon chamber practice, but did not recommend its abolition. It strongly recommended banning post-retirement government employment for Supreme Court judges because the government was a large litigant in the courts. The recommendations were never implemented.

Death Penalty in India

Polity & Governance

Why in news?

- According to the Annual Death Penalty Report - 2022, trial courts awarded 165 death penalties in 2022, most since 2000.

About the report

- The Annual Death Penalty report 2022 was released by Project 39A, a group from the National Law University, New Delhi.
- **Report Highlights** - In 2022, 165 death sentences were imposed by trial courts, which is the highest in a single year since 2000.
- As on 31st December 2022, 539 prisoners were living on death row, which is the largest death row population since 2004.
- The death penalty in Ahmedabad single bomb blast case is the largest number of persons sentenced to death in a single case since 2016.
- The cases of sexual violence constituting over half of the total death sentences imposed by trial courts in 2022.
- Despite the high number of death sentences in trial courts, very few death sentences are upheld by higher courts

Prisoners on Death Row

- **Global scenario** - At the end of 2022, 113 countries had abolished the death penalty.
- 125 countries voted in favour of a moratorium on the death penalty at the UNGA on 15 December 2022, with India voting against the same.
- **Related topics** - [Jurisprudence of death penalty](#), [Reforming death penalty in India](#), [Mercy Petition](#)

Section 69(A) of IT Act

Polity & Governance

Why in news?

- The Ministry of Electronics and Information Technology (MeitY) blocked 200 online platforms under Section 69(A) of the Information Technology Act, 2000.

About the section

- Section 69 of the IT Act allows the government to issue content-blocking orders to online intermediaries.
- The online intermediaries include Internet Service Providers (ISPs), telecom service providers, web hosting services, search engines, online marketplaces, etc.
- **Criteria** - The information or content being blocked to be deemed a threat to India's national security, sovereignty, or public order.
- **Section - 69A** If the Centre or state government are satisfied that blocking the content is "necessary" and "expedient" on grounds of "sovereignty or integrity of India, defence of India, security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of any cognizable offence relating to above or for investigation of any offence,"
- it may, for reasons to be recorded in writing, direct any agency "to intercept, monitor or decrypt or cause to be intercepted or monitored or decrypted any information generated, transmitted, received or stored in any computer resource"**Procedure to block apps**
- The MeitY has blocking powers similar to those of the Ministry of Information & Broadcasting.

- MeitY derives the blocking powers from the IT Act, 2009.
- The Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009 or the IT Rules, 2009, explains the process to issue such orders.
- The IT Rules include provisions such as review committees, the opportunity for a fair hearing, strict confidentiality, and maintenance of records by designated officers.
- **Safeguards**- Blocking can only be resorted to where the Central Government is satisfied that it is necessary to do so.
- The reasons have to be recorded in writing in such blocking order so that they may be assailed in a writ petition under Article 226 of the Constitution.

History of blocking

- Following cross-border tensions with China, the MeitY banned 59 apps on June 29, 2020, including TikTok, Shareit, etc.
- Similarly, the government banned 118 apps, including PUBG, followed by another ban on 49 apps in 2020.

Prohibition of Child Marriage Act, 2006

Polity & Governance

Why in news?

- More than 2,000 people have been arrested under the POCSO Act and Prohibition of Child Marriage Act in Assam.

About the legislation

- The Prohibition of Child Marriage Act of 2006 was enacted to bring down child marriage and protection of minors from marriage.
- **Legal Age** - The Act stipulates 18 years as the minimum marriageable age for women, while for men it is 21 years.
- **Illegal** - Under the Act, child marriages are illegal but not void.
- Instead, they are voidable at the option of the minor party, in the scenario that the minor petitions the court to declare the marriage void.
- **Punishment** - Rigorous imprisonment which may extend to 2 years or with fine which may extend to one lakh rupees or with both.
- The punishment also extends to anyone who performs, conducts, directs, or abets any child marriage.
- It includes rigorous imprisonment of up to 2 years and a fine which may extend to one lakh rupees unless proven that he had reasons to believe that the marriage was not a child marriage.
- **Marriageable Age** - At the time of India's independence, the minimum marriageable age stood at 15 years for females and 18 years for men.
- In 1978, the government increased it to 18 for girls and 21 for men.
- The 2021 Amendment Bill seeks to raise the age of legal marriage for women from 18 to 21.
- The Jaya Jaitly Committee submitted a report stating that the marriageable age for women should be increased from 18 to 21 years of age, in light of factors like reproductive health, education, etc.
- **Related Topics** - UNFPA-UNICEF Global Programme to End Child Marriage, Marriage laws in India, Marriage age under various acts

Office of Deputy Speaker

Polity & Governance

Why in news?

- The Supreme Court has recently issued notices to the Centre and five states over the failure to elect a Deputy Speaker.

Constitution and deputy speaker

- **Article 93** of the Indian Constitution establishes the post of the Deputy Speaker of Lok Sabha.
- **Articles 94-96** deals with the appointment, removal, and powers of Deputy Speaker.
- Since the 11th Lok Sabha, the Speaker will come from the ruling party, while the Deputy Speaker will come from the leading opposing party.
- The Deputy Speaker has the same power as the Speaker when presiding over a sitting of the House.



- Deputy Speaker is not subordinate to the Speaker and is directly responsible to the House.
- Whenever the Deputy Speaker is appointed as a member of a parliamentary committee, he automatically becomes its chairman.
- The Deputy Speaker's salary and allowances are fixed by Parliament, and are charged on the Consolidated Fund of India.
- The Speaker and the Deputy Speaker do not take any separate oath or affirmation.

Office of Profit

Polity & Governance

Why in news?

- Jharkhand Chief Minister was reported to be holding office of profit when he was the mining and forest minister of Jharkhand.

About office of profit

- An office of profit has been interpreted to be a position that brings to the office-holder some financial gain, or advantage, or benefit.
- The amount of such profit is immaterial.
- A person shall be disqualified, if he holds any office of profit under the Government of India or the Government of any State, other than an office declared by the Legislature not to disqualify its holder.
- The question of disqualification in matters related to office of profit is vested with the Governor and his/her decision is final.
- Before giving any decision, the Governor shall obtain the opinion of the Election Commission and shall act according to such opinion.
- However, it does not lay down a time frame for the Governor to act.

Sansad Ratna Awards

Polity & Governance

Why in news?

- The 13th edition of the Sansad Award was announced recently.

About the awards

- The **Awards were instituted at the suggestion of Dr APJ Abdul Kalam** to honour top performing Parliamentarians on the basis of their work in the apex legislative body.
- He launched the 1st edition of the Award function in 2010.
- So far, 90 top performing Parliamentarians have been honoured.
- The Sansad Ratna Awards' Jury committee comprises eminent Parliamentarians and members of civil society.
- The **Sansad Ratna Awards are not given by the Government of India.**
- The **awards were the brainchild of K Srinivasan**, a communication strategist who founded the Prime Point Foundation in 1999.
- The **awards were started with support from IIT Madras.**

