







CONTENTS

<u>OCT 1</u>

- ➤ G20 Sherpa meeting
- National Pension System Diwas
- ≻ AFSPA
- ➤ Black cocaine
- ➤ laws annexing 4 Ukraine regions
- > National Film Awards
- ➤ Infrastructure sector slows to 3.3%
- ➤ Chief of Defence Staff
- RBI hikes repo rate
- Bandhavgarh Tiger Reserve

<u>OCT 2</u>

- Surface of Mars
- Second coup in Burkina Faso
- International Day of Older Persons
- > Telecom Technology Development Fund scheme
- ➤ Swachh Survekshan 2022
- ➤ Army deploys M777
- Fourth leak found on Nord Stream
- > UGC clears 'professors of practice'
- RBI's Credit & Debit Card Tokenisation
- > 5G Services in India at 6th India Mobile Congress 2022

<u>OCT 3</u>

- Windfall tax
- Tri-services Missile Command
- Services output grows at slowest pace since March
- > 62% of rural households in India have fully functional tap water
- > Election Commission launches year-long voter awareness
- ≻ YUVA 2.0
- ➤ UAE's new immigration laws
- Fast-melting Arctic ice

<u>OCT 4</u>

➤ Mudra loans log a record 30% growth in H1 FY23





- Over 69% houses constructed under PMAY
- > The SASTRA Ramanujan Prize for 2022
- > Nobel winner Svante Paabo's discoveries show what makes us human
- > 4th Foreign Office Consultations between India and Ethiopia
- India's merchandise export grew by over 15 %
- National Means cum Merit Scholarship scheme
- ➤ World Habitat Day.
- Shyamji Krishna Varma

<u>OCT 5</u>

- > Agriculture ministry, NAFED sign MoU to boost international year of millets 2023
- ➤ 'herSTART' platform for women entrepreneurs
- > PM Modi talks to Ukranian President Volodymyr Zelenskyy
- OBPAS extended to five more Cantonment Boards
- > Garba Attaining Popularity Among National Games Participants
- > Home Ministry designates 10 individuals as terrorists
- Scheduled Tribe status for Pahari community in J&K
- > Explorers of Quantum Entanglement Win 2022 Nobel Prize in Physics

<u>OCT 6</u>

- > India's female Infant Mortality Rate drops to same level as male
- > 412 dengue cases in Delhi in a week, 693 in September
- > EU's new laws to regulate content online, and how do they compare with India's
- > Quality Council of India Celebrates Its Silver Jubilee
- > OPEC+ to cut oil production by 2 million barrels per day
- > US-India strategic clean energy partnership dialogue
- > Govt modifies credit scheme for civil aviation sector
- > UN peacekeeping chief Jean-Pierre Lacroix to visit India
- Click chemistry and bioorthogonal chemistry
- > India emerges as world's largest producer & consumer of Sugar

<u>OCT 7</u>

- National Lok Adalat to be held across country on Nov 12
- ➤ Nobel literature prize 2022
- > UNHRC adopts resolution against Sri Lanka's rights record
- ➤ NOPEC: the US bill to pressure the OPEC+ oil group





- > Sitharaman inaugurates CCI's western regional office in Mumbai
- International Solar Alliance's 5th Assembly
- > ISRO's Vyommitra's Skills Get A Lift-Off With Digital Grey Matter
- > PM Modi calls for giving boost to One District One Product scheme
- > PM Modi shares citizen's response to Ayushman Bharat Scheme
- ➤ Revenue Deficit Grant of Rs.7183.42 crore released to 14 States

<u>OCT 8</u>

- > India rejects claims of inaccuracies in National Health Accounts
- > BIS, the National Standards Body of India signed an MoU
- > Centre notifies establishment of Credit Guarantee Scheme for Startups
- Pradhan Mantri Rashtriya Bal Puraskar
- > Shri Mahakaleshwar Temple Extension project
- ➣ 50th Chief Justice of India
- ➢ Nobel Peace Prize
- > CAQM reviews the progress of commissioning of gas infrastructure
- > Online gaming task force may set spend limits in framework
- RBI to soon launch Digital Rupee

<u>OCT 9</u>

- ➤ US aims to hobble China's chip industry
- ➤ Rosetta Stone
- ➤ Clean swipe for MGNREGS
- > Key bridge linking Crimea to Russia hit by huge explosion
- > Election Commission allots 'Balasahebanchi Shiv Sena' as party
- > Eid Milad-un-Nabi being celebrated across India
- > Indian Air Force Day is celebrated on October 8 every year
- > Government approves creation of Weapon Systems branch in Indian Air Force
- > PM Modi declares Modhera in Gujarat as India's first 24×7

<u>OCT 10</u>

- > North Eastern Council Concludes with A Strategic Roadmap Ahead
- > 4th NICDC Investors' Roundtable Conference
- ➤ Manesar Anti-Terror 2022 Exercise
- > Delhi-NCR's revised action plan 'GRAP' to fight air pollution
- > India's Direct Tax Collections Rise 23.8 Per Cent To Rs 8.98 Lakh Crore





- World Post Day is observed each year on October 9
- > China more self-reliant in defence production
- > Pradhan Mantri National Apprenticeship Mela
- > Sharad Purnima being celebrated in country on October 9
- > Pune Terriers observe 73rd Territorial Army Day

<u>OCT 11</u>

- Protests Intensify in Iran
- > India gets fourth set of Swiss bank account details
- Indian space economy set to grow \$13 bn by 2025
- > Lancet Commission issues call to urgently address stigma
- > Aviation Minister inaugurates 4th Heli-India Summit 2022
- > DPIIT hosts Conference on B20 Indonesia Global Dialogue
- > FIFA, AIFF launch Football for Schools as Govt of India pledges active support
- > International Day of the Girl Child observed on 11th October

<u>OCT 12</u>

- > Israel-Lebanon Maritime Border Deal Hailed as 'Historic'
- > Principle of seniority and next CJI Chandrachud's '5+1' collegium
- ➢ Beti Bachao Beti Padhao
- > Three lakh and counting: RTI pleas pile up at information commissions
- > IMF cuts India's FY23 growth forecast to 6.8%
- > 53rd Capacity Building programme in Field Administration
- > 6th meeting of India-Norway Joint Working Group on Higher Education
- > PM Narendra Modi addresses UN World Geospatial International Congress
- > PM Modi recently lays the foundation stone of various healthcare facilities

<u>OCT 13</u>

- > Prime Minister Narendra Modi recently flagged off Vande Bharat Express
- ➢ First World Sloth Bear Day
- ➤ World Arthritis Day 2022
- ➤ Inflation accelerates to 7.41% in September 2022
- > Languages panel recommendations and a fresh 'Hindi imposition' row
- > Interpol rejects Delhi Red Corner request
- ➤ Welfare Fund For Martyrs' Families
- Poshan Maah 2022





- Multi-State Cooperative Societies (Amendment) Bill, 2022
- > Amit Shah unveils 15ft high statue of Jayaprakash Narayan

<u>OCT 14</u>

- ➤ LEADS 2022
- PM GatiShakti National Master Plan
- ➤ "PowerEX-2022"
- > Over Rs 6,000-crore scheme for Northeast gets Cabinet nod
- > IMF terms India's Direct Benefit Transfer scheme, as a 'logistical marvel'
- > Pakistan raising Kashmir issue at CICA platform
- ➤ Slender Loris
- ➤ A quest for the 'ghost' cat
- > ISRO's Next-Gen Launch Vehicle may assume PSLV's role
- > 69% drop in wildlife population globally in 50 years

<u>OCT 15</u>

- > India ranks 107th out of 121 countries on Global Hunger Index
- > Electoral bonds scheme is absolutely transparent mode of political funding
- "Manak Mahotsav"
- Nuclear-powered INS Arihant
- > 7th edition of IBSAMAR helds at Port Elizabeth
- > India participates at the 6th East Asia Summit
- > PM Modi to launch 75 digital banking units across 75 districts on Oct 16

<u>OCT 16</u>

- Army inks pacts with 11 banks
- Union Finance Minister recently attended the International Monetary and Financial Committee
- ➢ DefExpo 2022 in Gandhinagar
- ➤ Iodine tablets
- Legal rights being given to nature and rivers
- ➤ US is facing a shortage of Adderall
- Varanasi court rejects plea seeking carbon dating of 'Shivling'
- Dera Sacha Sauda head leaves Sunaria jail on 40-day parole
- > Karnataka Hijab row: 2-judge SC bench delivers split verdict





<u>OCT 17</u>

- > Ultra infectious new Omicron variant BF.7 detected in India
- ➤ In last 3.5 months, consumer panels cut pendency by 11%
- Securing Livelihoods in the Himalayas
- > Sri Lanka seeks Indian gaurs for reintroduction into the wild
- International Day of Rural Women
- > EY-CII report says India to attract \$475-bn FDI in 5 years
- Centre plans 22 'bhasha kendras'
- China's 'Wolf Warrior' Diplomacy
- > 'Meat' from plants and is 'just like' meat vegetarian
- > India stands third in the world in terms of fish production

<u>OCT 18</u>

- NHAI InvIT looks to raise additional Rs 3,800 cr
- ➤ Pasmanda Muslim
- > Kerala governor threatens to remove ministers
- > EdCIL pays a dividend of Rs 16 Crore for the year 2021-2022
- ➤ Green crackers
- > IHBAS joins central scheme to address mental health issues
- > Jitendra Singh launches integrated portal for pensioners
- 'One Nation One Fertiliser' Scheme
- > 415 million exited poverty in India in 15 years: UNDP
- > CAA norms can be applied to Hindu Tamils from Lanka

<u>OCT 19</u>

- ► India-U.K. form Joint Working Group
- > Grazing animals key to long-term soil carbon stability
- > Six new spider species discovered from across the country
- > What is nihonshu and why is Japan seeking a GI tag?
- ► U.S. returns 307 antiquities, valued at nearly \$4 million, to India
- > PM reviews the progress of National Maritime Heritage Complex at Lothal
- > Om Birla to address the National Conference on Tourist Police Scheme
- WISER programme to promote participation of women in international R&D
- Single Integrated Pensioners' Portal aimed at "Ease of Living"
- National Metallurgist Award- 2022





<u>OCT 20</u>

- > Tamil Nadu's mission to save the critically endangered vultures
- ➤ Govt. to launch Swadesh Darshan 2 with chosen destinations from 15 States
- > 11% of world's crypto, Web3 talent is in India: NASSCOM
- People's Plan Campaign–2022 Sabki Yojana Sabka Vikas
- Deendayal Antyodaya Yojana-National Rural Livelihoods Mission
- > 14th Tribal Youth Exchange Programme held in New Delhi
- > AK-203 assault rifles production to begin by year-end
- ➤ What is avian flu
- Indigenous UAV Rustom-2
- IPPB and Reserve Bank Innovation Hub (RBIH) Collaborate
- 'The Seven Moons of Maali Almeida'

<u>OCT 21</u>

- > Army's 4th round of emergency procurement to be from India
- ➤ 'Honesty shops'
- > German Chancellor says Russia using 'scorched-earth tactics'
- > Actor Anna May Wong, The Asian-American To Be Featured On US Currency
- > October storm in Bay of Bengal after 3 years: When, where it is likely to hit
- > This September was 5th warmest in 143 years: NOAA report
- Voter's education & awareness-2022
- > Nearly 46 tonnes single-use plastic items seized
- Mission DefSpace launched by PM Modi in Gujarat
- ➢ PM & UNSG Launch Mission LiFE

<u>OCT 22</u>

- Pakistan out of FATF's grey list after 4 years
- > Viral spillover risk increases with climate change in High Arctic lake sediments
- > Draft of National Credit Framework (NCrF) for public consultation
- > Central committee to probe 'illegal' felling of trees in Corbett National Park: NGT
- > Are critically endangered Great Indian Bustards now migrating to Pakistan?
- > Centre launches programme to strengthen Kashi-Tamil Nadu bond
- > Don't wait for complaints to act against hate speech, Supreme Court tells police
- U.P. bags top honours at PMAY-U Awards 2021
- "Quality, quantity and continuity" are the core principle for success of Jal Jeevan Mission





> Uttarakhand Governor felicitates astronomers, encourages young scientists

<u>OCT 23</u>

- > Maharashtra withdraws 'general consent' to CBI
- > Sri Lankan Parliament passes 20th Amendment
- > The Anti-Corruption Working Group
- ➤ What are govt securities?
- > What are monoclonal antibodies (mAbs)?
- ➤ CPI-IW base year revised to 2016
- > Testimony of sexual assault victim enough for conviction
- Anti-tank guided missile (ATGM), Nag
- ➤ Tubarial salivary glands
- ➤ "Life in Miniature" project

<u>OCT 24</u>

- ➤ 1962 India-China War
- ➤ FCRA and NGO
- ➤ How we can protect migrant workers
- ➤ Cuban Missile Crisis (CMC)
- SC directions on hate speech
- RBI monitoring Bank
- ➢ NAREDCO Finance Committee
- ≻ InvITs
- > Sugarcane production shifting from South to North: NSO report
- ➤ Basmati Rice
- Doping Violations
- ➤ Neanderthals

<u>OCT 25</u>

- ➤ Bhoota Kola
- > India successfully test fires Agni Prime ballistic missile
- Eknath Shinde govt restores CBI's general consent to probe cases in Maharashtra
- > Partial solar eclipse happening today.
- > Pradhan Mantri Bhartiya Janaushadhi Pariyojana
- > Five new varieties to expand India's Basmati platter





- Invisible killer threatens India's sandalwood forests
- ISRO's heaviest rocket successfully places 36 satellites in orbit
- > Plant spotted in Palakkad is second species of the genus Allmania
- ➤ Sukapaika River revival plan

<u>OCT 26</u>

- Remaining global carbon budget meagre, the World needs rapid and transformative actions
- > U.S. considers HAWK air defence equipment for Ukraine
- United Nations Day is celebrated on October 24
- > What was Neanderthals' family life like? DNA grants a glimpse
- Russia tells Ukraine planning 'dirty bomb' attack
- > Silver Trumpet and Trumpet Banner to The President's Bodyguard
- Cyclonic storm Sitrang
- ≻ Diwali
- ➤ Bestu Varsh
- > Rishi Sunak becomes Britain's first Indian-origin Prime Minister

<u>OCT 27</u>

- Finance Minister attends the Meeting of Board of Governors of Asian Infrastructure Investment Bank
- Means-cum-merit scholarship
- > Photos of Lakshmi and Ganesha on currency notes
- ➤ 'Blue Flag' tag
- > Jagdeep Dhankhar visits Golden Temple
- > Saudi Aramco executive spent week in Chamoli jail
- > India to expand NaVIC use to civilian sectors, make signals more secure
- ➤ GM mustard
- > Agro-Forestry under the co-chairmanship of Union Agriculture Minister
- > New technology for retrofitting non-earthquake-resistant buildings

<u>OCT 28</u>

- ➤ Floating trash barrier
- ➤ 100 years of Saka Panja Sahib
- > News Broadcasting & Digital Standards Authority
- > Dakar International Forum on Peace and Security in Africa





- PM Modi To Lay Foundation Stone Of C-295 Transport Aircraft Manufacturing Facility
- > UNSC's counter-terror meet in India to focus on these key issues
- > NIA agency to have offices in all states by 2024, says Home Minister
- > India's first indigenous Overhauser Magnetometer
- > Indian Army Celebrates 76th Infantry Day On 27 October
- Pradhanmantri Sangrahalaya

<u>OCT 29</u>

- Regional Connectivity Scheme (RCS)-UDAN
- Withdrawal of the Personal Data Protection Bill
- ➢ RBI to hold additional MPC meeting
- Four-day Chhath Puja celebrations
- India's Northward Development Journey
- > Govt Notifies Rules For Social Media Grievance Appellate Committees
- > PM Modi moots 'One Nation, One Police Uniform' idea
- > Hattis leads to resentment among SCs, Gujjars in Sirmaur
- > Tulu, Kodava speakers demand priority for their languages

<u>OCT 30</u>

- ➤ AMR Salmonella
- > Tuberculosis deaths and disease increase during the COVID-19 pandemic
- Kinnaur youth seek affidavit from candidates against construction of hydropower projects
- ➤ Uniform Civil Code
- ➤ Kalanamak rice
- Northeast monsoon arrives over South India, declares IMD
- AMPRI converts red mud into X-ray shielding tiles
- ➤ 4th edition of Goa Maritime Symposium
- ➢ INDIAN NAVY PARTICIPATES IN MAIDEN TRILATERAL EXERCISE
- ECI to host a two day International Conference on 'Role, Framework & Capacity of EMBs' as the lead for the Cohort on 'Election Integrity'

<u>OCT 31</u>

- ➤ "Special Operation Medal" for the year 2022
- ➤ Myositis





- > PM announces ex-gratia from PMNRF for the victims of mishap in Morbi
- ➤ Amur falcons
- > Prime Minister praises plantation drive of Central Reserve Police Force jawans
- > PM Modi inaugurates Maze Garden and Miyawaki Forest
- IMD predicted moderate rain in Tamil Nadu, Puducherry, Karaikal, Kerala and Mahe
- RBI will convene to formulate its response to the Government of India about the high rate of inflation in the country.
- > Kanye West says he was beaten to pulp after outrage over his anti-Semitic rants
- ➤ Rashtriya Ekta Diwas or National Unity Day 2022





OCT 1

India participates at 3rd G20 Sherpa meeting in Indonesia

- A Sherpa is a personal representative of the leader of a member country at an international Summit meeting such as the G8, G20, the Nuclear Security Summit etc.
- The Sherpa engages in planning, negotiation and implementation tasks through the Summit.
- They coordinate the agenda, seek consensus at the highest political levels, and participate in a series of pre-Summit consultations to help negotiate their leaders' positions.
- Sherpas are career diplomats or senior government officials appointed by the leaders of their countries.
- The term is derived from the Nepalese Sherpa people, who serve as guides for mountaineers in the Himalayas.
- There is only one Sherpa per Summit for each member country; he/she is assisted by several sous Sherpas.

PFRDA will observe tomorrow as the National Pension System Diwas (NPS Diwas) to promote pension and retirement planning

- It aims to promote pension and retirement planning among the citizens. PFRDA is organising this campaign under 'Azadi Ka Amrit Mahotsav'.
- The pension regulator aims to encourage every citizen, whether working professionals or self-employed professionals, to plan towards creating a pension corpus to ensure a financially sound future after retirement.
- NPS subscribers will enjoy the benefits of tax deduction on contribution, power of compounding and reap the benefits of regular income after retirement.

AFSPA extended in Nagaland, Arunachal Pradesh

• The AFSPA will be extended for six months in nine districts -- Dimapur, Niuland, Chumoukedima, Mon, Kiphire, Noklak, Phek, Peren, and Zunheboto -- and 16 police stations areas in four other districts --Kohima, Mokokchung, Longleng, and Wokha of Nagaland.





- It has been extended in certain parts of five other districts of the two northeastern states to facilitate the armed forces to continue the anti-insurgency operations.
- It is a law which gives armed forces (Army, the Air Force and Central paramilitary forces) the special powers and immunity to maintain public order in "disturbed areas".
- **When is it applied?**It can be applied only after an area has been declared "disturbed" under section 2 of the act.
- What is a Disturbed area? An area can be considered to be disturbed due to differences or disputes among different religious, racial, language or regional groups or castes or communities.
- Who declares an area as disturbed? Section (3) of AFSPA empowers the governor of the state/Union territory to issue an official notification declaring the state or a region within as a "disturbed area", after which the centre can decide whether to send in armed forces.
- The 'special powers' of armed forces under Section 4 are:
 - Power to use force, including open fire' at an individual if he violates laws which prohibit (a) the assembly of five or more persons; or (b) carrying of weapons.
 - 'power to arrest' without a warrant; (Under section 5 the Armed Forces have to hand over the arrested person to the nearest Police Station "with the least possible delay".
 - \circ 'power to seize and search' without any warrant any premise.
- These armed forces are immune from prosecution unless Union Government provides sanction to the prosecuting agencies.

Bolivian woman held with black cocaine worth Rs 13 crore at Mumbai airport

- "Black cocaine" is a rare drug, is a mixture of regular cocaine and other chemicals of administrated quantity.
- In a bid to ensure that sniffer dogs used at airports do not detect cocaine, it is being used by drug peddlers coming to India from South American countries.
- It neutralises the smell of cocaine so that it can pass through checkpoints easily.
- Black cocaine is a mixture of regular cocaine base with various substances to camouflage typical appearance (e.g. charcoal), to interfere with colour-based drug tests (cobalt salts form deep red complexes in





solution), to make the mixture undetectable by drug-sniffing dogs as activated carbon may sufficiently absorb trace odours.

- The pure cocaine base is then recovered from the mixture by extraction using common organic solvents such as methylene chloride or acetone.
- A second process is required to convert the cocaine base into powdered cocaine hydrochloride.

Russia's Putin signs laws annexing 4 Ukraine regions, finalising the move

- The four regions being annexed are Donetsk and Luhansk in eastern Ukraine and Kherson and Zaporizhzhia in southern Ukraine.
- The separatist Donetsk and Luhansk regions in eastern Ukraine have been backed by Moscow since declaring independence in 2014, weeks after the annexation of Ukraine's Crimean Peninsula.
- The southern Kherson region and part of the neighboring Zaporizhzhia were captured by Russia soon after Putin sent troops into Ukraine on February 24, 2022.
- Together with Crimea that Russia annexed in 2014, Russia now claims 20% of Ukrainian territory.
- The four territories create a crucial land corridor between Russia and the Crimean peninsula, annexed by Moscow in 2014.

President Droupadi Murmu recently gave away the National Film Awards for the year 2020 under various categories at the 68th edition of the ceremony.

- The Dadasaheb Phalke Award was conferred on veteran actor Asha Parekh, an accomplished Indian classical dancer who has also been a director and producer.
- The Dadasaheb Phalke Award is India's highest award in the field of cinema.
- It is presented annually at the National Film Awards ceremony by the Directorate of Film Festivals, an organisation set up by the Ministry of Information and Broadcasting.
- The recipient is honoured for their "outstanding contribution to the growth and development of Indian cinema".
- The award prize consists of a golden lotus, a cash prize of ₹ 10 lakh and a shawl.





- The award was introduced by the Government of India to commemorate Dadasaheb Phalke's contribution to Indian cinema, who is popularly known as and often regarded as "the father of Indian cinema".
- It was first presented in 1969. The first recipient of the award was actress Devika Rani, "the first lady of Indian cinema".

Output growth of eight core infrastructure sector slows to 3.3% in August

- This is the slowest pace seen since November 2021, with crude oil and natural gas continuing to report contractions while electricity and steel production clocked sharply lower expansions than in the previous month.
- Overall output levels in the eight sectors were 1.5% lower than in July 2022, marking the third successive month of sequential contraction.
- The core sector is an aggregate of 8 core sectors that are fundamental to the Indian economy.
- These are Coal, Crude oil, Natural gas, Refinery products, Fertilisers, Steel, Cement and Electricity.
- These 8 sectors constituting the core sector are important because they account for nearly 40.27% of the overall IIP and hence have long term repercussions for corporate profit growth as well as for the overall GDP growth.
- The growth of the country's eight core sectors is a lead indicator of the monthly industrial performance.
- The Office of Economic Adviser, Department for Promotion of Industry and Internal Trade (DPIIT) in the Commerce and Industry Ministry releases the Index of Eight Core Industries.

Gen Anil Chauhan assumes charge as Chief of Defence Staff

- General Anil Chauhan was commissioned into the 11 Gorkha Rifles of the Indian Army in 1981 and has served a range of staff and operational appointments including that of Director General of Military Operations.
- The CDS post has been vacant for over nine months since the death of the first CDS Gen Bipin Rawat in a chopper crash in December 2021.
- This is the first instance since independence, of a three-star Lieutenant General rank officer taking over as a four-star General after retirement.





- The Chief of Defence Staff of the Indian Armed Forces (CDS) is the military head and permanent Chairman of the Chiefs of Staff Committee (COSC) of the Indian Armed Forces.
- The Chief of Defence Staff is the highest-ranking uniformed officer on active duty in the Indian military and chief military adviser to the Minister of Defence.
- The Chief also heads the Department of Military Affairs.

RBI hikes repo rate by 50 basis points

- It raised the repo rate (or the rate at which it lends money to the banking system) by 50 basis points (or 0.5 percentage points).
- It has cut India's GDP growth rate for the current financial year (2022-23) from 7.2% to 7%.
- The MPC retained the retail inflation projection for the current fiscal year at 6.7%.

Monetary Policy Committee

- The Monetary Policy Committee of India is responsible for fixing the policy interest rate, to achieve the objectives of monetary policy.
- Three officials of the Reserve Bank of India, with Governor of RBI as Chairperson, ex officio
- Three external members appointed by the Government of India
- The external members hold office for a period of four years.
- Decisions of the MPC are taken on the basis of majority, with Governor having the casting vote in case of a tie.
- The MPC meets least 4 times a year and it publishes its decisions after each such meeting.

ASI's recent findings in Bandhavgarh Tiger Reserve

- The 26 caves that were found are associated with the Mahayana sect of Buddhism.
- These date back to the same time as the Ajanta caves in Aurangabad, a UNESCO World Heritage Site.
- Besides the caves, the ASI team also found the remains of 26 temples, two mathas, two stupas, 46 idols and sculptures, 26 fragments and 19 water bodies.





- ASI also mentioned a Buddhist pillar fragment containing a miniature stupa carving, dating to the 2nd-3rd century CE, and 24 Brahmi inscriptions from the 2nd-5th century CE.
- The temples are from more recent times the Kalachuri period (9th-11th century), while the water bodies range between 2nd-15th centuries CE.
- The places Kaushami, Mathura, Pavata (Parvata), Vejabharada and Sapatanaairikaa are mentioned in the Brahmini inscriptions, while the inscribed names of kings include Shri Bhimsena, Maharaja Pothasiri and Bhattadeva.

Bandhavgarh Tiger Reserve

- Bandhavgarh was declared a national park in 1968 and became a tiger reserve in 1993.
- Tala, Khitauli and Magadhi comprise the three main zones of the national park, which together cover an area of 716 km.

OCT 2

China's Zhurong rover has peered under the surface of Mars and has found evidence of two huge floods that shaped the landscape.

- Since May 2021, Zhurong has been exploring Utopia Planitia, in Mars's northern hemisphere.
- Images from the rover's ground-penetrating radar found layered patterns under the surface, which are made of sedimentary rocks carried in by two major floods around 1.6 billion years ago.





- China's Zhurong rover landed in the Utopia Planitia, a 2,000-miles-wide (3,300 kilometers) basin in the Northern Hemisphere of Mars, in May 2021.
- Since then, the rover has been studying local geology, chemical composition of rocks, and local weather conditions using its six scientific instruments.
- Zhurong has already completed its primary mission of 90 sols. But the rover is continuing its way to the south of its landing site, collecting data as it goes.

Second coup in Burkina Faso as military officers dismiss junta leader

- Burkina Faso is a landlocked country in West Africa, bordered by Mali to the northwest, Niger to the northeast, Benin to the southeast, Togo and Ghana to the south, and the Ivory Coast to the southwest.
- It was previously called Republic of Upper Volta.
- Its capital and largest city is Ouagadougou.
- The country owes its former name of Upper Volta to three rivers which cross it: the Black Volta (or Mouhoun), the White Volta (Nakambé) and the Red Volta (Nazinon).

October 1 is observed as the International Day of Older Persons across the globe.

- This year, the theme for the International Day of Older Persons is "Resilience of Older Persons in a Changing World"
- The day was introduced by the United Nations General Assembly with an aim of honouring the contribution of older persons and looking into the problems that they face.
- The United Nations General Assembly passed a resolution on December 14, 1990, to establish October 1 as the International Day of Older Persons.
- The day came into being after the Vienna International Plan of Action on Ageing initiative, which was adopted by the World Assembly on Ageing in 1982.
- The UN General Assembly in 1991 approved the United Nations Principles for Older Persons. Later in 2002, the Second World Assembly on Ageing embraced the Madrid International Plan of Action on Ageing.





• It was done to address and understand the opportunities and challenges faced by the older generation in the 21st century and to promote the development of a society for all ages.

Universal Service Obligation Fund (USOF) launches Telecom Technology Development Fund scheme

- Telecom Technology Development Fund (TTDF) aims to fund R&D in rural-specific communication technology applications and form synergies among academia, start-ups, research institutes, and the industry to build and develop the telecom ecosystem.
- Additionally, the Scheme aims to promote technology ownership and indigenous manufacturing, create a culture of technology co-innovation, reduce imports, boost export opportunities and creation of Intellectual Property.
- Under the scheme, USOF is also targeting to develop standards to meet countrywide requirements and create the ecosystem for research, design, prototyping, use cases, pilots, and proof of concept testing, among others.
- The scheme entails grants to Indian entities to encourage and induct indigenous technologies tailor-made to meet domestic needs.

President of India Announces Results of Swachh Survekshan 2022

- Indore has been adjudged the cleanest city of India for the sixth year in a row, while Madhya Pradesh is the cleanest state in the country.
- Surat is the second cleanest city and Navi Mumbai comes a close third in the category of cities with a population more than a lakh.
- Visakhapatnam was adjudged the fourth cleanest city in the country (In over 10 lakh population category).
- In the population category of less than one lakh, Panchgani and Karad from Maharashtra bagged the first and third positions respectively, while Patan from Chhattisgarh bagged the second position.
- Tirupati received the best city award in Safai Mitra Suraksha category, while Haridwar in Uttarakhand received the award for the best Ganga town in more than one lakh population cities.
- Bijnor ranked first among Ganga towns with less than one lakh population, followed by Kannauj and Garhmukhteshwar.





- Maharashtra's Deolali was adjudged the country's cleanest Cantonment Board.
- Shivamogga in Karnataka received the fast mover city award.
- Tripura got the cleanest State award in the "less than 100 urban local bodies category".

Army deploys M777 Howitzers to ramp-up firepower at northern frontiers

- In the next five years, the Army's Regiment of Artillery will see major force accretion with the induction of several guns, including indigenous ones.
- It includes the Dhanush, Sharang, M777 Ultra Light Howitzer (ULH), additional K9-Vajra howitzers and the Advanced Towed Artillery Gun System (ATAGS).
- The M777s are a key component of the army's field artillery rationalisation plan (FARP), cleared in 1999.
- The 155 mm/39-caliber M777 howitzers have a range of up to 30km, but it is capable of striking targets at ranges of more than 40 km in some areas where the geography allows the shells to fly in rarefied air.
- Built with titanium and aluminum alloys, the howitzers weigh 4,218 kg.
- In contrast, 155mm towed guns weigh twice as much.
- The Indian Air Force's CH-47F Chinook helicopters can carry the howitzers as underslung load for swift deployment in high-altitude areas.

Fourth leak found on Nord Stream pipelines

- Nord Stream 1 is a 1,224 km underwater gas pipeline running from Vyborg in northwest Russia to Lubmin in northeastern Germany via the Baltic Sea.
- The majority owned by the Russian energy giant Gazprom, it is the primary network through which gas reaches Germany.
- Most of the gas goes directly to Germany, while the rest travels west and southwards through onshore links to other countries and into storage caverns.
- The 1,200-km Nord Stream 2 pipeline was to run from Ust-Luga in Russia to Greifswald in Germany through the Baltic Sea and carry 55 billion cubic metres of gas per year.





• It was meant to run along with the Nord Stream 1 system. Germany is Russia's biggest European gas consumer, and most of it comes through the Nord Stream.

UGC clears 'professors of practice' in all colleges, universities

- No formal educational qualification such as a PhD is needed to apply for a position.
- To be eligible for appointment, an individual will have to be a "distinguished expert" who has "made remarkable contributions in their professions", and has at least 15 years of service or experience.
- The idea is to bring practical experience into classroom teaching.
- It is open to the institutions themselves to decide the sector from which they want to rope in professionals.
- A professor of practice can be anyone with a background in a diverse range of areas from technology, science, social sciences, media, literature, armed forces, law, fine arts, etc.
- However, the position is not open for those in the teaching profession either serving or retired.
- Currently, under the UGC's minimum qualifications for appointment of teachers and other academic staff, an individual needs a PhD to be recruited as a professor or associate professor, and also needs to have cleared the National Eligibility Test (NET).
- It can be either a full-time or a part-time engagement for at least four years. Initially, the hiring will be for one year. Based on performance, extensions may be given.
- The remuneration will be decided at the level of the institutes and the experts being hired.

RBI's Credit & Debit Card Tokenisation Rules From 1 October 2022

- Tokenisation here refers to replacement of actual credit and debit card details with an alternate code called the "token".
- A token is a 16-digit number unique for a combination of card, token requestor and merchant.
- By tokenising the card with a merchant, the actual card details of the customer are replaced with token credentials, which can be used only for the merchant for which the token has been created.





- Tokenisation can be performed only by the authorised card network and recovery of original Primary Account Number (PAN) should be feasible for the authorised card network only.
- Adequate safeguards have to be put in place to ensure that PAN cannot be found out from the token and vice versa, by anyone except the card network.
- A tokenised card transaction is considered safer as the actual card details are not shared with the merchant during transaction processing.

Prime Minister to launch 5G Services in India at 6th India Mobile Congress 2022

- 5G is the next generation of mobile communication networks, which is supposed to offer much faster speeds and wider use cases than 4G.
- It is believed that the rollout of 5G will accelerate the adoption of cloud gaming, AR/VR technology, Internet of Things, etc. 5G also has several enterprise use cases.
- It enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.
- 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users.
- In 5G the latency will be ten times less than in 4G, being able to perform remote actions in real time.





OCT 3

Windfall tax on crude reduced, export duty on diesel halved

- The taxes were introduced on July 1, as the Centre felt that elevated crude prices were allowing oil companies to make windfall profits, and that the exchequer must get a share of such gains.
- The reduction in tax rates follows the easing of crude oil prices in international markets.
- A windfall tax is a tax levied by governments against certain industries when economic conditions allow those industries to experience above-average profits.
- The idea is to target firms that were lucky enough to benefit from something they were not responsible for in other words, a windfall.
- In other words, windfall tax is imposed on companies that have seen their profits extraordinarily not because of any clever investment decision or an increase in efficiency or innovation, but simply because of favourable market conditions.

Tri-services Missile Command on anvil as stand-off weapons era dawns

- The proposed missile command will be responsible for deployment of missile and rocket regiments against any hostile adversary and will be manned by commanders of the three services in rotation.
- This means that conventional missiles like BrahMos and Akash as well as Pinaka rockets will be placed under one command for rapid deployment against any adversary.
- The proposal to set up a missile command has been moved in the aftermath of the May 2020 East Ladakh stand-off with the PLA and the use of rockets and missiles in the Ukraine theatre by the Red Army.
- The missile command will be on similar lines as the tri-services cyber command and the space command as the future wars will hardly have any contact between troops unless used for capturing enemy territory.

Services output grows at slowest pace since March

• It was the 15th straight month the figure was above the 50-mark separating growth from contraction.





- The survey pointed out that Indian businesses become more confident in the outlook as inflation worries were tamed.
- The overall level of positive sentiment seen in September was the best in over seven-and-a-half years, according to the survey.

Purchasing Managers' Index

- Purchasing Managers' Index or PMI is an economic indicator, which is derived after monthly surveys of different companies.
- The index shows trends in both the manufacturing and services sector.
- The index helps in determining whether the market conditions, as seen by purchasing managers, is expanding, contracting or staying the same.
- It is used to provide information regarding the current and future business conditions.
- PMI is one of the closely watched indicators of business activity and helps in predicting the economic health of a country.
- There are two types of PMI Manufacturing PMI and Services PMI. A combined index is also made using both manufacturing PMI and services PMI.
- A PMI number greater than 50 indicates expansion in business activity. A number less than 50 shows contraction. The rate of expansion is also judged by the difference from the mid-point (50) and also by previous month's data.

62% OF RURAL HOUSEHOLDS IN INDIA HAVE FULLY FUNCTIONAL TAP WATER CONNECTIONS WITHIN THEIR PREMISES, SAYS WATER RESOURCES MINISTRY REPORT

- Around 62% of rural households in India have fully functional tap water connections within their premises, according to a survey commissioned by the Union Ministry of Water Resources to assess the functioning of the government's marquee Jal Jeevan Mission.
- Tamil Nadu, Himachal Pradesh, Goa, and Puducherry reported more than 80% of households with fully functional connections, while fewer than half the households in Rajasthan, Kerala, Manipur, Tripura, Maharashtra, Madhya Pradesh, Mizoram and Sikkim had such connections.
- A fully functional tap water connection is defined as a household getting at least 55 litres per capita per day of potable water all through the year.