22nd Law Commission of India

Polity & Governance

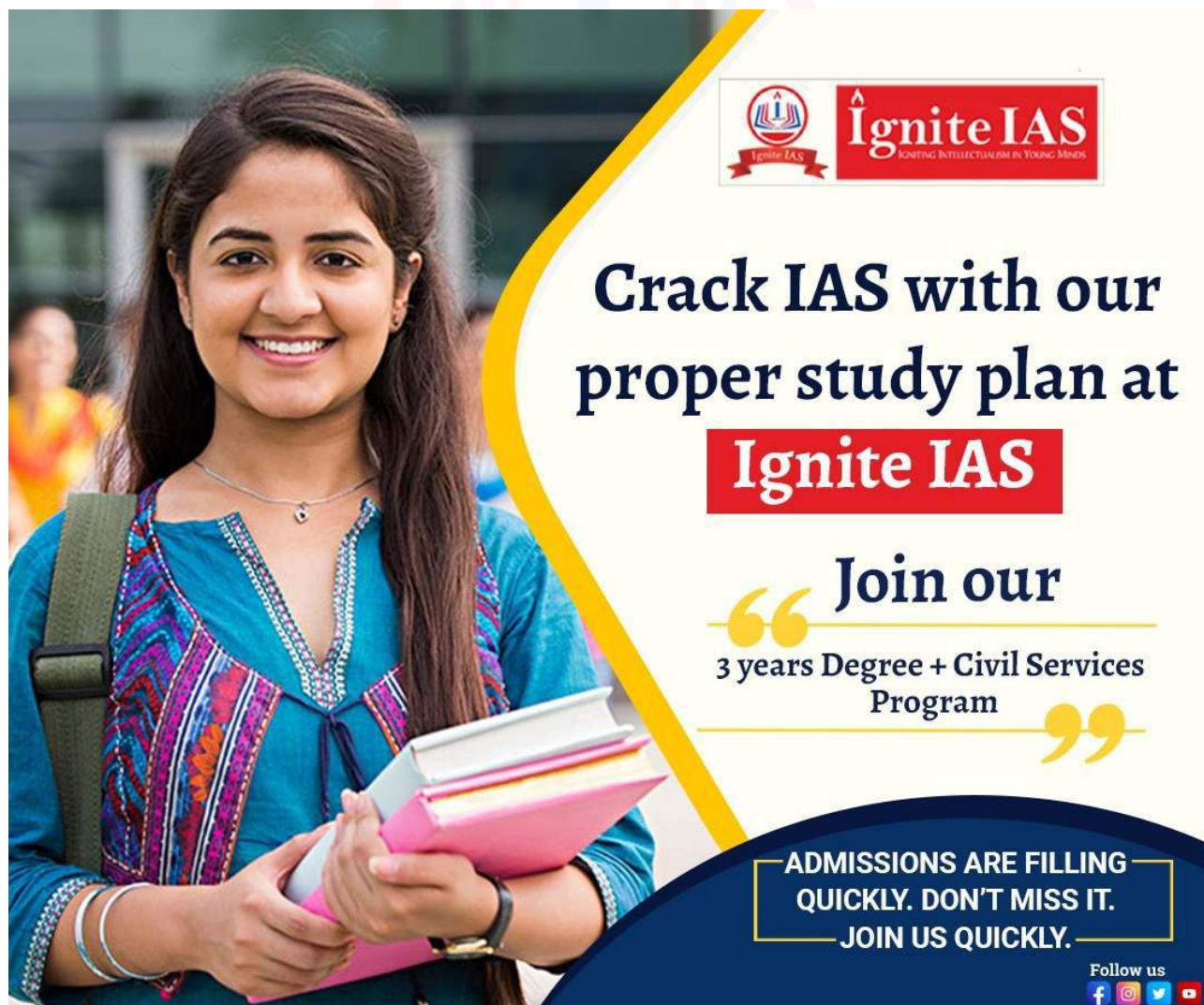
Why in news?


- Union Cabinet has recently approved the extension of term of 22nd Law Commission of India up to 2024.
- **Law Commission of India**
- **Status** - It is a non-statutory body, constituted by the Government of India from time to time.
- The Commission was initially formed in 1955 and is re-constituted occasionally.
- **Composition** - A full-time chairperson with 4 full-time members, including a member-secretary.
- Law and Legislative Secretaries in the Law Ministry will be the ex-officio members of the commission.
- A retired Supreme Court judge or Chief Justice of a High Court will head the Commission.



Why in news?

- Data presented in Lok Sabha revealed that the National Commission for Scheduled Tribes (NCST) is currently functioning with less than 50% of its sanctioned strength.
- About the commission
- The National Commission for Scheduled Tribes (NCST) was established under Article 338A in the Indian Constitution through the Constitution (89th Amendment) Act, 2003.
- The 89th amendment, the erstwhile National Commission for Scheduled Castes and Scheduled Tribes into 2 separate Commissions namely-
- The National Commission for Scheduled Castes (NCSC)
- The National Commission for Scheduled Tribes (NCST)
- NCST has its Headquarters at New Delhi and 6 Regional Offices.
- **Composition** - Consists of a Chairperson, a Vice-Chairperson and 3 members, appointed by the President by warrant under his hand and seal.
- The rules provide for the ST panel to have two among V-C and Members must be from ST community.
- The Chairperson has rank of Union Cabinet Minister and the Vice Chairperson has rank of Secretary to government of India.
- **Tenure** - 3 years; conditions and service of tenure by President.
- NCST annually submits its report to the President.
- NCST is vested with the powers of a civil court for investigation and enquiry.







 **Ignite IAS**
IGNITING INTELLECTUALISM IN YOUNG MINDS

Crack IAS with our proper study plan at

Ignite IAS

“Join our
3 years Degree + Civil Services Program”

ADMISSIONS ARE FILLING QUICKLY. DON'T MISS IT. JOIN US QUICKLY.

Follow us
   

**Ignite IAS**
IGNITING INTELLECTUALISM IN YOUNG MINDSigniteias.com

24

Why in news?

- NSE Indices Ltd, an NSE arm, has launched the country's first ever municipal bond index recently.

About municipal bond index-

- The new Nifty India Municipal Bond Index **will track the performance of municipal bonds issued by Indian municipal corporations across maturities** and having investment grade credit rating.
- Presently, the index has 28 municipal bonds issued by 10 issuers all having credit rating in the AA category.**
- The index constituents are assigned weights based on their outstanding amount.
- The Indian municipal bond market has seen a resurgence of issuances after Sebi's Issue and Listing of Municipal Debt Securities Regulations, 2015 came into effect and a renewed emphasis on municipal finance by policymakers.
- Raising money from capital markets incentivises municipal corporations to fund new projects and improve civic infrastructure while encouraging them to become financially disciplined and governance oriented.
- The municipal bond market has a potential to play a pivotal role in financing the borrowing requirements of different municipal corporations in India.**
- The proceeds from bonds issued by municipal corporations can be utilised to finance the expansion of essential municipal services through growth-driven infrastructure projects and can contribute to bridging India's urban infrastructure financing gap.
- The index is computed using the total return methodology including price return and coupon return.**
- The index has a base date of January 1, 2021, and a base value of 1,000. The index will be reviewed quarterly.**

Mahila Samman Savings Certificate (MSSC)**Economy****Why in news?**

- The Union Finance Minister has announced a **one-time small savings scheme**, the Mahila Samman Savings Certificate (MSSC) for women investors in Budget 2023.

Key features of MSSC-

- Through this scheme, **individuals can make deposits in the name of a woman or a girl child.**
- This is a **one-time scheme**, and it will remain available for two years i.e., up to March 2025.
- The scheme is Backed by the central government.
- Partial withdrawal option is available under this scheme.**
- It will offer deposit facility upto Rs 2 lakh in the name of women or girls for tenure of 2 years (up to March 2025) at fixed interest rate of 7.5 per cent with partial withdrawal option.
- MSSC account opening facility is likely to be made available at Post Office. However, the Government may allow some banks also to offer the MSSC scheme.
- The savings account is easily portable in the event of a move, and the woman has no restrictions on when or how she withdraws her money.
- The scheme's broader goals of empowering women and increasing financial awareness go beyond simply providing women with material advantages.
- The program is also intended to encourage and facilitate women's participation in the financial industry and the expansion of their numbers inside financial institutions.

Repo Rates**Economy****Why in news?**

- Reserve Bank of India (RBI) hikes repo rate by 25 basis points (bps) to 6.5% and has also projected a GDP growth for the next fiscal at 6.4%.

Reasons behind hiked repo rate

- Inflation forecast** - The central bank has lowered the inflation target from 6.7% to 6.5%, which is still above the RBI's comfort level of 4%.



- Inflation is expected to be 5.3% in FY24.
- The hike will help in moderating inflation in the country.

Implications

- **Cash reserve ratio (CRR)** is the percentage of a bank's total deposits that it needs to maintain as liquid cash.
- This is an RBI requirement, and the cash reserve is kept with the RBI.
- A bank does not earn interest on this liquid cash maintained with the RBI and neither can it use this for investing and lending purposes.
- The banks will now have to pay a higher amount of interest to the RBI which in turn shall be collected from the retail/ corporate borrowers of the banks.
- This would result in higher interest outflow on loans taken from the banks, thus the loans in general will become costlier by 1-2%.

Impact overall economy

- **Lending rates of banks** is expected to go up as the cost of funds is expected to rise further.
- EMIs on vehicles, home and personal loans will also rise.
- **The external benchmark linked lending rate (EBLR)** of banks will rise as such loans are linked to the Repo rate.
- Some analysts say that consumption and demand can be impacted by the repo rate hike.
- **Marginal cost of funds-based lending rates (MCLR)** which accounts for 49.2% of the loans portfolio of banks is also expected to move up.

Adani-Hindenburg Saga

Economy

Why in news?

- Stocks of Adani Group tumbled recently after Hindenburg Research has highlighted financial irregularities in the company.

About Hindenburg Research

- Hindenburg Research is an investment research firm that focuses on analysing accounting irregularities, undisclosed transactions, illegal business or financial reporting practices among others.
- It alleged that Gautam Adani, founder and chairman of the Adani group, has added over \$100 billion to his net worth over the last three years, largely through **stock manipulation** and **fraud**.
- The research firm has raised concerns about its **substantial debt**.
- Hindenburg alleged that Adani used **offshore shells** for money laundering and siphoned from listed companies.
- Hindenburg revealed about short positions in Adani companies through bonds and non-Indian-traded derivative instruments.
- As per India's tax and SEBI laws, short selling of domestic stocks outside the country's jurisdiction is illegal unless they are listed on any exchange.
- While Adani bonds are listed on the US exchange, Hindenburg's reference to the '**non-Indian-traded derivatives**' raised the alarm for Indian regulators.

Implications after Hindenburg report

- The group's stocks and Mr. Adani's personal wealth have taken a plunge after the report.
- The Adani Group has been facing a crisis of confidence as the stocks of most of its companies have been on the fall.
- Once ranked No. 2 among the world's wealthiest, he has tumbled to No. 21 on the **Bloomberg Billionaires Index**.
- Adani Enterprises decided to call off its Rs 20,000 crore follow-on public offer and return the money that it had collected from investors.
- Morgan Stanley Capital International (MSCI), a global index provider for financial markets, announced that it will reduce the free float designations for four Adani Group companies in multiple indices.



Why in news?

- Chairman Apparel Export Promotion Council (AEPC) along with the other Export Council (EC) members inaugurated the first edition of upnext India 2023 in presence of international buyers and exhibitors, at Apparel House, Gurugram.

What is upnext India 2023?

- This initiative in the form of a series of Reverse Buyer Seller meet under the name of "UPNEXT INDIA" kick started with Japan.
- Upnext India is organized by AEPC and supported by the Ministry of Commerce and Industry under the Market Access Initiative (MAI) Scheme.
- 84 prominent Japanese buyers including trading companies and retail chains/ stores are in India to source their requirement from the 112 odd Indian exhibitors which are displaying the diverse range of RMG reflecting Japanese taste.

Market Access Initiative (MAI) Scheme-

- It is an **Export Promotion Scheme** envisaged to act as a catalyst to promote India's exports on a sustained basis.
- The scheme is **formulated on focus product-focus country approach** to evolve specific market and specific product through market studies/survey.
- Assistance would be provided to Export Promotion Organizations/Trade Promotion Organizations/National Level Institutions/ Research Institutions/Universities/Laboratories, Exporters etc.,** for enhancement of exports through accessing new markets or through increasing the share in the existing markets.
- Under the Scheme the level of assistance for each eligible activities has been fixed.
- The following activities are eligible for financial assistance under the Scheme:**
 - Marketing Projects Abroad.
 - Capacity Building.
 - Support for Statutory Compliances.
 - Studies.
 - Project Development.
 - Developing Foreign Trade Facilitation web Portal.
 - To support Cottage and handicrafts units.

Green Debt Swaps

Economy

Why in news?

- With many developing nations facing a triple whammy of rising debt loads, climate change and nature loss, conservationists say the answer could lie with the debt-for-environment swaps.

About green debt swaps

- Debt for Climate (DFC) swaps** - Debt swap in which the debtor nation, instead of continuing to make external debt payments in a foreign currency, makes payments in local currency to finance climate projects domestically on agreed upon terms.
- Developing nations are pushing for these swaps as they are struggling to pay back creditors and are at the risk of defaulting.
- According to the World Bank, the world's poorest countries owe \$62 billion in annual debt service, a year-on-year increase of 35%.
- Even as debt burdens grow, there is now an urgent need for countries to invest more in climate and biodiversity protection to meet their international and national commitments.

Advantages

- Rising Private creditors:** About 70-80% of countries' debts are now owed to private creditors, according to the World Wide Fund for Nature (WWF), usually banks and asset managers.

- **China's debt trap:** In parts of Africa, a large chunk of the current debt pile is owed by mineral-rich countries to China's government, banks, and other institutions, sometimes via its Belt and Road Initiative for infrastructure development.
- **Debt rises in the COVID-19 pandemic:** It exacerbated high debt levels among many countries as they sought loans to soften the social and economic impacts of the health crisis.
- **Severe climate-driven disasters:** This is also pushing countries into deeper debt distress, as seen with Pakistan's devastating floods, the recent case of Earthquakes in Turkey, and tropical storms that have hit island nations' economies hard.

Special Rupee Vostro Accounts

Economy

Why in news?

- Recently, government officials informed that 20 Russian banks Rosbank, Tinkoff Bank, Centro Credit Bank and Credit Bank of Moscow have opened Special Rupee Vostro Accounts (SRVA) with partner banks in India.

About SRVA arrangement

- **Vostro account** - A Vostro account (Vostro means 'yours' in Latin) is an account that a domestic bank holds for a foreign bank in the domestic bank's currency.
- In this case between India and Russia, Indian banks hold an account for Russian banks in rupee (INR).
- **Special Vostro Accounts** - Normal Vostro accounts acts only as transit accounts whereas in Special Vostro Accounts INR (Indian Rupee) balances can be held.

Components of the framework

- The framework entails three important components - invoicing, exchange rate and settlement.
- **Invoicing** entails that all exports and imports must be denominated and invoiced in INR.
- The **exchange rate** between the currencies of the trading partner countries would be market- determined.
- The **final settlement** also takes place in Indian National Rupee (INR).

Eligibility criteria of banks

- Banks from partner countries are required to approach an authorised domestic dealer bank for opening the SRVA.
- **Role of Domestic banks** - The domestic bank would then seek approval from the apex banking regulator providing details of the arrangement.
- Domestic banks need to ensure that the correspondent bank is not from a country mentioned in the updated Financial Action Task Force (FATF) Public Statement on High Risk & Non-Co-operative jurisdictions.
- Domestic banks must also put forth for perusal, financial parameters pertaining to the corresponding bank.
- **Other Features** - Authorised banks can open multiple SRV accounts for different banks from the same country.
- All reporting of cross-border transactions are to be done in accordance with the extant guidelines under the Foreign Exchange Management Act (FEMA), 1999.

World Economic Situation & Prospects report-2023

Economy

Why in news?

- The United Nations' World Economic Situation and Prospects 2023 was published recently.

Key highlights of the report

- According to the new report, **Global gross domestic product (GDP) is forecast to drop to 1.9 per cent in 2023 from 3 per cent in 2022.**
- **The reasons are the food and energy crises** that hit the world economy hard in 2022, against the backdrop of COVID-19 and the Ukraine war.
- The world's **output growth can bounce back to 2.7 per cent in 2024**, subject to a change in the war situation and the disruption of supply chains.
- **The world's average inflation rate was at 9 per cent in 2022**, which led to budgetary constraints in several developed as well as developing countries.