- Close to three-fourths of households received water all seven days a week and 8% just once a week.
- On an average, households got water for three hours every day, and 80% reported that their daily requirements of water were being met by the tap connections.
- The report mentions a concerning problem of chlorine contamination. Though 93% of the samples were reportedly free of bacteriological contamination, "most of the anganwadi centres and schools, had higher than the permissible range of residual chlorine and indicated inappropriate local dosing.

Election Commission launches year-long voter awareness program on All India Radio

- It is a year-long voter awareness program.
- The Matadata Junction program will be broadcast in 23 languages across the country.
- The weekly program covers all aspects of the Voter ecosystem and shall be broadcast every Friday on the All India Radio network.
- Each Program will be based on a particular Theme on the Electoral process.
- All the 52 Themes are aimed at encouraging all eligible citizens and especially the young and first time voters to vote and make an informed decision during the elections.
- The program includes a Citizen's Corner where any citizen can ask a query or suggest any aspects of the voting.

YUVA 2.0: MoE launched PM's Scheme for Mentoring Young Authors

- It is a Prime Minister's scheme for mentoring young authors, and a programme to train young and budding authors below the age of 30 to promote reading, writing, and book culture in the country, and project India and Indian writings globally.
- The ministry of education (MoE) launched the YUVA 2.0 scheme in view of the significant impact of the first edition of the YUVA.
- The first edition witnessed a large-scale participation from young authors in 22 different Indian languages including English.
- It is in tune with the Prime Minister's vision to encourage the youth to understand and appreciate India's democracy.





- It will help to develop a stream of writers who can write on a spectrum of subjects to promote the Indian heritage, culture, and knowledge system.
- The National Book Trust, India, as the implementing agency under MoE will ensure the phase-wise execution of the scheme under well-defined stages of mentorship.
- The young authors will be trained by eminent authors and mentors from 1st March to 31st August 2023.

UAE's new immigration laws come into effect today.

- Under UAE's new immigration laws, the five-year green visa will allow foreigners to sponsor themselves without any help from UAE nationals or their employers. Freelancers, skilled workers, and investors are eligible for this visa.
- Now, green visa holders can sponsor their family members themselves.
- If the permit for a green visa holder expires, they will be given a period of up to six months to renew it.
- A 10-year expanded residency is also offered under the golden visa. Investors, entrepreneurs, and individuals with exceptional talents are eligible for a golden visa.
- According to the new immigration laws, golden visa holders will also enjoy the benefit of 100% ownership of their business.
- Tourist visas will allow the visitors to stay in UAE for 60 days, as per new rules.
- A five-year multi-entry tourist visa will allow visitors to stay in the UAE for up to 90 days in a row.
- And the job exploration visa will also allow professionals to seek employment opportunities in the UAE without a sponsor or host.

Fast-melting Arctic ice is turning the ocean acidic, threatening life

- The team of researchers identified a strong correlation between the accelerated rate of melting ice and the rate of ocean acidification.
- Scientists have predicted that by 2050, Arctic sea ice in this region will no longer survive the increasingly warm summers.
- As a result, the ocean's chemistry will grow more acidic, creating lifethreatening problems for the diverse population of sea creatures, plants and other living things that depend on a healthy ocean. Crabs, for





example, live in a crusty shell built from the calcium carbonate prevalent in ocean water.

- Seawater is normally alkaline, with a pH value of around 8.1.
- The researchers point to sea-ice melt as the key mechanism to explain this rapid pH decrease, because it changes surface water in three primary ways.
 - First, the water under the sea ice, which had a deficit of carbon dioxide, now is exposed to the atmospheric carbon dioxide and can take it up freely.
 - The seawater mixed with meltwater is light and can't mix easily into deeper waters, which means the carbon dioxide is concentrated at the surface.
 - The meltwater dilutes the carbonate ion concentration in the seawater, weakening its ability to neutralise the carbon dioxide into bicarbonate and rapidly decreasing ocean pH.

IAF inducts first made-in-India light combat helicopters: 5 points

- The indigenous Light Combat Helicopter (LCH) is set to be formally inducted into the Indian Air Force (IAF) at the Jodhpur air base.
- It is the only attack helicopter in the world which can land and take off at an altitude of 5,000 meters with a considerable load of weapons and fuel, meeting the specific requirements laid out by the Indian Armed Forces.
- It has the maximum take-off weight of 5.8 tonnes, maximum speed of 268 kilometers per hour, range of 550 kilometers, endurance of over three hours and service ceiling the maximum density altitude to which it can fly of 6.5 kilometres.
- The helicopter uses radar-absorbing material to lower radar signature and has a significantly crash-proof structure and landing gear.
- A pressurised cabin offers protection from nuclear, biological and chemical (NBC) contingencies.
- The helicopter is equipped with a countermeasure dispensing system that protects it from enemy radars or infrared seekers of the enemy missiles.
- As far as weapons systems are concerned, a 20 mm turret gun, 70 mm rockets and air-to-air missile systems are onboard.
- LCH is powered by two French-origin Shakti engines manufactured by the HAL.





OCT 4

Mudra loans log a record 30% growth in H1 FY23

- It is a flagship scheme of the Ministry of Finance, Government of India, launched on 8th April, 2015.
- It is a Financial Inclusion (FI) programme in the country based on three pillars Banking the Unbanked, Securing the Unsecured and Funding the Unfunded.
- Shishu Covering loans up to Rs 50,000;
- Kishor Covering loans above Rs 50,000 and up to Rs 5 lakh;
- Tarun Covering loans above Rs 5 lakh and up to Rs 10 lakh.
- Any Indian Citizen who has a business plan for a non-farm sector income generating activities such as manufacturing, processing, trading or service sector.
- They can avail from all Public Sector Banks, Regional Rural Banks and Cooperative Banks, Private Sector Banks, Foreign Banks, Micro Finance Institutions (MFI) and Non-Banking Finance Companies (NBFC) up to Rs 10 lakhs Micro Units Development & Refinance Agency Ltd. (MUDRA) loans under PMMY.

Over 69% houses constructed under PMAY in rural India are owned by women, says government

- Over 69% of houses constructed under the Prime Minister's special housing scheme are either wholly or jointly owned by women in rural areas.
- As on September 29, 2022, a total of two crore houses had been constructed out of the 2.46 crore houses that were sanctioned.
- The Pradhan Mantri Awas Yojana (Gramin) was launched by the Prime Minister in 2016 with the aim of constructing 2.95 crore houses.
- Beneficiaries are identified using parameters from Socio-Economic and Caste Census (SECC) 2011 data and verified by Gram Sabhas.
- **Concerned Ministry:** Ministry of Rural Development.

The SASTRA Ramanujan Prize for 2022 will be awarded to Yunqing Tang





- Yunqing Tang is an Assistant Professor with the University of California, Berkeley, U.S.A.
- According to SASTRA Ramanujan Prize Committee Ms. Yunqing's works display a remarkable combination of sophisticated techniques, in which the arithmetic and geometry of modular curves and of Shimura varieties play a central role, and her results and methods are bound to have major impact on future research in this area.
- The award, instituted by the Shanmugha Arts, Science, Technology & Research Academy (SASTRA) in 2005 with a cash prize of \$10,000, is presented annually to individuals aged 32 and below, who made outstanding contributions in the field of mathematics, influenced by Srinivasa Ramanjuan in a broad sense.

Nobel winner Svante Paabo's discoveries show what makes us human

- He has spearheaded the development of new techniques that allowed researchers to compare the genome of modern humans and that of other hominins the Neanderthals and Denisovans.
- He spent decades trying to extract DNA from 40,000-year-old bones, culminating in the unveiling of the Neanderthal genome in 2010.
- The research helped establish that modern humans and Neanderthals share a common ancestor that lived some 600,000 years ago. Paabo and his team also found genetic evidence that, during periods of coexistence, modern humans and Neanderthals had children together.
- His seminal research gave rise to an entirely new scientific discipline; paleogenomics.
- His research led to the understanding that archaic gene sequences from our extinct relatives influence the physiology of present-day humans.
 - One such example is the Denisovan version of the gene EPAS1, which confers an advantage for survival at high altitude and is common among present-day Tibetans.
 - Other examples are Neanderthal genes that affect our immune response to different types of infections.

4th Foreign Office Consultations between India and Ethiopia

• During the consultation, both sides reviewed the entire spectrum of bilateral relations, including political engagements, trade and economic





matters, development partnership projects and cooperation in higher education.

- They also agreed to work to expand engagement in fields such as defence, Science and Technology, education, agriculture and allied sectors and civil aviation.
- India and Ethiopia have also agreed to continue high-level political exchanges and regular meetings of the joint institutional mechanisms to keep the relationship vibrant and mutually beneficial.
- The next round of Consultations will be held in New Delhi.

India's merchandise export grew by over 15 % from April to September this year

- India's merchandise export has grown by over 15 per cent to 229 billion US dollar from April to September this year in comparison to the same period last year.
- The country has achieved merchandise export of over 32 billion dollars in September this year with a decrease of 3.52 per cent in comparison to the same month last year.
- The export of non-petroleum and non-gems and jewellery from April to September this year was over 158 billion dollars, an increase of 5.53 per cent over the same period last year.

National Means cum Merit Scholarship scheme

- The last date for submission of application for 'National Means cum Merit Scholarship scheme for the year 2022-23 extended till 15th October, 2022'.
- It is a Central Sector Scheme that was launched in 2008.
- **Objective:** Award scholarships to meritorious students of economically weaker sections to arrest their drop out at class VIII and encourage them to continue their education at secondary stage.
- **Features:**One lakh fresh scholarships are awarded to selected students of class IX every year and their continuation / renewal in classes X to XII for study in State Government, Government-aided and Local body schools under the scheme. The amount of scholarship is Rs. 12000/- per annum from 1st April 2017 (earlier it was Rs. 6000/- per annum).





• The Cabinet has approved continuation of the Scheme from FY 2021-22 to FY 2025-26 with total allocation of Rs.1827 crores.

United Nations observes the first Monday of October as World Habitat Day.

- This year, World Habitat Day will be observed on October 3.
- Theme: "Mind the Gap. Leave No One and Place Behind".
- It seeks to draw attention to the growing inequalities and vulnerabilities in cities and human settlements that have been exacerbated by the triple 'C' crises COVID-19, climate and conflict.
- The day came into existence with a resolution by the UN General Assembly in 1985.
- World Habitat Day was first celebrated in 1986 in Nairobi, Kenya, with the theme 'Shelter is my right'.

PM Modi pays tribute to Shyamji Krishna Varma

- Shyamji Krishna Varma (1857 1930) was an Indian freedom fighter, lawyer and journalist.
- Indian Home Rule Society (IHRS):It was an Indian organisation founded in London in 1905 that sought to promote the cause of self-rule in British India. The organisation was founded by Shyamji Krishna Varma, with support from Bhikaji Cama, Dadabhai Naoroji and S.R. Rana.
- India House:He founded India House in London. It was a student residence that existed between 1905 and 1910 which was opened to promote nationalist views among Indian students in Britain.
- Indian Sociologist:He founded Indian Sociologist in London. The monthly Indian Sociologist became an outlet for nationalist ideas.





ОСТ 5

Agriculture ministry, NAFED sign MoU to boost international year of millets 2023

- The U.N. General Assembly recently adopted a resolution, sponsored by India and supported by more than 70 countries, declaring 2023 as the International Year of Millets.
- The resolution is intended to increase public awareness on the health benefits of millets and their suitability for cultivation under tough conditions marked by climate change.
- Millet is a cereal that belongs to the grass family.
- Majorly cultivated in the semiarid tropical regions of Africa and Asia, around 97 percent of world's overall millet production happens in these regions.
- Types of millets: Jowar (Sorghum), Ragi, Bajra (Pearl millet).

President launches 'herSTART' platform for women entrepreneurs

- herSTART' is the initiative of Gujarat University Startup and Entrepreneurship Council aims at supporting women-led startups.
- The platform has been launched with the aim that it will not only boost innovation and start-up efforts of women entrepreneurs but also help them connect with government as well as private enterprises.
- Through this platform, free resources and training modules free will be provided to aspiring women entrepreneurs. It will build a digital community and also a digital publication to spread their success stories.

PM Modi talks to Ukranian President Volodymyr Zelenskyy; conveys India's readiness to contribute to any peace efforts

- Both the leaders discussed the ongoing conflict in Ukraine. Mr Modi reiterated his call for an early cessation of hostilities and the need to pursue the path of dialogue and diplomacy.
- The Prime Minister expressed his firm conviction that there can be no military solution to the conflict and conveyed India's readiness to contribute to any peace efforts.





- He emphasized the importance India attaches to the safety and security of nuclear installations, including in Ukraine. Mr Modi underlined that endangerment of nuclear facilities could have far-reaching and catastrophic consequences on public health and the environment.
- India was one of the first countries to recognize Ukraine. Government of India recognized the Republic of Ukraine as a sovereign country in December 1991 and established diplomatic relations in January 1992.
- The Embassy of India in Kyiv was opened in May 1992. Ukraine opened its Mission in Delhi in February 1993 its first in Asia.

Online Building Plan Approval System (OBPAS) extended to five more Cantonment Boards

- Government has approved the extension of Online Building Plan Approval System (OBPAS) under eChhawani portal to five more Cantonment Boards, namely Agra, Ranikhet, Babina, Jammu and Cannanore.
- eChhawani is a citizen-centric project of the **Directorate General of Defence Estates, Ministry of Defence.**
- Under this initiative, Cantonment Boards provide **online citizen services** to more than 20 lakh residents across 62 Cantonments in the country.
- The unified portal provides access to civic services along with all relevant information in a simple, easy to understand and effective manner.
- As a step towards facilitating ease of living, over 2.18 lakh property taxpayers living in cantonment areas would be able to **apply online for mutation in the property tax** register under the eChhawani portal (echhawani.gov.in).

PM Narendra Modi Expresses Happiness On Garba Attaining Popularity Among National Games Participants

- Garba is a dance form native to the Indian state of Gujarat, performed in October to honour the Hindu Deity of Divinity, Goddess Durga
- It is a joyful style of dance, based on a circular pattern and characterized by a sweeping action from side to side.
- Garba performances often include singing and a musical accompaniment traditionally provided by dhol (double-headed drum) and the similar but





smaller dholak; hand clapping; and assorted metallic idiophones, such as cymbals.

- Garba dances celebrate fertility, honour womanhood, and pay respect to any of an array of mother goddesses.
- In Gujarat the dances customarily mark a girl's first menstrual cycle and, later, her imminent marriage. Garba dancing also takes place during the nine-day Navratri festival.

Home Ministry designates 10 individuals as terrorists

- A total of 10 members of Hizbul Mujahideen (HM), Lashkar-e-Taiba (LeT) and other proscribed outfits have been designated as terrorists by the Union Ministry of Home Affairs (MHA) under the Unlawful Activities (Prevention) Act (UAPA).
- The UAPA was enacted in 1967. It lays down the definitions and rules for designating an organisation as an "unlawful association" if it is engaged in certain types of activities.
- The government can then issue a notification designating such an organisation as a terrorist organisation, if it believes that the organisation is part of "terrorist activities.
 - Under the Act, 'unlawful activity' is not limited to terror activities relating to causing direct violence or attacks, it also includes any activities that disrupt the sovereignty and territorial integrity of the country, disrupts the economic stability of the country or causes disharmony or feelings of enmity, hatred or ill-will between different reli-gious, racial, language or regional groups or castes or communi-ties in the country
- In 2004, the Preamble to the UAPA was amended and 'terrorist activities' were brought within its fold, under which 34 outfits, including the Lashkar-e-Taiba and the Jaish-e-Mohammad, were banned.
- The 2019 Amendment gave the Home Ministry the power to designate individuals as terrorists.

HM Amit Shah announces Scheduled Tribe status for Pahari community in J&K ; to address rally in Baramulla

• He said that Justice GD Sharma Commission has recommended reservation for Paharis, Gujjars and Bakerwals and after completion of





the administrative process, these communities will get reservation benefits.

- The Pahari community is a linguistic group mainly residing in the Pir Panjal valley. They constitute of Hindus, Muslims and Sikhs and make up around 10-11 per cent of the population in Jammu and Kashmir.
- Their mother tongue, Pahari, is an offshoot of Pothwari language with varying dialects and their own unique culture. They usually reside in rural areas and are majorly involved in agricultural and cattle activities.
- The criteria presently followed for specification of a community as a Scheduled Tribe are : (i) indications of primitive traits, (ii) distinctive culture, (iii) geographical isolation, (iv) shyness of contact with the community at large, and (v) backwardness. However, these criteria are not spelt out in the Constitution.

Article 342

Article 342 prescribes the procedure to be followed in the matter of specification of Scheduled Tribes.

- Under Clause (1) of Article 342, the President may, with respect to any State or Union Territory, and where it is a State, after consultation with the Governor thereof, notify tribes or tribal communities or parts of these as Scheduled Tribes. This confers on the tribe, or part of it, a Constitutional status invoking the safeguards provided for in the Constitution, to these communities in their respective states/UTs.
- Clause (2) of the Article 342 empowers the Parliament to pass a law to include in or exclude from the List of Scheduled Tribes, any tribe or tribal community or parts of these.
- The List of Scheduled Tribes is State/UT specific and a community declared as a Scheduled Tribe in a state need not be so in another state/UT.

Explorers of Quantum Entanglement Win 2022 Nobel Prize in Physics

• Two of the laureates—John Clauser and Alain Aspect—worked on firming up the concept of quantum entanglement and developing more complex experiments that demonstrated this phenomenon, especially creating, processing and measuring what are called Bell pairs. The third laureate, Anton Zeilinger, has been chosen for his innovative use of entanglement





and Bell pairs both in research and application such as quantum cryptography.

- Quantum information science has a broad range of potential implications in areas such as secure information transfer, quantum computing and sensing technology.
- One of the most mature applications of quantum technology is quantum cryptography, which takes advantage of the fact that changes made to one particle in an entangled system affect the other.
- It is a phenomenon by which a pair of particles, say photons, are allowed to exist in a shared state where they have complementary properties, such that by measuring the properties of one particle, you automatically know the properties of the other particle. This is true regardless of how far apart the two particles are transported.

OCT 6

India's female Infant Mortality Rate drops to same level as male

- India has registered a decline in female infant mortality rate.
- In sixteen states, IMR remained higher for female babies than male but the gap had reduced since 2011. According to Sample Registration System Statistical Report 2020, Chhattisgarh had the highest gap in 2020, with a male infant mortality rate of 35 compared to female infant mortality rate of 41.
- Infant mortality is the death of an infant before his or her first birthday.
- The infant mortality rate is the number of infant deaths for every 1,000 live births.
- In addition to giving us key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society.





Interventions for improving Infant Mortality Rate (IMR):

- Mothers' Absolute Affection (MAA): Early initiation and exclusive breastfeeding for first six months and appropriate Infant and Young Child Feeding (IYCF) practices are promoted under Mothers' Absolute Affection (MAA).
- Social Awareness and Actions to Neutralize Pneumonia Successfully (SAANS) initiative implemented since 2019 for reduction of Childhood morbidity and mortality due to Pneumonia.
- Universal Immunization Programme (UIP) is implemented to provide vaccination to children against life threatening diseases such as Tuberculosis, Diphtheria, Pertussis, Polio, Tetanus, Hepatitis B, Measles, Rubella, Pneumonia and Meningitis caused by Haemophilus Influenzae B.
- Rashtriya Bal Swasthya Karyakaram (RBSK): Children from 0 to 18 years of age are screened for 30 health conditions (i.e. Diseases, Deficiencies, Defects and Developmental delay) under Rashtriya Bal SwasthyaKaryakaram (RBSK) to improve child survival.

412 dengue cases in Delhi in a week, 693 in September

- Dengue is a mosquito-borne viral infection, found in tropical and subtropical climates worldwide, mostly in urban and semi-urban areas.
- Dengue infections are caused by four Antigenically distinct serotypes, DENV-1, DENV-2, DENV-3 & DENV-4. Dengue serotype 2 is considered the most virulent strain and may produce serious illness.
- A very typical feature of dengue infection is that till the patient is in the febrile phase (running fever) he/she doesn't develop serious complications usually.

EU's new laws to regulate content online, and how do they compare with India's

- Called the Digital Services Act (DSA), the law tightly regulates the way intermediaries, especially large platforms such as Google, Meta, Twitter, and YouTube, function in terms of moderating user content.
- It will give better protection to users and to fundamental rights online, establish a powerful transparency and accountability framework for online platforms and provide a single, uniform framework across the EU.





Key features of the Digital Services Act

- Faster removals and provisions to challenge: The social media companies will have to add "new procedures for faster removal" of content deemed illegal or harmful. They will also have to explain to users how their content takedown policy works. It also allows for users to challenge takedown decisions taken by platforms and seek out-of-court settlements.
- Bigger platforms have greater responsibility: Under the DSA, 'Very Large Online Platforms' (VLOPs) and 'Very Large Online Search Engines' (VLOSEs), that is platforms, having more than 45 million users in the EU, will have more stringent requirements.
- Direct supervision by European Commission: These requirements and their enforcement will be centrally supervised by the European Commission itself.
- More transparency on how algorithms work: VLOPs and VLOSEs will face transparency measures and scrutiny of how their algorithms work.
- Clearer identifiers for ads and who's paying for them: Online platforms must ensure that users can easily identify advertisements and understand who presents or pays for the advertisement. They must not display personalised advertising directed towards minors or based on sensitive personal data.

Quality Council of India Celebrates Its Silver Jubilee; Goyal Says 'Quality Is National Mission'

- Quality Council of India was set up in 1997, jointly by the Government of India and the Indian Industry represented by the three premier industry associations i.e. Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI), with Mr Ratan Tata as its first Chairman.
- QCI was established as a National body for Accreditation. It is a nonprofit organization registered under the Societies Registration Act XXI of 1860.
- QCI has launched a marquee campaign–Gunvatta Se Atmanirbharta: India's quality movement. The campaign aims to celebrate India's quality hubs, create awareness about India's landmark achievements and inform





people about the many initiatives that India is embracing with an aim to enhance the quality of lives of all our citizens.

OPEC+ to cut oil production by 2 million barrels per day to shore up prices, defying U.S. pressure

- Opec's de-facto leader Saudi Arabia said the cut of 2 million barrels per day (bpd) of output equal to 2% of global supply was necessary to respond to rising interest rates in the West and a weaker global economy.
- It is the biggest cut since the height of the Covid pandemic in 2020. The move would reinforce the perception that Russia and Saudi Arabia are working closely together to manage oil markets.
- Established in 1960 by founding members Iran, Iraq, Kuwait, Saudi Arabia and Venezuela, OPEC has since expanded and now has 13 member states. With the addition of another 11 allied major oilproducing countries that include Russia, the grouping is known as OPEC+.
- Previously controlled by western-dominated multinational oil companies known as the "Seven Sisters," OPEC sought to give the oil-producing nations greater influence over the global petroleum market.
- They account for roughly 40 per cent of the world's crude oil and 80 per cent of the globe's oil reserves, according to estimates from 2018. They usually meet every month to determine how much oil the member states will produce.
- Oil prices skyrocketed after Russia's invasion of Ukraine in February, and have since begun to soften over the past few months, before dropping sharply to under \$90 in September due to fears of a recession in Europe and reduced demands from China because of its lockdown measures.
- OPEC+ members are concerned that a faltering global economy would reduce the demand for oil, and the cuts are seen as a way to protect profits.

Hardeep Puri to co-chair US-India strategic clean energy partnership dialogue

• The revamped USISCEP was launched in accordance with U.S.-India Climate and Clean Energy Agenda 2030 Partnership announced by Prime





Minister Shri Narendra Modi and President Joe Biden at the Leaders' Summit on Climate held in April 2021.

- The SCEP organizes inter-governmental engagement across five pillars of cooperation: (1) Power and Energy Efficiency; (2); Responsible Oil and Gas; (3) Renewable Energy; (4) Sustainable Growth and (5) Emerging Fuels.
- India-US Task Force on Biofuels: A new India-US Task Force on Biofuels was also announced to build on the scope of work on cooperation in biofuels sector.
- Renewable Energy: Strengthen the electric grid in India to support largescale integration of renewables, including through smart grids, energy storage, flexible resources etc.
- Gas Task Force: Rechristening of Gas Task Force to India-US Low Emissions Gas Task Force, which would continue to forge collaboration between U.S. and Indian companies on innovative projects to support India's vision of gas-based economy.
- India Energy Modeling Forum: Institutionalization of India Energy Modeling Forum with the constitution of Six Task Forces for carrying out research and modelling in different areas. Joint Committees have been set up to deliberate on Energy Data Management, Low Carbon Technologies and Just Transition in Coal Sector.
- (PACE)-R initiative: Include smart grid and grid storage as part of the second phase of the Partnership to Advance Clean Energy (PACE)-R initiative anchored on the Indian side by the Department of Science & Technology.

Govt modifies credit scheme for civil aviation sector

- The Department of Financial Services (DFS) has modified the ECLGS for the aviation sector, raising the scheme's cheaper loan limit to ₹1,500 crore from ₹400 crore to help the sector tide over cash-flow problems.
- As per the modified ECLGS, an airline would be eligible for 100% of its fund- based or non-fund-based loan outstanding or ₹1,500 crore, whichever is lower.
- The move is aimed at giving the necessary collateral-free liquidity at reasonable interest rates to the aviation industry. Previously, the civil aviation sector were allowed to borrow up to 50% of their highest fundbased credit outstanding, subject to a maximum of ₹ 400 crore per borrower.





- ECLGS was announced as part of the Atma Nirbhar Bharat Package in 2020 with the objective to help businesses including MSMEs to meet their operational liabilities and resume businesses in view of the distress caused by the COVID-19 crisis, by providing Member Lending Institutions (MLIs), 100 percent guarantee against any losses suffered by them due to non-repayment of the ECLGS funding by borrowers.
- ECLGS is under the operational domain of Ministry of Finance, Department of Financial Services (DFS).

UN peacekeeping chief Jean-Pierre Lacroix to visit India

- Jean-Pierre Lacroix will visit India, the United Arab Emirates, Pakistan and Japan starting from October 6. He will participate in a two-day meeting organised by the Challenges Forum, the event CAF22, which brings together leading policymakers, practitioners and academics on key issues linked to peace operations.
- The CAF22 will be co-hosted by the organisation's Indian partner the United Service Institution of India (USI). Under the overarching theme "Future of Peace Operations".
- India is one of the largest troop and police contributing countries to U.N. peacekeeping missions and more than 5,700 Indian peacekeepers are deployed in nine out of 12 U.N. peacekeeping missions at present.

UN Peacekeeping

- UN peacekeepers provide security and the political and peacebuilding support to help countries make the difficult, early transition from conflict to peace.
- There are three basic principles that continue to set UN peacekeeping operations apart as a tool for maintaining international peace and security.
- 1. Consent of the parties:
- 2. Impartiality
- 3. Non-use of force except in self-defence and defence of the mandate.
- Role of Security Council: The United Nations Charter gives the United Nations Security Council the responsibility to maintain international peace. The Security Council authorize peacekeeping operations through Chapter VII authorizations.





- Financing: As all UN Member States share the costs of peacekeeping, the General Assembly apportions these expenses based on a special scale of assessments, taking into account the relative economic wealth of Member States, with the permanent members of the Security Council required to pay a larger share.
- For its services, UN Peacekeeping has also received the Nobel Peace Prize.
- UN peacekeepers are often referred to as Blue Berets or Blue Helmets because of their light blue berets or helmets.

Chemistry Nobel goes to trio for development of click chemistry and bioorthogonal chemistry

- Sharpless was the first scientist to work on '**click chemistry'** a branch of science that explores the assembly of molecules.
- Meldal and Dr. Sharpless independently of each other presented the copper-catalysed azide-alkyne cycloaddition (**CuAAC**), a reaction that is now widely used in fields like medicinal chemistry. The CuAAC reaction is an improved form of the azide-alkyne Huisgen cycloaddition.
- Bertozzi improved the field further by developing **click reactions** that work inside living organisms. These bioorthogonal reactions do not disrupt the normal chemistry of the cell.
- Click chemistry is a functional field where molecules snap together quickly and efficiently literally like a click. It is defined as a "set of powerful, highly reliable, and selective reactions for the rapid synthesis of useful new compounds and combinatorial libraries through heteroatom links".
- Replicating reactions that involve bonds between carbon atoms that are vital to the existence of life is expensive and often leads to side reactions and loss of material.
- Instead of trying to make carbon atoms react with each other, Dr. Sharpless's research focuses on using smaller molecules that already have a complete carbon frame. These molecules can further be linked using oxygen or nitrogen atoms as bridges.
- Simpler reactions, "where there is a strong intrinsic drive for the molecules to bond together", may avoid the loss of material as well as the unwanted side reactions.

India emerges as world's largest producer & consumer of Sugar





- In Sugar Season (Oct-Sep) 2021-22, a record of more than 5000 Lakh Metric Tons (LMT) sugarcane was produced in the country. Out of this, 35 LMT sugar was diverted to ethanol production and 359 LMT sugar was produced by sugar mills.
- Ethanol production capacity of molasses/sugar-based distilleries has increased to 605 crore litres per annum and the progress is still continuing to meet targets of 20% blending by 2025 under Ethanol Blending with Petrol (EBP) Programme.

Ethanol Blending with Petrol (EBP) Programme

- The EBP programme was launched by the Ministry of Petroleum and Natural Gas in 2003, to promote the use of alternative and environment friendly fuels.
- The Government has 10% blending target for mixing ethanol with petrol by 2022 & 20% blending target by 2030. However, considering the encouraging performance, due to various interventions made by the Government since 2014, the target of 20% ethanol blending was advanced from 2030 to 2025-26.

Ethanol

- Ethanol is an agro-based product, produced from sugarcane, maize, wheat, etc which are having high starch content. In India, ethanol is mainly produced from sugarcane molasses by fermentation process
- Ethanol can be mixed with gasoline to form different blends. As the ethanol molecule contains oxygen, it allows the engine to more completely combust the fuel, resulting in fewer emissions and thereby reducing the occurrence of environmental pollution.
- Since ethanol is produced from plants that harness the power of the sun, ethanol is also considered as renewable fuel.





OCT 7

National Lok Adalat to be held across country on Nov 12 to dispose pending cases

- Lok Adalat is one of the alternative dispute redressal mechanisms, it is a forum where disputes/cases pending in the court of law or at prelitigation stage are settled/ compromised amicably.
- National Legal Services Authority of India (NALSA) along with other Legal Services Institutions conducts Lok Adalats.
- Lok Adalats have been given statutory status under the Legal Services Authorities Act, 1987.
- Appeal:
 - 1. The award (decision) made by the Lok Adalats is deemed to be a decree of a civil court and is final and binding on all parties and no appeal against such an award lies before any court of law.
 - 2. If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award, but they are free to initiate litigation by approaching the court of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.
- There is no court fee payable when a matter is filed in a Lok Adalat.
- Nature of Cases to be Referred to Lok Adalat
 - 1. Any case pending before any court.
 - 2. Any dispute which has not been brought before any court and is likely to be filed before the court.

Provided that any matter relating to an offence not compoundable under the law shall not be settled in Lok Adalat.

Nobel literature prize 2022 awarded to French author Annie Ernaux

• Ernaux, was honoured "for the courage and clinical acuity with which she uncovers the roots, estrangements and collective restraints of personal memory".





- Her more than 20 books, many of which have been school texts in France for decades, offer one of the most subtle, insightful windows into the social life of modern France.
- Personal experiences are the source for all of Ms. Ernaux's work and she is the pioneer of France's "autofiction" genre, which gives narrative form to real-life experience.

UNHRC adopts resolution against Sri Lanka's rights record

- The draft resolution on 'Promoting reconciliation, accountability and human rights in Sri Lanka' was adopted at the 51st Session of Human Rights Council in Geneva.
- The significant feature in the resolution is its call to investigate the ongoing economic crisis and prosecute those responsible.
- The resolutions on promoting reconciliation, accountability and human rights in Sri Lanka were previously moved in Geneva in 2012, 2013, 2014, 2015, 2017, 2019, and in 2021. Sri Lanka had expressed opposition to the resolution as a violation of its sovereignty other than in 2015 when they co-sponsored the resolution.

UN Human Rights Council

- What is it? It is an inter-governmental body within the UN system.
- Location: It meets at the UN Office at Geneva.
- Establishment: It was founded in 2006. It replaced the former United Nations Commission on Human Rights (UNCHR).
- Functions:
 - It investigates allegations of breaches of human rights in UN member states.
 - It addresses important human rights issues such as freedom of expression, women's rights, LGBT rights, and the rights of racial and ethnic minorities.
 - The UNHRC works closely with the Office of the High Commissioner for Human Rights (OHCHR).
- Membership:
 - The Council is made of 47 Member States, which are elected by UN General Assembly through direct and secret ballot. The Council's Membership is based on equitable geographical distribution.





- Members of the Council serve for a period of three years and are not eligible for immediate re-election after serving two consecutive terms.
- In June 2018, the United States announced its withdrawal from the United Nations Human Rights Council (UNHRC) terming it "hypocritical and self-serving".

NOPEC: the US bill to pressure the OPEC+ oil group

- NOPEC bill, which passed a Senate committee 17-4 on May 5, is intended to protect U.S. consumers and businesses from engineered oil spikes.
- The bipartisan NOPEC bill would tweak U.S. antitrust law to revoke the sovereign immunity that has protected OPEC+ members and their national oil companies from lawsuits.
- If signed into law, the S. attorney general would gain the option to sue the oil cartel or its members, such as Saudi Arabia, in federal court.
- It is unclear exactly how a federal court could enforce judicial antitrust decisions against a foreign nation.

Sitharaman inaugurates CCI's western regional office in Mumbai

- Status: A statutory body established under the provisions of The Competition Act, 2002.
- Established in: 2003.
- Composition: A Chairperson and 6 Members appointed by the Central Government.
- Headquarters: New Delhi.
- Preceding agency: Monopolies and Restrictive Trade Practices Commission.
- Mandate: To implement provisions of The Competition Act, 2002 which -
 - prohibits anti-competitive agreements and abuse of dominant position by enterprises
 - regulates mergers and acquisition (M&A) which can have an adverse effect on competition within India. Thus, deals beyond a certain threshold are required to get clearance from CCI.

International Solar Alliance's 5th Assembly to deliberate on promoting Solar Energy





- The Assembly is the apex decision-making body of ISA, in which each Member Country is represented. This body makes decisions concerning the implementation of the ISA's Framework Agreement and coordinated actions to be taken to achieve its objective.
- India holds the office of the President of the ISA Assembly. Ministers, missions and delegates from 109 Member and Signatory Countries are set to participate in this meeting.

International Solar Alliance (ISA)

- It is an international organisation with 109 member and signatory countries.
- It works with governments to improve energy access and security worldwide and promote solar power as a sustainable way to transition to a carbon-neutral future.
- ISA's mission is to unlock US\$ 1 trillion of investments in solar by 2030 while reducing the cost of the technology and its financing.
- With the signing and ratification of the ISA Framework Agreement by 15 countries in 2017, ISA became the first international intergovernmental organization to be headquartered in India.

ISRO's Vyommitra's Skills Get A Lift-Off With Digital Grey Matter

- 'Vyommitra', is a humanoid designed and developed by the ISRO to fly aboard unmanned test missions ahead of the Gaganyaan human spaceflight mission, is undergoing pre-flight ground tests.
- ISRO Inertial Systems Unit (IISU) has successfully integrated it with a computer 'brain' which enables it to 'read' control panels aboard the unmanned test flights and communicate with the ISRO ground stations.
- The AI-enabled robot, which can withstand vibrations and shock during the flight, has been designed to resemble a human with facial expressions and speech and sight capabilities. It is a half-humanoid lacking lower limbs.

PM Modi calls for giving boost to One District One Product scheme & further develop Aspirational Districts

• ODOP was launched by the Ministry of Food Processing Industries, to help districts reach their full potential, foster economic and socio-





cultural growth, and create employment opportunities, especially, in rural areas.

- This initiative is carried out with the 'Districts as Exports Hub' initiative by the Directorate General of Foreign Trade (DGFT), Department of Commerce.
- There may be more than one cluster of ODOP products in one district. The States would identify the food product for a district, keeping in perspective the focus of the scheme on perishables.
- The ODOP product could be a perishable Agri produce, cereal-based product, or a food product widely produced in a district and their allied sectors.
- The ODOP launch date is January 24, 2018, by the Uttar Pradesh Government, and due to its success, was later adopted by the Central Government.

Aspirational Districts Programme (ADP)

- Launched by the Hon'ble PM in January 2018, it aims to quickly and effectively transform 112 most under-developed districts across the country.
- The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes -Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure.