- **In South Asia, the economic outlook has significantly deteriorated due to high food and energy prices, monetary tightening and fiscal vulnerabilities.**
- **Average GDP growth is projected to moderate from 5.6 per cent in 2022 to 4.8 per cent in 2023.**
- On the contrary, **growth in India is expected to remain strong at 5.8 per cent, albeit slightly lower than the estimated 6.4 per cent in 2022**, as higher interest rates and a global slowdown weigh on investment and exports.
- The report indicated that **India's food and energy subsidies prevented a major downfall.**
- The report said that the **prospects are more challenging for other economies in the region. Bangladesh, Pakistan and Sri Lanka sought financial assistance** from the International Monetary Fund (IMF) in 2022.
- **A slight reversal in poverty eradication was noted in early 2019, but this halted due to the pandemic.**
- According to the World Bank, several global crises pushed an additional 75 to 95 million people into extreme poverty in 2022, compared to pre-pandemic projections.
- Income inequalities were evident. **Globally, the average income for the bottom 40 per cent was \$2,935 in 2021**, a slight decline from \$2,951 in 2019.
- **The average income for the top 10 percent income group increased from \$124,668 in 2019 to \$126,153 in 2021**, signalling widening income inequality.
- The International Monetary Fund has an allocation called the Special Drawing Rights (SDR), to provide liquidity to the global financial system in times of emergencies.
- **In August 2021, a \$650 billion lending was arranged from the SDR, which is the largest amount withdrawn for this purpose in history.**
- **Of this amount, only \$21 billion was allocated to low-income countries.** However, some countries such as China donated some of their SDR \$10 billion of its \$40 billion to African countries.
- While the SDRs remain an important source of liquidity support for countries facing balance-of-payment challenges, the interest rate on them rose sharply in 2022.
- The international community will need to cap interest and charge rates to ensure that the poorest and most vulnerable countries can access the facility to meet near-term financing needs.
- **The Group of 20 Common Framework for Debt Treatments is considered the main international debt relief mechanism** that was availed of by only three countries.
- It is a programme offered by G20 countries to defer official debt service, particularly by developing countries and low-income countries.

Free Trade Agreements to Lift Textile Exports

Economy

Why in news?

- India's modest export performance of India's textiles sector can be negated when import duties in developed countries become zero through free trade agreements (FTAs).

About Free Trade Agreement (FTA)

- A **free trade agreement** is a pact between two or more nations to reduce barriers to imports and exports among them.
- Under a free trade policy, goods and services can be bought and sold across international borders with little or no government tariffs, quotas, subsidies, or prohibitions to inhibit their exchange.
- FTAs also cover other areas such as intellectual property rights (IPRs), investment, government procurement, competition policy, etc.
- India is **negotiating FTAs** with countries such as the European Union, Canada, the U.K., and Israel.

Types of FTA

- PTA (Preferential Trade Agreement)
- CECA (Comprehensive Economic Cooperation Agreement)
- CEPA (Comprehensive Economic Partnership Agreement)
- Customs Union Common Market and Economic Union to know more about FTAs,
- **Market access** - By eliminating tariffs and some non-tariff barriers, FTA partners get easier market access into one another's markets.
- **Preferential treatment** - Exporters prefer FTAs to multilateral trade liberalization because they get preferential treatment over non-FTA competitors.

- **Protection of local exporters** - FTAs protect local exporters from losing out to foreign companies that might receive preferential treatment under other FTAs.
- **Increased foreign investment** - There is also possibility of increased foreign investment from outside the FTA.

Status of India's textile sector

- India has a **4% share** of the global trade in textiles and apparel.
- India's textile and apparel exports stood at \$ 44.4 billion in FY22, a 41% increase YoY.
- **The US** is the single largest market for India's textile and apparel exports.
- India is the world's largest producer of **cotton**.
- India's textiles industry has around 4.5 crore employed workers across the country.

UPI for NRIs

Economy

Why in news?

- The National Payments Corporation of India (NPCI) recently eased the use of UPI (Unified Payment Interface), to non-resident Indians (NRIs).

About UPI NRI's

- **Existing case** - Even now, non-resident Indians (NRIs) can use the UPI app for payments.
- But for sim-linked payments process, Indian mobile phone number is required.
- **Now** - NPCI has eased the use of UPI to NRIs to make payments from their non-Indian mobile numbers.
- Non-resident account types like NRE/NRO that have international mobile numbers will now be allowed to transact with UPI.
- It can cover retail as well as wholesale transactions.
- **New Provision** - In order to access UPI from their international mobile number, the user will need an NRO or NRE (non-resident ordinary or non-resident external) account.
- The user should first link the mobile number with an NRE or NRO account.
- Member banks must ensure that the accounts are only allowed as per the extant FEMA regulations.
- The onus of adherence to the guidelines/instructions issued by the RBI from time to time will rest with the respective banks.
- In addition to this, the remitter and beneficiary banks need to comply with respect to anti-money laundering (AML) rules.
- The first phase of rollout is extended only to 10 countries — Singapore, Australia, Canada, Hong Kong, Oman, Qatar, the US, Saudi Arabia, United Arab Emirates and the UK.

UPI -Paynow Linkage

Economy

Why in news?

- India's real-time retail payment system Unified Payments Interface (UPI) and its equivalent network in Singapore called PayNow, were integrated recently.

About Linkage

- **Unified Payments Interface (UPI)** - It is India's mobile-based fast payment system which facilitates customers to make round-the-clock payments instantly.
- It uses a Virtual Payment Address (VPA) which eliminates the risk of sharing bank account details by the remitter.
- UPI supports both Person-to-Person (P2P) and Person-to-Merchant (P2M) payments and it also enables a user to send or receive money.
- **PayNow** - It is a fast payment system in Singapore which enables peer-to-peer funds transfer service.
- **UPI-Paynow linkage** - Singapore is the first country with which India has cross border P2P facility.
- **Significance** - Cross-border retail payments are generally less transparent and more expensive than domestic transactions.

- The UPI-PayNow linkage will enable faster remittances between the two countries at a competitive rate and bring the benefits of digitalization.
- It will also help the Indian diaspora in Singapore, especially migrant workers and students, through the instantaneous and low-cost transfer of money from Singapore to India and vice-versa.
- **G20** - It closely aligns with the G20's financial inclusion priorities of driving faster, cheaper and more transparent cross-border payments.

Additional Surveillance Mechanism

Economy

Why in news?

- The National Stock Exchange (NSE) placed 3 of Adani Group companies under the short-term additional surveillance mechanism (ASM).

About the Mechanism

- The Additional Surveillance Mechanism (ASM) was introduced on March 26, 2018 with the intention to protect investors from market volatility and unusual changes in share price.
- The additional surveillance is part of SEBI and the Exchanges' initiative to enhance market integrity and safeguard the interest of investors.
- **Criteria** - The surveillance concerns are based on objective parameters viz. Price / Volume variation, Volatility etc.
- The shortlisting of securities for placing in ASM is based on criteria jointly decided by the Securities and Exchange Board of India (SEBI) and exchanges.
- The securities are shortlisted and reviewed under 2 frameworks
- Long-term ASM Frameworks
- Short-term ASM Frameworks
- Trading in stocks under the short-term ASM framework will require investors to pay 100% upfront margin even for intraday trading.
- **Purpose** - An ASM shortlisting signals to investors that the stocks have seen unusual activity.
- The shortlisting of securities under ASM is purely on account of market surveillance and it is not an adverse action against the concerned company / entity.

Follow on Public Offer

Economy

Why in news?

- Adani Enterprises has cancelled its Rs 20,000 crore follow-on public offer (FPO) and will refund proceeds it had received as part of its FPO.

About FPO

- FPO (Follow on Public Offer) is an additional issue of a company, which is already listed on an exchange.
- Under FPO, the company issues new shares to the investors or the existing shareholders, usually the promoters.
- A company uses FPO after it has gone through the process of an IPO (Initial Public Offering) to diversify their equity base.
- An FPO is an additional issue whereas an IPO is an initial or first issue.

Reasons to go for FPO

- To make more of its shares available to the public
- To raise capital to expand equity base
- To pay off debt
- **Oversubscribed** - When the demand for a new issue of stock is greater than the number of shares available.
- **Undersubscribed** - The demand for an issue of securities is less than the number of shares issued.
- Undersubscribed situation is also known as an "underbooking."

Why in news?

- The Union Budget 2023 has announced Rs 2,516 crore for computerisation of 63,000 Primary Agricultural Credit Societies (PACS) over the next 5 years.

About the societies

- Primary Agricultural Credit Societies (PACS) are village level cooperative credit societies.
- **3-Tier** - They serve as the last link in a three-tier cooperative credit structure headed by the State Cooperative Banks (SCB) at the state level.
- Credit from the SCBs is transferred to the district central cooperative banks (DCCBs) that operate at the district level.
- The DCCBs work with PACS, which deal directly with farmers.
- **Structure** - Since these are cooperative bodies, individual farmers are members of the PACS, and office-bearers are elected from within them.
- A village can have multiple PACS.
- **Credit** - PACS are involved in short term lending, known as crop loan.
- At the start of the cropping cycle, farmers avail credit to finance their requirement of seeds, fertilisers etc.
- **Interest** - Banks extend this credit at 7% interest, of which 3% is subsidised by the Centre, and 2% by the state government.
- Effectively, farmers avail the crop loans at 2% interest only.
- The PACS is attractive for the last mile connectivity they offer.
- PACS have the capacity to extend credit with minimal paperwork within a short time.
- **Computerization** - PACS are not connected to the Core Banking Software (CBS) but some PACS use their own software.
- Computerisation of PACS has already been taken up by a few states, including Maharashtra.
- A compatible platform will bring uniformity in the system.

Ignite IAS

Why in news?

- India and the European Union recently announced the establishment of three Working Groups under the India-EU Trade and Technology Council, TTC and their Terms of Reference.

About TTC

- TTC was launched by Prime Minister Narendra Modi and President of the European Commission Ursula von der Leyen during her visit to India in April in 2022.
- The **TTC is a strategic coordination mechanism that will allow both partners to tackle challenges at the nexus of trade, trusted technology and security**, and thus deepen cooperation in these fields between India and the EU.
- The **TTC with India is only the second such Council for the EU (first one with the United States) and the first such mechanism for India.**
- It will be co-chaired on the Indian side by the Ministers for External Affairs, Commerce and Industry and Communications, Electronics and Information Technology.
- The TTC will provide the political steer and the necessary structure to coordinate approaches and advance technical work
- The ministerial meetings of the TTC will take place at least once a year, with the venue alternating between the EU and India.

Working Groups

- India and the European Union recently announced the establishment of three Working Groups they are:
- Working group on Strategic Technologies, Digital Governance and Digital Connectivity**-Chaired by Secretary, Ministry of Electronics and Information Technology.
- Working Group on **Green and Clean Energy Technologies**-Chaired by Principal Scientific Adviser to the Government of India.
- Working Group on **Trade, Investment and Resilient Value Chains**-Chaired by Secretary, Department of Commerce.
- The working group on strategic technologies, digital governance and digital connectivity will work jointly on areas of mutual interest such as digital connectivity, artificial intelligence, 5G/6G, high performance and quantum computing, semiconductors, cloud systems, cybersecurity, digital skills and digital platforms.
- The group on green and clean energy technologies will focus on green technologies, including investment and standards, with emphasis on research and innovation.
- The group on trade, investment and resilient value chains will work on the resilience of supply chains and access to critical components, energy, and raw materials.
- It will also work to resolve identified trade barriers and global trade challenges by promoting cooperation in multilateral fora. It will work towards promotion of international standards and cooperation on addressing global geopolitical challenges.

Why in news?

- The United Kingdom Supreme Court ruled that the Northern Ireland Protocol is lawful.

About the protocol

- The Northern Ireland Protocol is a post-BREXIT agreement that created a trade border between Northern Ireland and the rest of the UK.
- The protocol was an integral part of the 2019 BREXIT agreement signed between the UK and the EU.
- Under the protocol,
- Northern Ireland remains in the EU single market, and
- Trade-and-customs inspections of goods coming from Great Britain take place at Northern Ireland ports along the Irish Sea.

QUAD Cyber Challenge

International Relations

Why in news?

- QUAD launched a public campaign 'Quad Cyber Challenge' to improve cyber security across their nations.

About QUAD challenge

- Quad Cyber Challenge is a public campaign launched by the QUAD nations.
- The initiative shows the continuous efforts of Quad nations to bolster cyber security awareness and action.
- The effort also fosters a more secure and resilient cyber ecosystem to benefit economies and users.
- **Aim** - To encourage internet users across the Indo-Pacific and beyond to adopt safe and responsible cyber habits.
- The Quad Cyber Challenge provides resources, including basic cybersecurity information and training for all users.
- **Need** - Internet-users worldwide are targets of cybercrime and other malicious cyber threats.
- Several cyber-attacks can be guarded against by simple preventative measures.
- **Preventive Measures** - Small steps by internet users and providers significantly improve cyber security.
- The steps include -
 - Routinely installing security updates
 - Enhanced identity checks through multi-factor authentication
 - Using stronger and regularly changing passphrases
 - Knowing how to identify common online scams, like phishing
- **Coordinator India** - The office of the National Cyber Coordinator with the National Security Council Secretariat.

India-ASEAN Digital Work Plan 2023

International Relations

Why in news?

- The India-ASEAN Digital Work Plan 2023 has been approved at 3rd ASEAN Digital Ministers (ADGMIN) meeting held virtually.

About the work plan

- The ASEAN Digital Ministers (ADGMIN) meeting was held under the theme "Synergy towards a Sustainable Digital Future".
- They discussed on strengthening India ASEAN relations in the field of Information and Communication Technologies (ICTs).
- The Ministers meeting approved the India-ASEAN Digital Work Plan 2023.
- The work plan includes the capacity building and knowledge sharing in emerging areas in the field of Information and Communication Technologies.
- Few of them are
 - Artificial Intelligence in Cyber Security
 - Application of IoT & AI in Next Generation Smart City & Society 5.0
 - Sustainable Data and Transport Network for Future
 - 5G technologies for IoT and future trends
 - Role of ICT in implementation of Digital Health
 - Security protection and assessment for future network
 - The ongoing and proposed projects in ICTs, will strengthen
 - collaboration between India and ASEAN by leveraging complementary strengths of each other.

iCET dialogue

International Relations

Why in news?

- National Security Advisor Ajit Doval and his US counterpart Jake Sullivan formally launched the US-India initiative on Critical and Emerging Technology (iCET) in Washington.



About iCET dialogue

- Announced during US President Joe Biden and Prime Minister Narendra Modi's bilateral talks in Tokyo in May 2022, the iCET is spearheaded by the National Security Councils of both countries.
- **It focuses on strengthening the US-India partnership on the technologies** that will drive global growth, bolster both countries' economic competitiveness, and protect shared national security interests.
- iCET will accelerate the US' strategic technology partnership with India and advance the two countries' shared democratic values.
- **The inaugural meeting under Critical and Emerging Technology (iCET) was hosted by the US-India Business Council** with US Secretary of Commerce Gina Raimondo, US National Security Advisor Jake Sullivan, and Indian National Security Advisor Ajit Doval, and other senior US and Indian officials.
- As part of this, a **task force will be formed between the US Semiconductor Industry Association (SIA) in partnership with the India Electronics Semiconductor Association (IESA)** with participation from the Government of India Semiconductor Mission to develop a "readiness assessment" to identify near-term industry opportunities and facilitate the longer-term strategic development of complementary semiconductor ecosystems.
- This **task force will make recommendations to the Department of Commerce and the India Semiconductor Mission on opportunities and challenges to overcome** in order to further strengthen India's role within the global semiconductor value chain, and will also provide input to the US-India Commercial Dialogue.
- The task force will also identify and facilitate workforce development, R&D, advanced packaging, and exchange opportunities to benefit both countries.
- **In addition, the two nations are signing a new Implementation Arrangement for a Research Agency Partnership between the National Science Foundation and Indian science agencies** to expand international collaboration in various areas. This includes artificial intelligence, quantum technologies, and advanced wireless.
- They are also establishing a **joint Indo-US Quantum Coordination Mechanism** with participation from industry, academia, and government to facilitate research and industry collaboration.
- In addition, they are also promoting **collaboration on High Performance Computing (HPC)**, including by working with Congress to lower barriers to U.S. exports to India of HPC technology and source code.
- India and the US are also developing a **new bilateral Defense Industrial Cooperation Roadmap** to accelerate technological cooperation between both countries for joint development and production, with an initial focus on exploring projects related to jet engines, munition-related technologies, and other systems.