PM Modi shares citizen's response to Ayushman Bharat Scheme

- The Prime Minister remarked that the benefits of the scheme can be availed all over India.
- Ayushman Bharat is National Health Protection Scheme, which will cover over 10 crore poor and vulnerable families (providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.
- Benefits of the scheme are and a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empanelled hospitals across the country.





portable across the country

- It will be an entitlement-based scheme with entitlement decided on the basis of deprivation criteria in the SECC database.
- States would need to have State Health Agency (SHA) to implement the scheme.

Revenue Deficit Grant of Rs.7183.42 crore released to 14 States

- The Post Devolution Revenue Deficit Grants are provided to the States under Article 275 of the Constitution.
- The grants are released to the States as per the recommendations of the successive Finance Commissions to meet the gap in Revenue Accounts of the States post devolution.
- The eligibility of States to receive this grant and the quantum of grant for the period from 2020-21 to 2025-26 was decided by the Fifteenth Commission based on the gap between assessment of revenue and expenditure of the State after taking into account the assessed devolution during this period.

OCT 8

Central Government of India rejects claims of inaccuracies in National Health Accounts

• The Ministry of Health and Family Welfare stated that the recent NHA estimates (2018-19) show a substantial reduction in out-of-pocket expenditure (OOPE), reaffirming the government's commitment towards easing the citizens' financial burden.





• It further said that the main source of information for OOPE was based on NSO data of 2017-18 whereas the previous estimates were based on 2014.

National Health Accounts

- It provide detailed information on expenditure incurred within the health sector of the country. It is a tool to describe health expenditures and the flow of funds in both Government and private sector in the country.
- The NHA estimates are prepared by using an accounting framework based on the internationally accepted standard of System of Health Accounts, 2011, developed by the World Health Organization (WHO).
- NHA 2018-19 is the 6th round of estimates in the series of annual Health Accounts for India.
- It is published by the National Health Systems Resource Centre under the Ministry of Health and Family Welfare.

Bureau of Indian Standards (BIS), the National Standards Body of India signed an MoU with Testing, Inspection, Certification Council, India.

- BIS is the National Standards Body of India under Department of Consumer affairs, Ministry of Consumer Affairs, Food & Public Distribution.
- It is a statutory body established by the Bureau of Indian Standards Act, 2016 which came into effect on 12 October 2017.
- BIS is involved in various activities such as Standards Formulation, Product Certification Scheme, Hall Marking Scheme, Laboratory Services etc.
- HQ: New Delhi.
- The Minister in charge of the Ministry or Department having administrative control of the BIS is the ex-officio President of the BIS.

Testing, Inspection, Certification Council

- It is an international non-profit association acting as the voice of the testing, inspection and certification industry.
- The TIC Council engages governments and key stakeholders to advocate for effective solutions that protect the public, facilitate trade and support innovation.





Centre notifies establishment of Credit Guarantee Scheme for Startups

- CGSS is aimed at providing credit guarantee up to a specified limit against loans extended by Member Institutions (MIs) to finance eligible borrowers viz. Startups. This scheme would help provide collateral-free debt funding to startups
- The credit guarantee cover under the Scheme would be transactionbased and umbrella based.
 - In transaction-based guarantee cover, the guarantee cover is obtained by the MIs on single eligible borrower basis. It will promote lending by Banks/ NBFCs to eligible startups.
 - The umbrella-based guarantee cover will provide guarantee to Venture Debt Funds (VDF) registered under AIF regulations of SEBI.
- The exposure to individual cases would be capped at Rs. 10 crore per case or the actual outstanding credit amount, whichever is less.
- DPIIT will be constituting a Management Committee (MC) and a Risk Evaluation Committee (REC) for reviewing, supervising and operational oversight of the Scheme.
- The National Credit Guarantee Trustee Company Limited (NCGTC) will be operating the Scheme.

Last date for the Pradhan Mantri Rashtriya Bal Puraskar extended to 31st October, 2022

- The National Child Award for Exceptional Achievement was instituted in 1996 to give recognition to children with exceptional abilities and outstanding achievements in the fields of innovation, scholastic achievements, social service, arts & culture and sports.
- A medal and a cash prize are given to each awardee.
- From the year 2018, the award has been renamed as the Bal Shakti Puraskar and achievements of children in the field of bravery are also acknowledged.
- It is administered by the Ministry of Women and Child Development.

PM Modi to inaugurate first phase of Shri Mahakaleshwar Temple Extension project





- Mahakaleshwar Jyotirlinga is a Hindu temple dedicated to Shiva and is one of the twelve Jyotirlingas, shrines which are said to be the most sacred abodes of Shiva.
- It is located in the ancient city of Ujjain in the state of Madhya Pradesh, India. The temple is situated on the side of the holy river Shipra.
- The temple's Mahakal Lingam is believed to be Swayambhu (selfmanifested) and unlike any other jyotirlingas in the country, the idol of Mahakaleshwar faces south.
- Mahakal temple complex expansion project was planned in the year 2017. This expansion project are being conducted in two phases. The second Phase will be completed in 2023-24.

12 Jyotirlingas in India

- The jyotirlinga shrines are places where Shiva appeared as a fiery column of light. A Jyotirlinga is a shrine where Lord Shiva is worshipped in the form of a Jyotirlingam.
- 12 Jyotirlingas In India ****are Somnath(Gujarat), Nageshwar (Gujarat), Bhimashankar (Maharashtra), Trimbakeshwar (Maharashtra), Grishneshwar (Maharashtra), Vaidyanath (Jharkhand), Mahakaleshwar (Madhya Pradesh), Omkareshwar (Madhya Pradesh), Kashi Vishwanath(Uttar Pradesh), Kedarnath (Uttarakhand), Rameshwaram (Tamil Nadu), Mallikarjuna (Andhra Pradesh).

Government seeks Lalit's recommendation on next and 50th Chief Justice of India

- CJI Lalit retires on November 8. The second seniormost judge on the Bench is Justice D Y Chandrachud. Upon recommendation by CJI Lalit and appointment by the President, Justice Chandrachud will be CJI for a little more than two years until November 10, 2024.
- The MoP is the playbook agreed upon by the government and the judiciary on the appointment of judges. It is a crucial document because the Collegium system of appointing judges is a judicial innovation that is not mandated through legislation or text of the Constitution.
- The MoP has evolved as the standard based on three decisions of the Supreme Court, known as the First Judges Case (1981), Second Judges Case (1993) and the Third Judges Case (1998). These three judgments form the basis of a peer selection process for the appointment of judges.





- The MoP was first drawn up in 1999. It was re-negotiated in 2016 following the Supreme Court's decision to strike down National Judicial Appointments Commission (NJAC)
- MoP says that the "Union Minister of Law, Justice...would, at the appropriate time, seek the recommendation of the outgoing Chief Justice of India for the appointment of the next Chief Justice of India".
- Although the MoP mentions an "appropriate time", the process is by convention begun a month before the date of retirement of the incumbent CJI.

Nobel Peace Prize Is Awarded to Russian, Ukrainian and Belarusian Activists

- Ales Bialiatski, who is in jail since 2021, is a vocal critic of Putin's ally, President Alexander Lukashenko of Belarus. In 1995, Bialiatski founded the Belarus human rights group Viasna (Spring).
- He was first jailed in 2011 for evading taxes. He was released in 2014, before being arrested again in 2021 during mass public protests in Minsk against elections that opposition activists said had kept Lukashenko in power the previous year.

Memorial group of Russia

- It was established by human rights activists in the former Soviet Union during the Gorbachev years of glasnost and perestroika, and among its founders were 1975 Nobel Peace Prize laureate Andrei Sakharov and Russian mathematician Svetlana Gannushkina.
- Its objective was to record atrocities committed during the communist regime, especially under Joseph Stalin. After the collapse of the Soviet Union, Memorial grew to become the largest human rights organisation in Russia.

Center for Civil Liberties, Ukraine

- It is a Ukrainian rights organisation that is documenting alleged war crimes by Russia in Ukraine.
- The Center was founded in Kyiv in 2007 with the aim of advancing human rights and democracy in Ukraine.





CAQM reviews the progress of commissioning of gas infrastructure/ PNG/ CNG connectivity in the NCR

- Considering the compelling necessity to fight air pollution arising out of industrial activities and vehicles, CAQM has directed expeditious commissioning of gas infrastructure in the entire NCR well before the next winter season.
- According to the CAQM, about 74 per cent of industrial areas of NCR have gas connectivity like PNG which is cleaner and emits less pollutants as compared to the conventional fuel like coal or diesel.
- The panel directed the 11 city gas distributors to ensure that the gas infrastructure covers the entire NCR.
- The Commission for Air Quality Management (CAQM) was established under Air Quality Management in National Capital Region and Adjoining Areas Act,2021.

Online gaming task force may set spend limits in framework

• The task force has proposed the creation of a central regulatory body for the sector, clearly defining what games of skill and chance are, and bringing online gaming under the purview of the Prevention of Money Laundering Act, 2002.

Recommendations of the task force

- A central-level law for online gaming should apply to real money and free games of skill, including e-sports, online fantasy sports contests, and card games etc.
- Casual games with no real money element in the form of stakes may be kept outside the scope of such rules, unless they have a high number of users in India.
- Creating a regulatory body, which will determine what qualifies as a game of skill or chance, and accordingly certify different gaming formats, seek compliance etc.
- A three-tier dispute resolution mechanism, similar to that prescribed under the Information Technology Rules, 2021 for online streaming services.





• Any online gaming platform – domestic or foreign– offering real money online games to Indian users will need to be a legal entity incorporated under Indian law.

Why a central-level law?

- Online gaming so far has been a state subject, but state governments find it extremely difficult to enforce certain rules like geo-blocking certain apps or websites within the territory of their state.
- Also, rules passed in one state are not applicable in another, which has caused inconsistency.
- State governments also do not have enough blocking powers like the Centre to issue blocking orders for offshore betting sites.

Online gaming market in India

- The revenue of the Indian mobile gaming industry is expected to exceed \$1.5 billion in 2022, and is estimated to reach \$5 billion in 2025.
- The industry in the country grew at a CAGR of 38% between 2017-2020, as opposed to 8% in China and 10% in the US.
- India's percentage of new paying users (NPUs) in gaming has been the fastest growing in the world for two consecutive years, at 40% in 2020 and 50% in 2021.

RBI to soon launch Digital Rupee on pilot basis for limited use

- The RBI in its concept note detailed various aspects including the technological measures to operationalise its electronic currency, its underlying digital infrastructure and various technological options the central bank is exploring.
- e-RUPI is a cashless and contactless instrument for digital payment.
- It is a QR code or SMS string-based e-Voucher, which is delivered to the mobile of the beneficiaries.
- The users of this seamless one-time payment mechanism will be able to redeem the voucher without a card, digital payments app or internet banking access, at the service provider.
- It has been developed by National Payments Corporation of India on its UPI platform, in collaboration with the Department of Financial Services, Ministry of Health & Family Welfare and National Health Authority.





ОСТ 9

US aims to hobble China's chip industry with new export rules

- Recently US officials applied FDPR to China's advanced computing and supercomputer industry to stop it from obtaining advanced computing chips.
- The foreign direct product rule, or FDPR, was first introduced in 1959 to control trading of US technologies.
- It essentially says that if a product was made using American technology, the US government has the power to stop it from being sold including products made in a foreign country.

Egypt historians wants the UK to return the 2,000-year-old Rosetta Stone

- The Rosetta Stone is a large stone slab with inscriptions on it and is believed to be a piece of a bigger rock.
- It has inscriptions in three scripts, all of which convey a decree or public message.
- The decree is inscribed three times, in hieroglyphs (suitable for a priestly decree), Demotic (the cursive Egyptian script used for daily purposes, meaning 'language of the people'), and Ancient Greek (the language of the administration the rulers of Egypt at this point were Greco-Macedonian after Alexander the Great's conquest).
- This is similar to how in Ancient India, King Ashoka ordered stambhas or edicts that had messages of Buddha's teachings and news about victory in a war inscribed. These were then placed throughout the kingdom for the public to see.
- Its discovery that helped develop the specific field of ancient Egypt studies, Egyptology.
- According to the British Museum, the engraving was done during the reign of King Ptolemy V who ruled from 204–181 BC.
- This stone was 'rediscovered' in the time of French king Napoleon Bonaparte, who launched a campaign in Egypt from 1798 to 1801.
- On Napoleon's defeat later at the hands of the British, the Treaty of Alexandria (1801) led to its transfer and it has been at the British Museum since then.





Clean swipe for MGNREGS attendance app only in 8 States

- The usage of the National Mobile Monitoring System (NMMS) is 50% or less in many states even after the Union government's order making it mandatory to record attendance of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- National Mobile Monitoring Software (NMMS) App was launched by the Minister of Rural Development on May, 21 2021.
- This app is aimed at bringing more transparency and ensure proper monitoring of the schemes.
- The NMMS App permits taking real time attendance of workers at Mahatma Gandhi NREGA worksites along with geo-tagged photograph.
- The app helps in increasing citizen oversight of the programme.
- The National Mobile Monitoring App is applicable for the Mahatma Gandhi NREGA workers for all the States/ Union Territories.

Key bridge linking Crimea to Russia hit by huge explosion

- The 19-km (12-mile) Crimea Bridge over the Kerch Strait is the only direct link between the transport network of Russia and the Crimean peninsula, which Moscow annexed from Ukraine in 2014.
- The bridge is crucial for the supply of fuel, food and other products to Crimea, where the port of Sevastopol is the historic home base of Russia's Black Sea Fleet.
- The Kerch Strait is a crucial part of the regional grain trade connecting the Azov sea with the Black Sea.

Election Commission allots 'Balasahebanchi Shiv Sena' as party name to Maharashtra CM Eknath Shinde-led group

- As per the Election Symbols (Reservation and Allotment) Order, 1968, the Election Commission allots symbols for anyone contesting in polls.
- A person contesting on behalf of a recognised political party will inherit the party's symbol.
- An independent candidate or someone contesting on behalf of an unrecognised political party has to approach the Commission and get a symbol allotted from the list of 'free' symbols available.





- A candidate will have to provide three symbols from the free list at the time of submission of nomination papers, one of which will be allocated to him/her.
- Any choice other than from the EC's list will be summarily rejected.
- In the case of a recognised political party, the Commission allows it to 'reserve' a symbol.
 - For example, if a political party recognised in a particular State wishes to contest in elections in another State, it can 'reserve' the symbol being used by it.
 - The Commission will oblige, provided the symbol is not being used by anyone else.
- Two or more recognised political parties can have the same symbol provided they are not contenders in the same State or Union Territory.
 - Both Federal Party of Manipur and Dravida Munnetra Kazhagam (DMK) use 'Rising Sun' as their symbol.
 - But if one of the parties wish to open their account in the other State, it will have to contest on a different symbol.
- The ECI may also derecognise a political party if it has not polled at least 6 % of votes or won two seats in the State elections. In case of a national party, it should have polled minimum 6 % votes and 2 MLAs in at least four States.
- Until 1997, unrecognised parties would lose their symbols. Later, the EC modified its order to allow them to retain its symbol.
- In case a recognised political party splits, the Commission decides which faction can use the symbol.
- The Commission may also choose to freeze the symbol and ask both factions to contest in fresh symbols.

Eid Milad-un-Nabi being celebrated across India

- This day marks the birth anniversary of the Prophet.
- According to legends, the Prophet was born on the twelfth day of Rabeeul-Awwal in Mecca in 570 CE. Rabee-ul-Awwal is the third month of the Islamic lunar calendar.
- "Milaad Mehfils" and "Seerat Conferences" will be held highlighting the life and teachings of Prophet Muhammad.





- On this day, hymns are sung in praise of the Prophet and it is also commonly believed that listening to those will make one receive worldly and heavenly rewards.
- Several countries celebrate the day by taking out large processions in the street and by decorating their homes.

Indian Air Force Day is celebrated on October 8 every year.

- The day aims to pay a tribute to the Air Force of India and acknowledge their contribution for a successful nation.
- As a part of the 90th anniversary celebration, nearly 80 military aircraft and helicopters participated in the Air Force Day fly-past on October 8 at the Sukhna Lake complex, Chandigarh.
- It is for the first time that the IAF decided to hold its annual Air Force Day parade and fly-past outside the Delhi NCR.
- On October 8, 1932, the former British Empire established the IAF.
- It was created to support the British Royal Air Force, particularly against Japan in World War II.
- The IAF was used to attack Japanese bases in Burma in order to stop the Japanese army's advance toward India.
- King George VI gave the IAF's accomplishments the prefix "Royal" in 1945.
- This honorific title was dropped in 1950, when India became a republic.

Government approves creation of Weapon Systems branch in Indian Air Force

- This is the first time since Independence that a new operational branch is being created.
- The IAF also unveiled a new digital camouflage uniform for its rank and file.
- Creation of the new branch would entail unification of all weapon system operators under one entity dedicated to the operational employment of all ground-based and specialist airborne weapon systems.
- This will essentially be for manning of four specialised streams of Surface to Surface missiles, Surface to Air Missiles, Remotely Piloted Aircraft and weapon system operators in twin and multi crew aircraft.
- Creation of this branch would result in savings of over ₹ 3,400 crore due to reduced expenditure on flying training.





PM Modi declares Modhera in Gujarat as India's first 24×7 solar-powered village

- Modhera will be India's first village to become a net renewable energy generator.
- It will be the first modern village to have a solar-based ultra-modern electric vehicle charging station.
- It is India's first grid-connected megawatt-hours (MWh) scale battery energy storage system.
- People in Modhera would be saving 60% to 100 % on electricity bills.
- The heritage lighting and 3-D projection at the Sun Temple would operate on solar energy.
- The 3-D projection will inform visitors about the history of Modhera.

Modhera Sun Temple

- The Modhera Sun Temple was made by King Bhima I of the Chalukya dynasty in the early 11th century.
- It is a temple made to honour the Sun God in Modhera village of Mehsana district on the bank of River Pushpavati.
- The temple is designed in such a way that during every equinox, the first ray of the rising sun would fall on a diamond placed on the head of the Sun God. This would also light up the shrine with a golden glow.
- The Sabha Mandap stands on 52 pillars, signifying the 52 weeks in a year. There are carvings of the sun on the walls to show its unity with air, water, earth and space.
- In 2014, Modhera Sun Temple entered the list of UNESCO World Heritage Sites.
- It enjoys the same significance as other two well-known sun-temples in Kashmir (Martand) and Orissa (Konark).
- The Gujarat Tourism hosts a three-day dance festival every year, known as the Uttarardha Mahotsav, at the temple every January after Makar Sankranti festival.





OCT 10

The Plenary Session of North Eastern Council Concludes with A Strategic Roadmap Ahead

- NEC is not a constitutional body, but a statutory organization established in 1971 under the North Eastern Council Act, 1971.
- To function as Apex Regional Planning Body for the North Eastern Region.
- Implementing various projects through the State and Central agencies.
- It comprises Governors and Chief Ministers of all the 8 North-Eastern States and three members nominated by the President.
- In June 2018, Union cabinet approved the nomination of the Home Minister as the ex-officio chairman and Minister for DoNER (Development of North-East Region) as the council's vice chairman.

4th NICDC Investors' Roundtable Conference to be held in Mumbai tomorrow

- The 4th NICDC Investors' Roundtable Conference organized by Maharashtra Industrial Township Limited (MITL).
- The Investors Roundtable Conference has previously been hosted in Delhi, Kochi, and Ahmedabad.
- The 4th edition of the conference will showcase the development of upcoming greenfield industrial cities across India, which have been planned by National Industrial Corridor Development Corporation Limited.
- Currently, four such greenfield smart industrial cities are being developed in Maharashtra in the districts of Aurangabad, Raigad, Satara and Nagpur.
- National Industrial Corridor Development Corporation (NICDC) is a Special Purpose Vehicle aiming to develop new industrial cities as "Smart Cities" and converging next generation technologies across infrastructure sectors.
- The programme is aimed at providing impetus to planned urbanization in India with manufacturing as the key driver.





Manesar Anti-Terror 2022 Exercise

- It is under the framework of Shanghai Cooperation Organisation (SCO) Regional Anti-Terrorist Structure (RATS).
- It is stage 2 of the exercise and the Stage-1 of the Exercise was conducted from July 27 to August 1 by the National Counter Terrorist Forces of SCO Member Countries in their respective territories.
- The exercise is aimed at exchanging expertise, best practices and build synergy between the Counter Terrorism Forces of the SCO RATS Member Countries to enhance capabilities for conducting Anti-Terrorist operations and countering other security threats collectively.
- Regional Anti-Terrorist Structure (RATS) one of the permanent organ of the Shanghai Cooperation Organisation and has its headquarters in Tashkent, Uzbekistan.
- The objective of SCO RATS is to facilitate cooperation and coordination against Terrorism, Extremism and Separatism.
- India assumed the chairmanship of the Council of SCO RATS in Oct 2021.
- Joint Anti-Terror Exercise (JATE) is an annual Counter Terrorist Exercise held within the framework of the SCO RATS.
- The SCO is an eight-member economic and security bloc that India and Pakistan joined as full-time members back in 2017.
- The founding members of this group include China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan.

Delhi-NCR's revised action plan 'GRAP' to fight air pollution

- The GRAP is a step-by-step plan to counter Delhi-NCR's deteriorating air quality.
- It was formulated by the Environmental Pollution Prevention and Control Authority (EPCA) jointly with the Delhi government in 2017.
- However, it is an emergency response mechanism and is only enforced when air pollution reaches a certain threshold.
- Moreover, the plan is incremental and adaptable, which means the preventive measures will be updated and escalated according to changes in the AQI.
- It has been prepared for implementation under different Air Quality Index (AQI) categories namely, Moderate & Poor, Very Poor, Severe, Severe+ and Emergency as per National Air Quality Index.





- **'Moderate' to 'poor' category**includes measures like stringent enforcement of PUC checks, prevention of waste burning and regulating polluting industries.
- **The 'very poor' category**includes measures like shutting down of diesel generator sets and enhancing parking fees.
- **The 'severe' and 'severe plus' categories** include stringent measures like shutting down hot mix plants and stone crushers, intensifying public transport, stopping entry of trucks into Delhi, stopping construction activity and even implementing the odd-even scheme.

India's Direct Tax Collections Rise 23.8 Per Cent To Rs 8.98 Lakh Crore Till 8 October

- It is an increase of 16.3% over the tax inflows during the corresponding period a year ago.
- Based on provisional data, net personal income tax collections grew 17.35%, rising faster than corporate income tax collections that were up 16.29% net of refunds.
- Securities Transaction Tax (STT) collections combined with personal income tax receipts, grew at a more moderate 16.25%.
- Underlining that direct tax collections continue to register a steady growth, the Ministry said tax refunds had jumped 81% over the preceding year to touch ₹ 1.53 lakh crore.
- Net direct tax collections had crossed ₹7 lakh crore by September 17, 2022 and were 23.3% higher at the time, so there appears to have been a moderation in tax inflows in the intervening three weeks.
- Gross revenues from direct taxes were at ₹8,36,225 crore on September 17, reflecting a 30.2% growth.

World Post Day is observed each year on October 9 across the world.

- The day is celebrated to commemorate the date of the establishment of the Universal Postal Union (UPU).
- It was instituted at the 1969 UPU Congress in Tokyo, Japan.
- **Theme:** The theme for World Post Day 2022 is 'Post for Planet'.
- **Universal Postal Union (UPU):** The Universal Postal Union (UPU) was started in 1874 in Switzerland.





- The world's first official airmail flight took place in India on February 18, 1911.
- The Indian Post Office Act 1898 was passed by the legislature on March 22, 1898. It became active on July 1, 1898.
- In Independent India, the first official postal stamp was issued on November 21, 1947. The new stamp depicted the Indian flag with the patriots' slogan 'Jai Hind'.

China more self-reliant in defence production, outranks India by massive margin, says study

- The 12 countries in the study were selected because they have the highest military spending in the region Australia, China, India, Indonesia, Japan, South Korea, Malaysia, Pakistan, Singapore, Taiwan, Thailand and Vietnam.
- The study, which measures self-reliance until 2020, is based on three indicators of self-reliance in each country:
 - Arms procurement
 - Arms industry
 - Uncrewed maritime vehicles
- China was the world's fifth largest arms importer in 2016-20.
- Its self-reliance policies, and its high economic growth in that period meant that the Chinese arms industry now increasingly fulfills the requirements of the People's Liberation Army (PLA).
- Its high volume of imports in absolute terms accounts for only 8 per cent of total procurement for the period, the lowest share for any of the 12 governments.
- India is ranked as the second largest importer of arms for its armed forces in 2016-20. India is highly dependent on imports of complete foreign major arms, including many produced under licence or as components for its domestic production.
- Of India's total volume of procurement in 2016–20, 84 per cent was of foreign origin. Domestic arms companies provide only 16 per cent of its total procurement.
- Hindustan Aeronautics Ltd, Indian Ordnance Factories, Bharat Electronics, Mazagaon Docks and Cochin Shipyard are among the major Indian arms servicing companies. Ashok Leyland, one of the largest suppliers of trucks to the Indian Army, is the only company ranked in the top 50 in the Indo-Pacific.





• India has seven Uncrewed Maritime Vessel projects ongoing. In the private sector, Larsen & Toubro has been developing AUV prototypes on its own and in collaboration with foreign partners, such as Italy's EdgeLab.

The Pradhan Mantri National Apprenticeship Mela to be conducted in 280 locations across India on October 10th, 2022

- It is being organised by the Ministry of Skill Development and Entrepreneurship, as part of the Skill India Mission to boost career opportunities and practical training among the youth.
- Every month, the apprenticeship mela will be hosted wherein selected individuals will receive a monthly stipend in accordance with government criteria for gaining new skill.
- To be eligible to apply, the students must have a 5th-12th grade pass certificate, a skill training certificate, an ITI Diploma, or a graduate degree to participate.
- Candidates will also earn National Council for Vocational Education and Training (NCVET)-recognized certifications, improving their employability after the training.

National Apprenticeship Promotion Scheme (NAPS):

- The National Apprenticeship Promotion Scheme (NAPS), launched in 2016, aims to promote apprenticeship training in the country by providing stipend support to the apprentices, undertake capacity building of the apprenticeship ecosystem and provide advocacy assistance to support rapid growth.
- To develop skilled manpower for the industry by promotion of on-the-job experiential training.
- To encourage establishments to enrol apprentices by sharing partial stipend support to the apprentices.
- To provide up-skilling opportunities for candidates who have undergone short-term skill training.
- To encourage enrolment of apprentices in small establishments (MSMEs), and those located in under served areas like in aspirational districts and in North-East region.

Sharad Purnima being celebrated in country on October 9.





- This religious festival is celebrated on the full moon day of the Hindu lunar month of Ashvin.
- It is also known as the Arogya Parv or Health Festival. It is also known as Kaumudi, or Kojagari Purnima.
- The full-moon night is celebrated differently in different cultural regions of the country.
- On this auspicious day, many divine pairs like Radha Krishna, Shiva Parvati, and Lakshmi Narayan are worshipped along with the moon and are offered flowers and kheer (a sweet dish made of rice and milk).
- Deities in temples are usually dressed in white, signifying the brightness of the moon.
- It is also observed as a harvest festival in many states across the country.

Pune Terriers observe 73rd Territorial Army Day

- It aims to commemorate its raising by the first Governor General C Rajagopalachari on this day in 1949.
- The Territorial Army (TA) was raised by the Britishers in 1920 through Indian Territorial Act of 1920 and it was org into two wings namely - 'The Auxiliary Force' for Europeans & Anglo-Indians and 'The Indian Territorial Force' for Indian Volunteers.
- After Independence Territorial Army Act was passed in 1948 and the Territorial Army was formally inaugurated by the first Indian Governor General Shri C Rajagopalachari on 09 Oct 1949.
- The Territorial Army is part of Regular Army and its present role is to relieve the Regular Army from static duties and assist civil administration in dealing with natural calamities and maintenance of essential services in situations where life of the communities is affected or the Security of the Country is threatened and to provide units for Regulars Army as and when required.





OCT 11

Protests Intensify in Iran Over young Iranian Kurdish Woman Who Died in Custody

- The Kurds are members of a large, predominantly Muslim ethnic group.
- They speak a language related to Farsi and live mostly in a mountainous region straddling the borders of Armenia, Iraq, Iran, Syria and Turkey.
- **Treaty of Sèvres:** After World War I, Western powers promised Kurds their own homeland in the agreement known as the Treaty of Sèvres.
- **Treaty of Lausanne:** But later the Treaty of Lausanne, ratified in 1924, divided the Kurds among the new nations of the Middle East.
- Today, there are more than 30 million Kurds living across the region, with about half of them in Turkey.
- Iraq is the only country in the region to have established an autonomous Kurdish region, known as Iraqi Kurdistan. Its parliament was founded in 1992.

India gets fourth set of Swiss bank account details

- This is the fourth tranche of information that India has received from Switzerland since the two countries entered into an Automatic Exchange Of Information (AEOI) agreement in January 2018.
- The first such exchange with India took place in 2019.
- AEOI 2022 exchange exercise aims to bring in transparency and restrict money laundering.
- Some countries which have been added to the Swiss AEOI list for the first time are Turkey, Peru and Nigeria.
- The guidelines and parameters for the AEOI are set by the Paris-based international body, the Organisation for Economic Co-operation and Development (OECD).
- The annual exercise of AEOI exchange, such as the current Swiss bonanza of banking details, is strictly meant for "tax only" purposes and in India, kept in the custody of and for action by the Central Board of Direct Taxes (CBDT).
- Under the OECD's guidelines, no details of the quantum of funds or the names of account holders are to be publicised.





- In 2014, the OECD developed the Common Reporting Standard (CRS) which allows every country to obtain data from Financial Institutions (FIs) and "automatically" exchange it with countries with which AEOI agreements are in order every year.
- Under the OECD umbrella of AEOI, India presently shares bulk financial and banking information with 78 countries and receives the same from 107 countries.

Indian space economy set to grow \$13 bn by 2025

- According to the report, the space-launch segment would grow at a CAGR of 13%, spurred by growing private participation, latest technology adoption and low cost of launch services.
- The satellite services and application segment would form the largest share of the space economy accounting for 36% of the ecosystem by 2025.
- On the country's satellite-manufacturing opportunity, EY and ISpA said that in 2020, it was \$2.1 billion. This would reach \$3.2 billion by the year 2025.
- Indian Space Association (ISpA), established in December 2020, is the premier industry association of space and satellite companies. Prime Minister Narendra Modi launched the ISpA on October 11, 2021.
- The industry association will act as an independent and "single-window" agency for enabling the opening up of the space sector to start-ups and the private sector, according to the government agenda.

Lancet Commission issues call to urgently address stigma in mental health

- The report was the result of the labours of the new Lancet Commission on Ending Stigma and Discrimination in Mental Health.
- According to the report, 90% of people living with mental health conditions feel negatively impacted by stigma and discrimination.
- Further, 80% said stigma and discrimination can be worse than the condition itself.
- Additionally, 90% of those surveyed felt that media could play a major role in reducing stigma.
- As per the commission, stigma can "cause social exclusion and disempowerment of people with mental health conditions leading to





discrimination and human rights violations, including problems in accessing healthcare, challenges in securing employment, and increased likelihood of health complications leading to early death".

Aviation Minister inaugurates 4th Heli-India Summit 2022

• During the summit the Minister announced 3 new projects for enhancing the helicopter sector in the country which includes HEMS and fractional ownership.

Helicopter Emergency Medical Services (HEMS)

- It is called Project Sanjeevani by deploying a helicopter in the next few weeks to provide emergency medical services at AIIMS Rishikesh.
- The helicopter will be based at the hospital at 20 minute notice and will have a service cover to an area of 150 km radius.
- It helps to grow the non-scheduled operations.
- It will lower the barrier on the cost of acquisition of helicopters and airplanes through pooled capital by multiple owners.
- This will allow companies and individuals to minimize their capital outflow by sharing the purchase cost, reducing their exposure to risks and making it financially easier to run a NSOP business.

Department for Promotion of Industry and Internal Trade (DPIIT) hosts Conference on B20 Indonesia Global Dialogue

- The aim is to align the perspectives of Indian industry with the policy recommendations of B20 Indonesia.
- This conference would set tone for the deliberations to ensure that the Indian perspectives are well represented in the policy recommendation of B20 Indonesia.
- Business 20 (B20), formed in 2010, is the official G20 dialogue forum with the global business community.
- B20 aims to deliver concrete actionable policy recommendations on the priorities by each rotating presidency to spur economic growth and development.

FIFA, AIFF launch Football for Schools as Govt of India pledges active support





- Football for Schools is an ambitious programme run by FIFA, in collaboration with UNESCO, which aims to contribute to the education, development and empowerment of around 700 million children.
- According to Union Government, "Football for Schools" movement espouses the spirit of National Education Policy (NEP) 2020 and promotes sports-integrated learning.
- Football for Schools is in line with Prime Minister Narendra Modi's vision of a developing India as a sporting superpower as well as ensuring a Fit India.
- The government will take the Football for Schools programme to all 700+ districts in India.
- Navodaya Vidyalaya Samiti will be the nodal agency on behalf of the ministry of education to take this initiative forward.

International Day of the Girl Child observed on 11th October

- The International Day of the Girl Child aims to raise awareness about the importance and potential girls hold as the future of our society.
- It focuses attention on the need to address the challenges girls face and to promote girls' empowerment and the fulfilment of their human rights.
- 2022 marks the 10th anniversary of International Day of the Girl Child.
- This year's theme is "Our time is now—our rights, our future".
- First time in history, the Beijing Declaration and Platform for Action in 1995, proposed an action plan to advance the rights of girls.
- In 2011, the United Nations General Assembly passed resolution 66/170 and adopted October 11 as the International Day of the Girl Child.
- It was an annual day commemorated to honour girls. Every year, a new theme is to be picked to focus on the most prevalent issue of the year.
- International Day of the Girl Child was first observed in 2012.





OCT 12

Israel-Lebanon Maritime Border Deal Hailed as 'Historic'

- It resolves a territorial dispute in the eastern Mediterranean Sea, in an area that Lebanon wants to explore for natural gas.
- All of the Karish field would fall under Israeli control, while another potential gas field, Qana, would be divided but its exploitation would be under Lebanon's control.
- It also sets a border between the maritime waters of Lebanon and Israel for the first time.
- The agreement does not touch on the shared land border between Israel and Lebanon, which is still disputed, but where both countries are committed to a ceasefire.
- This border is also called the Blue Line, a boundary that was drawn up by the UN after Israel withdrew from southern Lebanon in 2000.

Principle of seniority and next CJI Chandrachud's '5+1' collegium

- The collegium system of appointing judges evolved through three significant verdicts of the Supreme Court, known as the First, Second, and Third Judges Cases.
- The Constitution of India does not mention the collegium system; however, these three cases established that the collegium headed by the Chief Justice of India will have primacy in the appointment of judges to the higher judiciary.
- The Supreme Court collegium is headed by the CJI and comprises four other senior-most judges of the court.
- This collegium makes recommendations to the government for appointment of judges to the SC and of Chief Justices of High Courts, and the transfers of HC judges.
- A separate three-member collegium, headed by the CJI and comprising the two senior-most judges of the SC makes recommendations for appointment of judges to HCs.

First Judges Case (1982)





- SC held that "consultation" of judges does not mean concurrence
- Hence, it gave the primacy in appointment of judges to the Executive.

Second Judges Case (1993)

- Court reversed its earlier ruling by changing the meaning of "consultation" to concurrence.
- With this, the advice tendered by CJI became binding. However, the CJI would have to take into account the views of two of his senior most colleagues.

Third Judges Case (1998)

- Court gave primacy to the opinion of CJI in the matter of appointment of Judges.
- However, Chief Justice must consult four seniormost judges of SC.
- Opinion of all members of the collegium should be in writing.
- Even if two judges in the collegium give an adverse opinion of a person for appointment as the SC judge, the CJI should not send the recommendation to the government.

What is a 5+1 collegium?

- Given the order of seniority, a potential CJI will enter the Chandrachud collegium only in May 2023. However, Justice Khanna will be the sixth member of the collegium from November 9, 2022 itself.
- This happened earlier in 2007 when then CJI K G Balakrishnan took the top office, the collegium he headed did not have a potential CJI candidate. Justice S H Kapadia, who was next in line to be CJI, was invited to the collegium as the sixth member.

Union Minister Smriti Irani releases operations manual of Beti Bachao Beti Padhao

- The Central government recently announced the inclusion of skilling of girls in non-traditional livelihood (NTL) options in Beti Bachao Beti Padhao programme.
- The scheme will now also focus on increasing the enrolment of girls in secondary education, particularly in STEM (Science, Technology, Engineering, Mathematics) subjects.