REAIM 2023

International Relations

Why in news?

- The world's first international summit on the responsible use of artificial intelligence in the military was recently held in Netherlands.

Responsible AI in Military Domain Summit (REAIM) 2023

- **Host** - The World Forum, Hague, Netherlands
- **Co-host** - Republics of Korea
- **Objective** - It acts as a platform for all stakeholders to forge a common understanding of the opportunities, dilemmas and vulnerabilities associated with military AI.
- It brings together governments, corporations, academia, startups, and civil societies.
- Themes of REAIM 2023:
 - Mythbusting the characteristics of AI
 - Responsible deployment and use of AI
 - Governance frameworks for responsible AI

Munich Security Conference (MSC)

International Relations

Why in news?

- Billionaire investor George Soros has recently made a controversial speech at the Munich Security Conference (MSC) linking Adani and Indian Prime Minister.

About the conference

- MSC is an annual conference on global security issues held in February every year, at Munich, Germany.
- It was founded by Ewald-Heinrich von Kleist at the peak of the Cold War (1947-1991).
- **United Front Against Russia** - Started in 1963, the conference initially focused on military issues and was attended by the western countries.
- Its main objective is to display a united front in their struggle with Soviet communism.
- **After the cold war** - MSC expanded its agenda by including issues such as climate change and migration.
- It also started to invite leaders from eastern nations, including Russia, India and China.

Global Biofuel Alliance

International Relations

Why in news?

- India will work together with Brazil and the United States during the next few months towards the development of a Global Biofuels Alliance.

About Alliance

- The Global Biofuel Alliance is one of the priorities under India's G20 Presidency.
- Global Biofuels Alliance will be developed by Brazil, India, and the United States together.
- The Global Biofuel Alliance will also be joined by other interested countries.
- **Aim** - Facilitating cooperation and intensifying the use of sustainable biofuels, including in the transportation sector.
- **Emphasis** - It will place emphasis on strengthening markets, facilitating global biofuels trade and developing concrete policy lesson-sharing.
- It will also emphasize the already implemented best practices and success cases.
- **Work** - In collaboration with and complement the relevant existing regional and international agencies as well as initiatives such as
 - The Clean Energy Ministerial Bio-future Platform,
 - The Mission Innovation Bioenergy initiatives, and
 - The Global Bioenergy Partnership (GBEP).

Chicago Convention

International Relations

Why in news?

- An air services agreement was signed recently between India and Guyana that will pave the way for flight services between the two countries.

About the convention

- Chicago Convention also known as the Convention on International Civil Aviation, drafted in 1944 by 54 nations.
- It laid the foundation for the standards and procedures for peaceful global air navigation.
- It set out as its prime objective the development of international civil aviation.
- It also formalized that a specialized International Civil Aviation Organization (ICAO) would be established, in order to organize and support the intensive international co-operation.
-

Why in news?

- Bharat Electronics announced that the Delhi Metro launched India's first ever indigenously developed Train Control & Supervision System.

About i-ATS

- It was **jointly developed by the Bharat Electronics & Delhi Metro Rail Corporation (DMRC)**, the i-ATS for operations on its first corridor, Red Line (Rithala to Shaheed Sthal).
- Beginning with Red Line, the i-ATS System will further be deployed for operations on Delhi Metro's other operational corridors and the upcoming independent corridors of Phase – 4 Project as well.
- In addition, i-ATS can be used in operations of other rail based systems including Indian Railways.
- This technology has been developed with flexibility to work with different Signalling vendor's systems with suitable changes.
- With the launch of i-ATS, **India becomes the sixth country which has its own ATS products after France, Germany, Japan, Canada, and China.**
- With this development, the country has moved a step forward for an **indigenously built CBTC (Communication Based Train Control) based signalling system for the Metro railway.**
- **The ATS (Automatic Train Supervision), is a computer-based system which manages train operations.**
- It is also an important sub-system of the CBTC Signalling system.

Lithium Reserves in India**Science & Technology****Why in news?**

- The Union Ministry of Mines has announced that lithium reserves had been found in Jammu and Kashmir, a first in the country.

Significance of Lithium

- Lithium is a key element for new technologies and finds its use in ceramics, glass, telecommunication and aerospace industries.
- It is used in Lithium ion batteries, lubricating grease, high energy additive to rocket propellants, and optical modulators for mobile phones.
- Lithium is used in electric car batteries because of its lightness and energy density.
- It is also used as a convertor to tritium used as a raw material for thermonuclear reactions i.e. fusion.
- The thermonuclear application makes Lithium as **"Prescribed substance" under the Atomic Energy Act, 1962.**

Lithium Resources in India

- Currently India is **fully import-dependent** when it comes to lithium.
- In 2021-22, **Hong Kong**, China and the US were the top three sources of India's lithium imports.
- According to the Ministry of Mines, the Geological Survey of India (GSI) has carried out 19 projects in the last five years on lithium and associated elements.
- The GSI has currently inferred that the deposits in Kashmir could hold around 5.9 million tonnes of lithium in the Salal-Haimana area of Reasi District in Jammu and Kashmir.
- This is the G3 level of surveying.
- As per the United Nations Framework Classification (UNFC),
 - **G4** - Basic, reconnaissance survey
 - **G3** - Preliminary exploration
 - **G2** - General exploration
 - **G1** - When quantities associated with a known deposit can be estimated with a high level of confidence

Why in news?

- Reserve Bank of India (RBI) has recently announced to launch QR code based Coin Vending Machines as a pilot project.

What is QR code-based coin vending machine?

- At present, a person will have to approach the bank branch to withdraw coins.
- QR code-based coin vending machine (QCVM) is intended to dispense coins similar to the manner in which currency notes can be withdrawn from ATMs.
- Coins can be withdrawn using the **Unified Payments Interface (UPI) QR code** in designated vending machines.
- Coins of denomination of Rs 1 - Rs 20 will be made available in QCVM.
- RBI plans to launch the product in 19 locations across 12 cities.
- Since the implementation would begin through a pilot launch, only select banks may be involved in the initial stages.

Issues

- As banks have to keep replenishing these vending machines through third part agents, it could imply **additional costs for banks**.
- The average cost of minting a coin is Rs 1.11. If we add another layer for setting up and distributing coins through vending machines, it appears unattractive from a **cost perspective**.
- Since the intent of the government is on increasing the popularity and reach of **digital payments**, QCVM could be counterproductive.
- QCVM seems to be defying the **purpose of e-Rupee's retail** that aims to reduce the minting/printing cost of currency and gradually replace physical currencies with digital currencies.

Why in news?

- A man from Germany, has become at least the third person to have been cured of HIV with the virus not being detectable in his body even 4 years after stopping the medicine.

Human Immunodeficiency Virus (HIV)

- Type** - HIV is a lentivirus, which is a sub-classification of the retrovirus.
- AIDS** - It causes the HIV infection which over time leads to Acquired Immunodeficiency Syndrome (AIDS).
- AIDS is a deadly condition in which the affected person's immune system fails, leading to the spread of life-threatening infections and cancers in his body.
- HIV demolishes a particular type of WBC (White Blood Cells) and the T-helper cells.
- Transmission** - HIV infection can occur by the transference of blood, breast milk, vaginal fluid, semen, or pre-ejaculate.