- A Memorandum of Understanding was signed between the Ministries of Women and Child Development, Skill Development and Entrepreneurship, and Minority Affairs.
- It emphasises convergence between Ministries and Departments to ensure adolescents complete their education, build skills, and enter the workforce in a diverse range of professions, including in STEM fields.
- A national committee headed by the Secretary, Ministry of Women and Child Development will be the apex committee to review the implementation of the scheme at regular intervals with State governments and Union Territory administrations.

Three lakh and counting: RTI pleas pile up at information commissions

- Nearly 3.15 lakh complaints and appeals are pending with 26 information commissions across India.
- The number of appeals and complaints pending in 2019, from data obtained from 26 information commissions was 2,18,347.
- In 2020, the number climbed up to 2,33,384 with data obtained from 23 information commissions, in 2021 the number was 2,86,325 with data from 26 commissions and in 2022, it was 3,14,323.
- The highest number of pending cases was in Maharashtra at 99,722, followed by Uttar Pradesh at 44,482, Karnataka at 30,358, the Central Information Commission at 26,724 and Bihar at 21,346.
- The report says two information commissions—Jharkhand and Tripura out of 29 across the country have been completely defunct for 29 months and 15 months respectively.
- Manipur, Telangana, West Bengal and Andhra Pradesh are without chiefs at the moment.
- Only 5% of the all positions in commissions are being occupied by women.
- Also, several information commissions, including the Central Information Commission, are working at reduced capacity with less than the stipulated number of members being in office.
- Under RTI law, information commissions are the final appellate authority and are mandated to safeguard and facilitate people's right to information.

IMF cuts India's FY23 growth forecast to 6.8%





- IMF's move follows the World Bank slashing its FY23 growth projection for India to 6.5 per cent recently from 7.5 per cent predicted earlier.
- India is projected to grow at 6.8% in the current fiscal year, following 8.7% growth in fiscal year that ended March 31 as per figures released in the IMF's October 2022 World Economic Outlook.
- Growth rate for this year for India has been revised downward by 0.6 percentage points relative to the IMF's June 2022 forecast, following a weaker output in the second quarter, and subdued external demand.
- The forecast for the next fiscal year remains unaltered at 6.1%.
- The IMF has projected 6.9% consumer price inflation this year and 5.1% next year.
- For the world as a whole, growth will slow down from 6.0% in 2021 to 3.2% in 2022 and 2.7% in 2023.

Reports Published by IMF:

- Global Financial Stability Report
- Fiscal Monitor
- World Economic Outlook
- Regional Economic Outlook
- Managing Director's Global Policy Agenda

53rd Capacity Building programme in Field Administration for Civil Servants of Bangladesh inaugurated at Mussoorie

- The National Centre for Good Governance was set up in 2014 by the Government of India as an apex institution in the country.
- Its head office is at New Delhi and registered office at Mussoorie.
- It focuses on good governance, policy reforms, training and capacity building, and to also work as a think tank.
- It has taken up capacity building of civil servants of several foreign countries in partnership with Ministry of External Affairs.
- It has imparted training to civil servants of 15 countries such as Bangladesh, Kenya, Tanzania, Tunisia, Seychelles, Gambia, Maldives, Sri Lanka, Afghanistan, Laos, Vietnam, Bhutan, Myanmar and Cambodia.
- The NCGG traces its origin to the National Institute of Administrative Research (NIAR).
- NIAR was set up in 1995 by the Lal Bahadur Shastri National Academy of Administration (LBSNAA).





• NIAR was subsequently rechristened with an expanded mandate, as NCGG, which was inaugurated in 2014.

India hosted the 6th meeting of India-Norway Joint Working Group on Higher Education

- The Joint Working Group was established to monitor and oversee the implementation of the MoU on Cooperation in the field of Higher Education signed between India and Norway on 25th April, 2022.
- The two sides reviewed the progress made under the Indo-Norwegian Cooperation Programme developed under the ambit of the previous India-Norway MoU signed in 2014.
- They deliberated upon overall higher education policy and priorities, student/faculty mobility and cooperation in the field of skill development.

India's relations with Central Europe (CE):

- India's relations with countries in Central Europe (CE) remained on a steady upward track characterised by warmth and progress in 2021-22, according to the Ministry of External Affairs (MEA).
- Rooted in cultural ties, relations with Central European countries have been free from any major irritants.
- India has received support from these countries at various multilateral fora.
- Regional groups within CE like the Visegrad Group (Czech Republic, Hungary, Poland and Slovakia) and the Nordic group (Sweden, Norway, Finland, Denmark, Iceland) also provide platforms for plurilateral exchanges with India.

PM Narendra Modi addresses UN World Geospatial International Congress

- The goal of this year's UNWGIC is to promote a broad dialogue on global geospatial information management with all relevant governments, non-governmental organisations, academia, and the private sector.
- **Theme:** The theme of UNWGIC 2022 is 'Geo-Enabling the Global Village: No one should be left behind'.
- It was hosted by the ministry of science and technology of the government of India.





- The United Nations Global Geospatial Information Management (UN-GGIM) convened the conference on UNWGIC 2022 and was organised by the United Nations Department of Economic and Social Affairs.
- It is conducted every four years with the objectives of enhancing international collaboration among the Member States and relevant stakeholders in Geospatial information management and capacities.
- The first UNWGIC was organized by China in October 2018.

PM Modi recently lays the foundation stone of various healthcare facilities in Civil Hospital Asarwa, Ahmedabad.

- The CyberKnife System is a non-invasive treatment for cancerous and non-cancerous tumors and other conditions where radiation therapy is indicated.
- CyberKnife treatments are typically performed in 1 to 5 sessions.
- It is used to treat conditions throughout the body, including the prostate, lung, brain, spine, head and neck, liver, pancreas and kidney.
- It can be an alternative to surgery or for patients who have inoperable or surgically complex tumors.
- It offers several advantages to patients, including rapid relief from pain and other symptoms.

OCT 13

Prime Minister Narendra Modi recently flagged off Vande Bharat Express from Una in Himachal Pradesh to New Delhi.

- This is the fourth Vande Bharat train to be introduced in the country.
- The introduction of the train will help boost tourism in the region and provide a comfortable and faster mode of travel.
- The coaches of this train are indigenously manufactured at the Chennai Rail coach factory.





- Vande Bharat Express has been tested at 180 kmph and can run upto maximum speed of 160 kmph on passenger service.
- All Coaches are equipped with automatic doors; GPS based audio-visual passenger information system, onboard hotspot, wi-fi for entertainment purposes, and very comfortable seating.

Experts call for protection of sloth bear on first World Sloth Bear Day

- It aims to spread awareness about protection and conservation of sloth bears.
- A proposal for observing the World Sloth Bear Day was mooted by Wildlife SOS India, an organisation involved in sloth bear conservation and protection for over two decades and the IUCN-Species Survival Commission sloth bear expert team accepted the proposal and declared the day to be celebrated worldwide.

Sloth bears (Melursus ursinus):

- Sloth bears are endemic to the Indian sub-continent with small populations in Nepal and Srilanka and 90% of the species population is found in India.
- They are classified as 'Vulnerable' on the IUCN Red List.
- They are identified by their very distinct long, shaggy dark brown or black fur, distinct white V-shaped chest patch and four-inch long ivorycoloured curved claws used for digging out termites and ants from rockhard mounds. Listed under Schedule I of the (Wildlife Protection) Act of India, 1972 the species has the same level of protection as tigers, rhinos and elephants.
- They are found in all parts of the country except Jammu and Kashmir and north-eastern States.

World Arthritis Day 2022 observed on 12th October

- The theme for World Arthritis Day 2022 is "It's in your hands, take action".
- It aims to raise awareness about arthritis, a condition that can affect one or more joints, causing pain, swelling, and inflammation.
- It was established in 1996 by Arthritis and Rheumatism International (ARI).





• There are different types of arthritis out of which the most common ones are osteoarthritis and rheumatoid arthritis.

Inflation accelerates to 7.41% in September 2022, highest since April

- September's retail inflation was the highest since April, when price rise quickened to an almost eight-year high of 7.79%.
- This is the ninth month in a row that inflation has exceeded the 6% upper tolerance threshold mandated for the RBI and would require it to send an explanation to the government on its inability to achieve the price stability target.
- Rural inflation picked up further steam, from 7.15% in August, to touch 7.56% in September, while urban consumers also experienced a resurgence in price rise at 7.27%, from 6.72% a month earlier.
- Inflation in cereals quickened to 11.5%, with rural India facing almost 12% price gains, up sharply from 9.6% in August and almost doubling from July's 6.9% pace.
- Vegetables' inflation almost virtually doubled over two months, from 10.9% in July to 18.1% in September, with urban consumers facing a sharper 20.1% rise.

Languages panel recommendations and a fresh 'Hindi imposition' row

- The Committee of Parliament on Official Language was set up in 1976 under Section 4 of The Official Languages Act, 1963.
- Section 4 of the Act says "there shall be constituted a Committee on Official language, on a resolution to that effect being moved in either House of Parliament with the previous sanction of the President and passed by both Houses".
- Under the provisions of the 1963 Act, the panel submits its report to the President, who "shall [then] cause the report to be laid before each House of Parliament, and sent to all the State Governments".
- The Committee is chaired by the Union Home Minister, and has, in accordance with the provisions of the 1963 Act, 30 members 20 MPs from Lok Sabha and 10 MPs from Rajya Sabha.
- The mandate of the Committee is to review the progress made in the use of Hindi for official purposes, and to make recommendations to increase the use of Hindi in official communications.
- The first Report of the Committee was submitted in 1987.





Interpol rejects Delhi Red Corner request for Khalistan separatist Gurpatwant Singh Pannun

- Mandate: It is an international organization facilitating international police cooperation against cross-border terrorism, trafficking, and other crime.
- Governance: All decisions regarding the activities of INTERPOL are made by the General Assembly which is it's supreme governing body which meets annually.
- Status: It is 'NOT' a unit or part of united nation system. It is an independent international organization.
- National Central Bureau (NCB):
 - It has a National Central Bureau (NCB) in each member country, which is the central point of contact for both the general secretariat and the other NCBs around the world.
 - Each NCB is run by police officials of that country, and usually sits in the government ministry responsible for policing. (Union Home Ministry in India.)
 - Central Bureau of Investigation (CBI) represents Interpol in India as the country's national central bureau.
- HQ: Lyon in France.
- Founded in: 1923.

Types of Notices:

- It issues 8 type of notices (7 of which are colour-coded) which are in the form of alert/requests allowing police in member countries to share critical crime-related information.
- Red Notice
 - To seek the location and arrest of a person wanted by a judicial jurisdiction or an international tribunal with a view to his/her extradition.
 - It is the "closest instrument to an international arrest warrant".
- Blue Notice
 - To locate, identify or obtain information on a person of interest in a criminal investigation.
- Green Notice
 - To warn about a person's criminal activities if that person is considered to be a possible threat to public safety.





- Yellow Notice
 - To locate a missing person or to identify a person unable to identify himself/herself.
- Black Notice
 - To seek information on unidentified bodies.
- Orange Notice
 - To warn of an event, a person, an object or a process representing an imminent threat and danger to persons or property.
- Purple Notice
 - To provide information on modus operandi, procedures, objects, devices or hiding places used by criminals.
- Interpol-UNSC Special Notice
 - To inform Interpol's members that an individual or an entity is subject to UN sanctions.

Rajnath Singh To Launch Website On October 14 Enabling Citizens To Contribute To Welfare Fund For Martyrs' Families

- It is a Tri service fund, utilised for grant of immediate financial assistance of ex-gratia, to the Next of Kin and dependents of Battle Casualties.
- It has been set up under Department of Ex-Servicemen Welfare (ESW), Ministry of Defence.
- The fund has been created under the Charitable Endowments Act, 1890.
- Bollywood actor Amitabh Bachchan to be the 'Goodwill Ambassador'.

Over 15 crore activities conducted under various themes across the country during Poshan Maah 2022

- Through the Suposhit Bharat initiative, the government intend to conceptualize, develop, pilot and scale up food-based nutrition interventions through food services at institutional food services' level, and street foods, school & college canteens.
- This will therapeutically address malnutrition and non-communicable diseases in the general population.
- POSHAN Abhiyaan is a multi-ministerial convergence mission with the vision to ensure attainment of malnutrition free India.
- POSHAN Abhiyaan provides a platform to converge the activities of various stakeholders towards attaining the goal of 'Suposhit Bharat'.





Multi-State Cooperative Societies (Amendment) Bill, 2022 gets Cabinet approval

- It seeks to amend the Multi-State Cooperative Societies Act, 2002.
- The Bill will incorporate the provisions of the 97th Constitutional Amendment.
- The amendments have been introduced to improve governance, reform the electoral process, strengthen monitoring mechanisms and enhance transparency and accountability.
- The Bill also seeks to improve the composition of board and ensure financial discipline, besides enabling the raising of funds in the multi-state cooperative societies.
- It has included provisions relating to representation of women and Scheduled Caste/Scheduled Tribe members on the board of multi-state cooperative societies.
- It has provisions for setting up of Cooperative Election Authority, Cooperative Information Officer and Cooperative Ombudsman.
- There will also be a provision for issuing non-voting shares in multi-state co-operative societies to help them raise funds.

Multi-State Co-operative Societies Act, 2002

- The Multi-State Co-operative Societies Act, 2002 was enacted with a view to facilitating democratic functioning and autonomous working of multi-state co-operative societies in line with the established co-operative principles.
- India has more than 1,500 multi-State co-operative societies serving as an important tool to promote economic and social betterment of their members based on the principles of self-help and mutual aid.

Amit Shah unveils 15ft high statue of Jayaprakash Narayan in Bihar's Sitab Diara

- He was born on October 11, 1902, in Bihar's Sitab Diara.
- He quit college to join the non-cooperation movement, before going to study at the University of California, Berkeley, where he was influenced by the ideas of Karl Marx.





- He returned to India in 1929 and joined the freedom struggle and the Indian National Congress, upon the invitation of Jawaharlal Nehru and drawn by a speech by Maulana Abul Kalam Azad.
- He is one of the founding members of the Congress Socialist Party (CSP).
- He is credited for galvanising popular opinion against Indira Gandhi government, through his call for Sampoorna Kranti (Total Revolution). It led to the formation of the first non-Congress government (Janata Party government, 1977) in the country.
- In 1999, he was posthumously awarded the Bharat Ratna, India's highest civilian award, in recognition of his social service.
- Other awards include the Magsaysay award for Public Service in 1965.

OCT 14

LEADS 2022

- The LEADS is an indigenous data-driven index to assess logistics infrastructure, services, and human resources across all 36 States and UTs.
- The index is an indicator of the efficiency of logistical services necessary for promoting exports and economic growth.
- The index aims at enhancing the focus on improving logistics performance across states which is essential for improving the country's trade and reducing transaction cost.
- Unlike the previous versions of LEADS which were based on ranking systems for all states, LEADS 2022 has adopted a classification-based grading, states have been now classified under four categories viz coastal states, hinterland/landlocked states, north-eastern states, and Union Territories.
- Three performance categories namely,
 - **Achievers:** States/UTs achieving 90% or more percentage,





- Andhra Pradesh, Assam and Gujarat are among the 15 States and UTs categorised as achievers.
- **Fast Movers:** States/UTs achieving percentage scores between 80% to 90%,
 - Kerala, Madhya Pradesh, Rajasthan, Puducherry, Sikkim and Tripura are the other States categorised as fast movers.
- **Aspirers:** States/UTs achieving percentage scores below 80% have been made.
 - The 15 States and UTs ranked in the aspirers category include Bihar, Chhattisgarh, Goa, Mizoram, Andaman and Nicobar Islands, Lakshadweep, Ladakh, Nagaland, Jammu and Kashmir, and Arunachal Pradesh.
- The LEADS 2022 survey report would assist PM GatiShakti National Master Plan (PMGS-NMP) and National Logistics Policy (NLP).

PM GatiShakti National Master Plan has the potential to save over Rs. 10 Lakh Crore annually by improving logistics

- The PM GatiShakti National Master Plan was launched by Prime Minister Narendra Modi on October 13, 2021.
- It is a digital platform to bring 16 Ministries including Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.
- It will facilitate the last mile connectivity of infrastructure and reduce logistics costs.
- It will incorporate the infrastructure schemes of various Ministries and State Governments like Bharatmala, Sagarmala, inland waterways, dry/land ports, UDAN etc.
- Economic Zones like textile clusters, pharmaceutical clusters, defence corridors, electronic parks, industrial corridors, fishing clusters, agri zones will be covered to improve connectivity & make Indian businesses more competitive.

CERT-In and Power-CSIRTs jointly conduct Cyber Security Exercise "PowerEX-2022"

• Indian Computer Emergency Response Team (CERT-In) in collaboration with Power-CSIRTs (Computer Security Incident Response Teams in





Power sector), successfully designed & conducted the Cyber Security Exercise "PowerEX".

- The theme of the exercise was "Defending Cyber induced disruption in IT & OT infrastructure".
- The Objective of the exercise was to "Recognize, Analyse & Respond to Cyber Incident in IT & OT Systems".

CERT-In:

- The Indian Computer Emergency Response Team (CERT-In) is an office within the Ministry of Electronics and Information Technology.
- It is the nodal agency to deal with cyber security in India and strengthen security-related defence of the Indian internet domain.

Over Rs 6,000-crore scheme for Northeast gets Cabinet nod

- It is a Central Sector Scheme with 100% central funding.
- It will be implemented by Ministry of Development of North Eastern Region (DoNER).
- It will have an outlay of Rs.6,600 crore for the four year period from 2022-23 to 2025-26.
- The infrastructure projects will be funded in line with the priorities laid down under the PM Gati Shakti program.
- The objectives of PM-DevINE are to:
 - Fund infrastructure convergently, in the spirit of PM Gati Shakti;
 - Support social development projects based on felt needs of the NER;
 - Enable livelihood activities for youth and women;
 - Fill the development gaps in various sectors.

IMF terms India's Direct Benefit Transfer scheme, as a 'logistical marvel'

- The aim of DBT (Direct Benefit Transfer) is to transfer the benefits and subsidies of various social welfare schemes directly in the bank account of the beneficiary on time by bringing efficiency, effectiveness, transparency and also to eliminate the intermediary body.
- It was started on 1st January, 2013.
- It was created in the Planning Commission to act as the nodal point for the implementation of the DBT programmes.