CCR5 mutation

- HIV mainly attacks the CD4 immune cells in the human body.
- The **CCR5 receptors** on the surface of the CD4 immune cells act as a **doorway for HIV virus**.
- However, the **CCR5-delta32 mutation** prevents these receptors used by the HIV virus from forming on the surface, effectively removing the doorway.
- Those with the mutation are almost immune to the HIV infection, although some cases have been reported.

Why in news?

- The world's first international summit on the responsible use of artificial intelligence in the military commenced on February 15 2023 in The Netherlands.

REAIM 2023

- It brings together governments, corporations, academia, startups, and civil societies to raise awareness, discuss issues, and possibly, agree on common principles in deploying and using AI in armed conflicts.
- The two-day summit explored advances in AI and machine learning models, understand their limitations, and the possibilities of building a human-machine team.
- It was organised by the Netherlands government..
- The event was co-hosted by the Republic of Korea and took place at the World Forum in The Hague, the international city of peace and justice.
- It's the first global attempt to prevent the proliferation of lethal autonomous weapons (LAWS) and insert ethics, responsibility, accountability and the moral factor into a rapidly developing weaponisation technology that has potential for cataclysmic damage.

IEEE C-DOT Certified Telecom Expert Program (ICCTEP)**Science & Technology****Why in news?**

- The Secretary (Telecom), Government of India has launched the 'IEEE C-DOT Certified Telecom Expert Program (ICCTEP).

About ICCTEP

- **About IEEE C-DOT Certified Telecom Expert Program (ICCTEP)**
- ICCTEP is a result of collaboration between the Institute of Electrical and Electronics Engineers (IEEE) and the Centre for Development of Telematics (C-DOT).
- IEEE is the world's largest technical professional organization working to advance technology for the betterment of humanity.
- IEEE inspires a global community through its various activities, including highly cited publications, conferences, technology standards, and professional & educational programs.
- **About Centre for Development of Telematics (C-DOT):**
- C-DOT is the premier R&D center of the Department of Telecommunications, Ministry of Communications, Government of India.
- C-DOT has designed various cutting-edge Telecom technologies, including 4G/5G, Disaster Management, Cyber Security, and Quantum Communications.

NISAR Satellite**Science & Technology****Why in news?**

- The NASA handed over the payload for the NISAR satellite to Indian Space Research Organisation (ISRO).

About NISAR

- NISAR is a jointly built Synthetic aperture radar (SAR) by NASA and the Indian Space Research Organisation (ISRO).
- NISAR will be the first radar of its kind in space to systematically map Earth, using 2 different radar frequencies.
- NISAR's two radar systems
- The L-band SAR provided by JPL.
- The S-band SAR built by ISRO.
- Synthetic aperture radar (SAR) refers to a technique for producing fine-resolution images from a resolution-limited radar system.
- **Functions** - NISAR provides information about biomass, natural hazards, sea level rise, and groundwater.

- NISAR monitors resources such as water, forests and agriculture and measure changes in earth surface less than a centimeter across.
- It is expected to be launched from Satish Dhawan Space Centre in Andhra Pradesh state in 2024.

Crew Module Recovery Model

Science & Technology

Why in news?

- The Indian Space Research Organisation (ISRO), along with the Indian Navy, has conducted an important trial for the Gaganyaan mission.

About the model

- The Gaganyaan project envisages demonstration of human spaceflight capability of India.
- Gaganyaan will be launching a crew of 3 members for a 3 day mission.
- The members will be launched to an orbit of 400 km and bringing them back safely to earth, by landing in Indian sea waters.
- Vikas engine and Launch Vehicle Mark-3 (LVM-3) will be used in this mission.
- Orbital Module (OM) that will be Orbiting Earth comprises of Crew Module (CM) and Service Module (SM).
- The crew module system undergoes several tests before launch and recover the module using new test launch rockets.
- The initial recovery trials of the Crew Module was conducted in the Navy's Water Survival Test Facility (WSTF) in Kochi.
- A Crew Module Recovery Model (CMRM) was used for the trials.
- The CMRM simulates the mass, center of gravity, outer dimensions, and externals of the actual Crew Module at touchdown.
- The sequence of operations required for the recovery of the Crew Module were carried out as part of the trials.
- The safe recovery of the crew is the final step for a successful human spaceflight.
- It has to be carried out with the minimum lapse of time.

Kilonova

Science & Technology

Why in news?

- Researchers have confirmed the detection of a star system that will one day end in a kilonova.

About Kilonova

- Supernova is the explosive demise of heavy stars when they run out of fuel for nuclear fusion.
- Neutron stars are formed when the cores of a supernova implode, crushing their constituent protons and electrons together into a super-dense ball of neutrons.
- A kilonova is a similar cosmic event that occurs when a neutron star smashes into another neutron star or a black hole.
- A kilonova releases heavy metals like gold, silver, and selenium into outer space at tremendous velocities, as well as radiation.
- A kilonova radiation also accompanies a gamma-ray burst, one of the most energetic cosmic events ever known.
- Astronomers first detected a kilonova in 2017, when they recorded gravitational waves from such an event.
- The newfound star system has been labelled CPD-29 2176, and is located about 11,400 light-years from the earth.
- CPD-29 2176 is currently a neutron star and a star orbiting each other.
- The star is expected to become a neutron star and the 2 neutron stars are expected to collide with each other later.
- It is extremely rare that only 10 star systems that exist in the Milky Way will end in kilonovae.



Why in news?

- Researchers have detected a ring encircling the minor planet Quaoar.

About Quaoar

- Quaoar is a minor planet that orbits beyond Pluto in Kuiper belt.
- Quaoar which is about half the size of Pluto, was discovered in 2002.
- Quaoar is currently defined as a minor planet and is proposed as a dwarf planet.
- It is yet to be formally given that status of 'dwarf planet' by the International Astronomical Union.
- Its diameter of about 700 miles (1,110 km) is about a third that of Earth's moon and half that of the dwarf planet Pluto.
- It has a small moon called Weywot with a diameter of 105 miles (170 km) orbiting beyond the ring.
- Quaoar's ring was spotted by the European Space Agency.
- The formation of Quaoar's rings are not known.

Giant Metrewave Radio Telescope

Science & Technology

Why in news?

- The proposed Rs 16,000-crore Pune-Nashik high-speed rail project could jeopardise the operations of the Giant Metrewave Radio Telescope.

About the telescope

- The Giant Metrewave Radio Telescope (GMRT) is the world's largest radio telescope located in Pune.
- GMRT is a project of the Department of Atomic Energy (DAE), operating under the Tata Institute of Fundamental Research (TIFR).
- GMRT has made a number of path-breaking discoveries and continues to remain a unique global facility.
- It is a highly sought-after telescope both within India and by scientists from 30-plus countries.
- GMRT is a low-frequency radio telescope which uses the metre wavelengths range of the radio spectrum.
- It helps to investigate various radio astrophysical problems ranging from nearby solar systems to the edge of the observable universe.
- The full-scale telescope operations of GMRT commenced in 2000.
- It underwent a major upgrade in 2019 and known as upgraded Giant Metrewave Radio Telescope (uGMRT) since then.

ALMA Telescope

Science & Technology

Why in news?

- ALMA telescope is set to get software and hardware upgrades which would take around 5 years to finish.

About the telescope

- The Atacama Large Millimetre/submillimetre Array (ALMA) is a radio telescope located in the Atacama Desert of northern Chile.
- The telescope consists of 66 high-precision antennas, spread over a distance of up to 16 km at an altitude of 5,050 metres above sea level.
- **Function** - ALMA studies celestial objects at millimetre and submillimetre wavelengths penetrating through dust clouds.
- It also has extraordinary sensitivity, which allows it to detect even extremely faint radio signals.
- **Operation** - ALMA is fully functional since 2013.
- ALMA is operated under a partnership among the United States, 16 countries in Europe, Canada, Japan, South Korea, Taiwan, and Chile.
- The radio telescope was designed, planned and constructed by the
- US's National Radio Astronomy Observatory (NRAO),
- The National Astronomical Observatory of Japan (NAOJ) and
- The European Southern Observatory (ESO).

Why in news?

- The Rajasthan Chief Minister has once again urged the Prime Minister to decide on declaring ERCP as National Project.

Objectives of canal project

- The Eastern Rajasthan Canal Project (ERCP) is planned to meet the drinking and irrigation needs of the 13 districts of south-eastern Rajasthan.
- ERCP was first announced in the Rajasthan state Budget for 2017-18.
- The project was approved by the Central Water Commission in 2017.
- ERCP aims to harvest surplus water available during the rainy season in rivers in southern Rajasthan, such as the Chambal and its tributaries Kunnu, Parvati, and Kalisindh.
- The harvested thus water is used in the 13 water-scarce south- eastern districts of the state.
- Among the state's water bodies, only the Chambal river basin has surplus water, but this water cannot be tapped directly.
- The water is tapped through the help of diversion structures, intra-basin water transfers, linking channels, and building pumping main feeder channels.
- **State's Proposal** - The state wants the Centre to declare this as a national project so that the cost-sharing ratio between the Centre and the state becomes 90:10.

MIIRA**Schemes****Why in news?**

- India is planning to propose the launch of a global initiative to encourage the consumption and production of millets.

About MIIRA

- 'MIIRA' or 'Millet International Initiative for Research and Awareness' will be launched by India during its G20 Presidency.
- MIIRA is aimed at coordinating millet research programmes at the international level.
- It is in line with the International Year of Millets and the Centre's plan to make India a global hub for millets.
- **Aim** - MIIRA will aim to connect the millet research organisations across the world while also supporting research on millet crops.
- **Functions** - MIIRA will set up a web platform to connect researchers and hold international research conferences.
- It also plans to promote millet consumption by raising awareness.
- It will reemphasize the nutritional value and the climate resilient nature of millets.
- **Secretariat** - The MIIRA secretariat will be in Delhi.
- **Funding** - India will contribute the "seed money" for MIIRA.
- Each G20 member contributes to its budget in the form of a membership fee.

DHARA 2023**Schemes****Why in news?**

- Driving Holistic Action for Urban Rivers (DHARA) Conference was organized recently by the National Mission for Clean Ganga (NMCG) and National Institute of Urban Affairs (NIUA) in Pune.

About DHARA 2023

- DHARA is the annual meeting of the members of the River Cities Alliance (RCA).
- It provides a platform to co-learn and discuss solutions for managing local water resources.
- One of the thrust areas of Urban 20 (U20) Initiative is to promulgate urban water security and DHARA 2023 is in sync with U20 as healthy rivers are vital to enhance overall water security.

River Cities Alliance (RCA)

- It is a collaborated effort of National Mission for Clean Ganga (NMCG) and National Institute for Urban Affairs (NIUA).
- It is launched by the Ministry of Jal Shakti along with the Ministry of Housing and Urban Affairs.
- River Cities Alliance started with 30 cities in 2021 and currently has 95 cities as members across India
- The Alliance is open to all river cities of India. Any river city can join the Alliance at any time.
- The Alliance focuses on three broad themes Networking, Capacity Building and Technical Support.
- It is a dedicated platform for river cities in India to ideate, discuss and exchange information for sustainable management of Urban Rivers such as,
- Minimizing their water footprint,
- Reducing impacts on river and water bodies,
- Capitalizing on natural, intangible, architectural heritage and associated services and
- Develop self-sufficient, self-sustainable water resources through recycle, reuse strategy.

Aadi Mahotsav 2023

Schemes

Why in news?

- Prime Minister Narendra Modi has recently inaugurated the 'Aadi Mahotsav' in the Major Dhyan Chand National Stadium, Delhi.

About Aadi Mahotsav

- It is a National Tribal Festival that aims to showcase tribal culture, celebrate the spirit of tribal culture, crafts, cuisine, commerce and traditional art.
- It is an annual initiative of the Tribal Cooperative Marketing Development Federation Limited (TRIFED), under the Ministry of Tribal Affairs.
- **Shree Anna** - Since 2023 is being celebrated as the International Year of Millets, a special focus in the Mahotsav will be on showcasing Shree Anna grown by tribals.
- In the event, NSTFDC disseminate information on various schemes and financial support being provided for Scheduled Tribes.

Suposhit Maa Abhiyan

Schemes

Why in news?

- Prime Minister of India has recently lauded the Lok Sabha speaker, Om Birla for his initiative of 'Suposhit Maa'.

About Abhiyan

- It is a scheme to ensure nutritional support to pregnant women in Kota, Rajasthan.
- The scheme is in line with achieving 'Malnutrition-free India' by 2022.
- The scheme aims to provide nutritional support to pregnant women and adolescent girl.
- 1,000 pregnant women will be covered by the scheme and it was later extended to 3,000 in the 2nd phase.
- Only one pregnant woman from a family will be covered by the scheme.
- The scheme would also ensure the child's health through medical exams, blood tests, medicine provisions, delivery.

Clean Plant Centres

Schemes

Why in news?

- With the demand for foreign planting materials of fruits like apple, avocado and blueberry the Centre plans to set up 10 'Clean Plant Centres'.

About centres

- The Centre plans to set up 10 'Clean Plant Centres' to boost domestic production of the selected crops.



- These centers will be set up under the 'Atmanirbhar Clean Plant Program', which was announced in the Union Budget 2023-24.
- The concept of Clean Plant Centres is unique and does not exist in India.
- The 10 centres will be established for fruit crops like apple, walnut, almond, grapes, mango, pomegranate, among others in the next 7 years.
- The overall budget of Rs 2,200 crore till 2030. Fully funded by the Centre.
- **Services provided by the centres**
- Disease diagnostic
- Therapeutics
- Multiplying of plants
- Generation of mother plants
- In a PPP mode in partnership with research organizations, agriculture universities and private sector partners.

PARAKH

Schemes

Why in news?

- NCERT selects Educational Testing Service (ETS) for establishing national assessment regulator PARAKH.

About PARAKH

- Setting up PARAKH was outlined in National Education Policy (NEP 2020) to help remove disparities in scores of students enrolled with different State boards.
- The Performance Assessment, Review and Analysis of Knowledge for Holistic Development (PARAKH) will work on setting norms, standards and guidelines for student assessment and evaluation for all recognised school boards in the country.
- Educational Testing Service (ETS) has been chosen by the National Council for Education Research (NCERT) for setting up the regulatory platform.
- PARAKH will be an independent organisation affiliated to the Education Ministry.
- It will be looking into 3 major areas
- Large-scale assessment like the National Achievement Survey.
- School-based assessments.
- Capacity building.

Ignite IAS



Ignite IAS
Creating Aspirants, Inspiring Leaders



[igniteias.com](https://www.igniteias.com)

44



THE MOST PREFERRED CHOICE

FOR IAS ASPIRANTS

INTER + IAS | INTER + CLAT
DEGREE + IAS | DIRECT IAS

**A LEARNING ENVIRONMENT
THAT INCULCATES 'ETHICS AND VALUES'**

INTER
**HEC, CEC,
MEC, MPC**

DEGREE
**HEP, HPP
HPG**

Day Cum Residential

IGNITE IAS FOUNDATION COURSE

COURSE FEATURES

PEDAGOGUE METHOD

- Teachers with expert domain knowledge
- Systematic and well-framed subject sequence
- Focus on conceptual clarity and with keen eye on recent exam pattern

COURSE MATERIAL

- Daily Newspaper Analysis and a monthly Current Affairs Astra Magazine
- Primer NCERT series
- Prelims and Mains exhaustive standard material

NOVEL FEATURES

- Daily answer writing practice
- Topic-wise consolidation tests
- Essay writing sessions
- Exam centric approach



Corp. Office: # 61/3rt, 2nd Floor, SR Nagar, Near Community Hall, Hyderabad, Telangana - 500 038.

Main Campus: Padmashali Seva Samajam, Opp: St. Martin's Engg. College, Dulapally Road, Kompally, Hyderabad, Telangana - 500 100. Phone: 7997992479 / 80 / 82 / 83 | Website: igniteias.com