- The Mission was transferred to the Department of Expenditure in July, 2013 and continue to function till 14.9.2015.
- To give more impetus, DBT Mission and matters related thereto has been placed in Cabinet Secretariat under Secretary (Co-ordination & PG) w.e.f. 14.9.2015.
- According to the government data, more than Rs 24.8 lakh crore has been transferred through Direct Benefit Transfer (DBT) mode since 2013.

MoS External Affairs Meenakshi Lekhi criticises Pakistan for raising Kashmir issue at CICA platform

- The Conference on Interaction and Confidence Building Measures in Asia (CICA) is a multi-national forum for strengthening cooperation towards promoting peace, security and stability in Asia.
- It was founded by the first President of the Republic of Kazakhstan Elbasy Nursultan Nazarbayev, on 5 October 1992, at the 47th Session of the United Nations General Assembly.
- India is one of the founding members of Conference on Interaction and Confidence Building Measures in Asia (CICA).
- To be a member of CICA, a state must have at least a part of its territory in Asia.
- The CICA Summit is convened every four years. The Meeting of the Ministers of Foreign Affairs is required to be held every two years.
- The CICA Secretariat administrative body of CICA is located in Nur-Sultan, Kazakhstan.

India's first sanctuary for endangered Slender Loris to be set up in Tamil Nadu

• The state government notified 'Kadavur slender loris sanctuary' under Section 26 (A)(1)(b) of Wildlife (Protection) Act, 1972.

Slender Loris:

- Slender Loris is a small nocturnal mammal that spends most of its life on trees.
- They are native to India and Sri Lanka and are also amongst the world's top 25 endangered primates.
- They are listed under endangered species as per the International Union for the Conservation of Nature (IUCN).





- They are also protected under Schedule 1 of the Indian legislation of the Wildlife (Protection) Act (WPA), 1972.
- They act as biological predators of pests that harm agricultural crops and help farmers.
- As per reports, there are 14,000 Slender Loris in the Dindigul and Karur forests in Tamil Nadu.

A quest for the 'ghost' cat: Behind Arunachal's snow leopard survey

- The snow leopard has never been spotted nor recorded in the Namdapha National Park and Tiger Reserve in Changlang district of Arunachal Pradesh.
- The belief that the national park is also the habitat of the snow leopard is based on the claim of a hunter from the Lisu ethnic community that he possessed the skin of the snow leopard.

Snow leopards:

- Snow leopards are native to the alpine regions of Central Asia.
- The 12 snow-leopard range countries are Afghanistan, Bhutan, China, India, Mongolia, Kazakhstan, Kyrgyzstan, Nepal, Tajikistan, Pakistan, Russia and Uzbekistan.
- In India, snow leopards inhabit the higher Himalayan and trans-Himalayan region at an altitude between 3,000-5,400 metres.
- Snow leopard states are Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh.

Conservation:

- It is listed as 'Vulnerable' on the IUCN red list of threatened species.
- It is protected under Schedule I of Wildlife Protection Act, 1972
- Also, it is listed on Appendix I of the Convention on International Trade of Endangered Species (CITES).

ISRO's Next-Gen Launch Vehicle may assume PSLV's role

• NGLV will feature semi-cryogenic propulsion (refined kerosene as fuel with liquid oxygen (LOX) as oxidiser) for the booster stages which is cheaper and efficient.





- According to ISRO the NGLV should be a cost-efficient, three-stage, reusable heavy-lift vehicle with a payload capability of 10 tonnes to Geostationary Transfer Orbit.
- NGLV will feature a simple, robust design which allows bulk manufacturing, modularity in systems, sub-systems and stages and minimal turnaround time.
- Potential uses will be in the areas of launching communication satellites, deep space missions, future human spaceflight and cargo missions.

PSLV (Polar Satellite Launch Vehicle):

- It is an indigenously-developed expendable launch system of the ISRO (Indian Space Research Organization). It was developed in the 1980s.
- It comes in the category of medium-lift launchers with a reach up to various orbits, including the Geo Synchronous Transfer Orbit, Lower Earth Orbit, and Polar Sun Synchronous Orbit.
- All the operations of PSLV are controlled from the Satish Dhawan Space Center, Sriharikota, east coast, India.
- It has a four-stage system comprising a combination of solid and liquid-fuelled rocket stages.
 - The first stage at the very bottom is solid fuelled having six strapon solid rocket boosters wrapped around it.
 - Second stage is liquid fuelled whereas the third stage has a solid fuelled rocket motor.
 - At the fourth stage, the launcher uses a liquid propellant to boost in the outer space.

69% drop in wildlife population globally in 50 years: Living Planet Report

- The highest decline (94 per cent) was in the Latin America and the Caribbean region.
- Africa recorded a 66 per cent fall in its wildlife populations from 1970-2018 and the Asia Pacific 55 per cent.
- Freshwater species populations globally reduced by 83 per cent. Habitat loss and barriers to migration routes were responsible for about half of the threats to monitored migratory fish species.
- It identified six key threats to biodiversity agriculture, hunting, logging, pollution, invasive species and climate change to highlight 'threat hotspots' for terrestrial vertebrates.





- Mangroves continue to be lost to aquaculture, agriculture and coastal development at a rate of 0.13 per cent per year.
- Around 137 square kilometres of the Sundarbans mangrove forest in India and Bangladesh has been eroded since 1985.

Living Planet Report:

- It is published biennially by World Wide Fund for Nature (WWF).
- It is a comprehensive study of trends in global biodiversity and the health of the planet.
- The Living Planet Report 2022 is the 14th edition of the report.

OCT 15

India ranks 107th out of 121 countries on Global Hunger Index

- The Global Hunger Index (GHI) is a tool for comprehensively measuring and tracking hunger at global, regional, and national levels.
- It is prepared jointly by Irish aid agency Concern Worldwide and German organisation Welt Hunger Hilfe.
- GHI scores are based on the values of four component indicators:
 - Undernourishment (share of the population with insufficient caloric intake),
 - child stunting (the share of children under age five who have low height for their age, reflecting chronic under-nutrition),
 - child wasting (acute under-nutrition in children under age five with low weight for their height),
 - child mortality (the mortality rate of children under the age of five).
- The GHI score is calculated on a 100-point scale reflecting the severity of hunger, where zero is the best score (no hunger) and 100 is the worst.





Global Hunger Index (GHI) 2022:

- India's score of 29.1 places it in the 'serious' category.
- India's GHI score has decelerated from 38.8 in 2000 to the range of 28.2 29.1 between 2014 and 2022.
- India also ranks below Sri Lanka (64), Nepal (81), Bangladesh (84), and Pakistan (99). Afghanistan (109) is the only country in South Asia that performs worse than India on the index.
- Seventeen countries, including China, Turkey, and Kuwait, shared the top rank with GHI score of less than five.

Electoral bonds scheme is absolutely transparent mode of political funding: Centre to SC

- The electoral bonds system was introduced in 2017 by way of a money bill introducing amendments in the Finance Act and the Representation of People Act.
- It was implemented in 2018.
- The electoral bonds are issued in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh and Rs 1 crore.
- State Bank of India is the only bank authorised to sell electoral bonds.
- Buyers can donate the bonds to a party of their choice and the bonds have to be cashed by the party through its verified account within 15 days.
- No payment shall be made to any political party if the electoral bond is deposited after expiry of the validity period of 15 days.
- Eligible political parties are allotted a verified account by the Election Commission of India (ECI) and the electoral bond transactions can be made only through this account.
- Buyers of the bonds have to submit full KYC details at the time of buying. However, the beneficiary political party is not required to reveal the identity of the entity that has given it the bonds.
- Electoral Bonds can be purchased by a person, who is a citizen of India or a company incorporated or established in India.
- Only political parties registered under section 29A of the Representation of the Peoples Act, 1951 are eligible to receive electoral bonds.
- Further, in order to be eligible the party must have secured at least one per cent of the votes polled in the most recent Lok Sabha or State elections.





- The bonds are available for purchase for a period of 10 days each in the beginning of every quarter, i.e. in **January, April, July and October**, as specified by the Central Government.
- An additional period of 30 days shall be specified by the Central Government in the year of Lok Sabha elections.
- However, there have been some occasions when the government has deviated from the specified schedule for issuance of these bonds.

Bureau of Indian Standards, Mumbai organises Conclave –"Manak Mahotsav" on occasion of World Standards Day

- World Standards Day is celebrated every year on October 14.
- This day, also known as International Standards Day, strives to educate consumers, policymakers, and businesses about the value of standardisation.
- The International Organization for Standardisation (ISO) was founded in 1947.

Bureau of Indian Standards (BIS):

- BIS is the National Standard Body working under the Ministry of consumer affairs, food and public distribution, Government of India.
- It is established by the Bureau of Indian Standards Act, 2016 which came into effect on 12 October 2017.
- Objective is the harmonious development of the activities of standardization, product testing and quality certification of goods in the country.

Nuclear-powered INS Arihant carries out successful launch of SLBM

- The capability of being able to launch nuclear weapons from submarines has great strategic importance in the context of achieving a nuclear triad, especially in the light of the 'no first use' policy of India.
- INS Arihant is India's nuclear-powered ballistic missile capable submarine, classified under the SSBN programme.
- It was commissioned in 2016.
- INS Arihant is presently armed with K-15 SLBM with a range of 750 km.
- The next in the class, INS Arighat is reported to have been launched in 2017 and is said to have been undergoing sea trials.





- The SSBN is a hull classification symbol for nuclear-powered ballistic missile carrying submarines.
- Operations of the SLBMs from the SSBN are under the purview of Strategic Forces Command which is part of India's Nuclear Command Authority.

Submarine Launched Ballistic Missiles (SLBMs):

- The family of indigenously developed Submarine Launched Ballistic Missiles (SLBMs), sometimes referred to as K-family missiles are codenamed after Dr APJ Abdul Kalam.
- Under the SLBM family, missiles of various ranges have been developed including K-15 also called Sagarika, which has a range of at least 750 km.
- India has also developed and tested the K-4 missiles from the same family, which have a range of 3,500 km.

South Africa: 7th edition of IBSAMAR helds at Port Elizabeth

- It is a joint multinational maritime exercise, among the Indian, Brazilian and South Africa navies.
- The objectives of the exercise included strengthening maritime relations, promoting joint operational military training, combating maritime crimes, securing Sea Lines of Communication and enhancing interoperability to pursue common evolutions at sea.
- The Indian Navy was represented in it by the guided missile frigate, INS Tarkash, a Chetak helicopter and MARCOS Special Forces.
- The first edition of the IBSAMAR naval exercise was organised in 2008 to unite on democratic values, economic interests and maritime cooperation.
- Goa hosted the fifth edition of IBSAMAR during the year 2016.
- The previous edition of IBSAMAR (IBSAMAR VI) was conducted off Simons Town, South Africa in 2018.

India participates at the 6th East Asia Summit Education Minister's Meeting

- The East Asia Summit (EAS) is the Indo-Pacific's premier forum for strategic dialogue.
- It was established in 2005.





- The EAS has 18 members:
 - The ten ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam) along with Australia, China, India, Japan, New Zealand, the Republic of Korea, Russia and the United States.
- The EAS membership represents around 54% of the world's population and accounts for 58% of global GDP.
- Six priority areas of regional cooperation within the framework of the EAS
 - Environment and Energy,
 - Education,
 - Finance,
 - Global Health Issues and Pandemic Diseases,
 - Natural Disaster Management, and
 - ASEAN Connectivity

PM Modi to launch 75 digital banking units across 75 districts on Oct 16

- As part of the Union budget speech for 2022-23, the Finance Minister had announced the setting up of the 75 DBUs in 75 districts of the country to commemorate the 75 years of independence of our country.
- 11 Public Sector Banks, 12 Private Sector Banks and one Small Finance Bank are participating in the endeavour.
- A digital banking unit is a specialised fixed point business unit or hub housing certain minimum digital infrastructure for delivering digital banking products and services as well as servicing existing financial products and services digitally in self-service mode at any time.
- The objective is to ensure benefits of digital banking reach every nook and corner of the country and will cover all the States and Union territories.
- DBUs will be brick and mortar outlets which will provide a variety of digital banking facilities to people such as opening of savings account, balance-check, print passbook, transfer of funds etc.
- They will spread Digital Financial Literacy and special emphasis will be given to customer education on cyber security awareness and safeguards.





OCT 16

Army inks pacts with 11 banks to provide banking facilities to Agniveers

- The features and benefits offered under Agniveer Salary Package are similar to the Defence Salary Package.
- The first batch of Agniveers under the "Agnipath Scheme" will be joining Training Centres by January 2023.
- Defence Minister Rajnath Singh recently announced the "Agnipath" scheme, for recruitment of youth in the armed forces for four years.
- Enrolment: Enrolment to all three services will be through a centralised online system, with special rallies and campus interviews at recognised technical institutes.
- Eligibility criteria: The new system is only for personnel below officer ranks
- Recruitment: It will be carried out on an 'All India All Class' basis with the eligibility age ranging from 17.5 to 21 years, with medical and physical fitness standards in accordance with existing norms.
- Salary package: Agniveers will receive Rs 33,000 in the second year, Rs 36,500 in the third year and Rs 40,000 in the fourth year. They will get Rs 11.71 lakh as Seva Nidhi Package after four years.
- Qualification: The required educational qualification will be Class X-XII.
- Reselection: For those who are re-selected, the initial four-year period will not be considered for retirement benefits.
- Permanent Commission: Up to 25% of each batch will be enrolled as regular cadre as under permanent commission and would be required to serve for a further minimum period of 15 years.

Union Finance Minister recently attended the International Monetary and Financial Committee

- What is it? The IMF Board of Governors is advised by two ministerial committees, the International Monetary and Financial Committee (IMFC) and the Development Committee.
- Composition: The IMFC has 24 members, drawn from the pool of 190 governors. Its structure mirrors that of the Executive Board and its 24 constituencies. As such, the IMFC represents all the member countries of the Fund.





- Working: The IMFC meets twice a year, during the Spring and Annual Meetings. The Committee discusses matters of common concern affecting the global economy and also advises the IMF on the direction its work.
- It is a joint committee, tasked with advising the Boards of Governors of the IMF and the World Bank on issues related to economic development in emerging and developing countries.
- The committee has 24 members (usually ministers of finance or development).
- It represents the full membership of the IMF and the World Bank and mainly serves as a forum for building intergovernmental consensus on critical development issues.

India-Africa Defence Dialogue to be held on October 18 at DefExpo 2022 in Gandhinagar

- The broad theme of the dialogue is 'India-Africa: Adopting Strategy for Synergising and Strengthening Defence and Security Cooperation'.
- India's approach towards Africa is guided by the Kampala Principles enunciated by Prime Minister Shri Narendra Modi in 2018.
 - The Kampala Principles promote ownership of private sector engagement (PSE) through development co-operation by partner countries and ensure the alignment of PSE projects and programmes with national sustainable development priorities.
- The first-ever India-Africa Defence Ministers Conclave was held in Lucknow, Uttar Pradesh in conjunction with DefExpo on February 06, 2020.

Why the war in Ukraine has countries stockpiling iodine tablets

- Potassium iodide, or KI, offers specific protection against one kind exposure. It prevents the thyroid a hormone-producing gland in the neck from picking up radioactive iodine, which can be released into the atmosphere in a nuclear accident.
- Iodine tablets work by filling up the thyroid with a stable version of iodine so that the radioactive kind can't get in.
- If the thyroid is already packed with potassium iodide, it won't be able to pick up the harmful iodine that's left after a nuclear accident.





• But potassium iodide doesn't protect against other kinds of radioactive threats. A nuclear bomb, for example, can release many different kinds of radiation and radioactive material that can harm many parts of the body.

Legal rights being given to nature and rivers

- Ecuador, in 2008, approved a Constitution that grants tropical forests, islands, rivers and air, legal rights to "exist, flourish and evolve". In April 2022 Ecuador became the first country to grant legal rights to individual wild animals.
- Bolivia granted all nature rights equal to that of humans in 2011.
- New Zealand in 2017, passed the Whanganui River Claims Settlement Bill, which granted legal personhood to river Whanganui and its surrounding ecosystem.

India stand

- Article 51-A (g) of the Constitution of India lays down that it is the fundamental duty of every citizen to protect wildlife and have compassion for all living creatures. However, such duties are not enforceable by law.
- The Uttarakhand High Court in 2017, granted the river Ganga and its longest tributary Yamuna the legal right to be protected and not be harmed.
- While other legal acts such as the Wildlife Protection Act of 1972 and the Cruelty to Animals Act of 1960 exist, they do not recognize animals as individual living entities.

Bio age

- The increased integration of biotechnology in human life will bring in the bio age.
- Integration of life sciences with modern technology through the production of genetically modified organisms (GMOs), engineering of genes to enhance disease resistance, gene editing, and more, indicate that biotechnology is most likely to pervade our lives in the future.
- It will mark the end of the digital Information Age and this era will require legal intervention to hold researchers accountable for the impact of their work on the environment.

Why the US is facing a shortage of Adderall, used to treat ADHD





- Adderall is the brand name for the formulation that consists of a combination of dextroamphetamine and amphetamine.
- It is an FDA-approved drug for the treatment of attention-deficit hyperactivity disorder (ADHD) and narcolepsy, a sleep condition that causes daytime sleepiness.
- Adderall belongs to the class of drugs known as stimulants and increases the levels of dopamine and norepinephrine in the brain.
- For people diagnosed with ADHD, Adderall can help improve focus, concentration, impulse control and hyperactivity, because of its effects on the central nervous system.
- Adderall is classified as a Schedule II drug in the US, which means that while it has positive medicinal effects, there is a large potential for abuse.

Varanasi court rejects plea seeking carbon dating of 'Shivling'

- Carbon dating is a widely-used method to establish the age of organic materials, things that were once living.
- Living things have carbon in them in various forms. The dating method is based on the fact that Carbon-14 (C-14), an isotope of carbon with an atomic mass of 14, is radioactive, and decays at a well-known rate.
- The most abundant isotope of carbon in the atmosphere is C-12. The ratio of C-12 to C-14 in the atmosphere is almost static, and is known.
- Plants and animals acquire C-12 and C-14 in roughly the same proportion as is available in the atmosphere.
- When they die, their interactions with the atmosphere stops. While C-12 is stable, the radioactive C-14 reduces to one half of itself in about 5,730 years known as its 'half-life'.
- The changing ratio of C-12 to C-14 in the remains of a plant or animal after it dies can be measured, and can be used to deduce the approximate time when the organism died.
- Carbon dating cannot be used to determine the age of non-living things like rocks. Also, the age of things that are more than 40,000-50,000 years old cannot be arrived at through carbon dating.

Radiometric dating methods:

• These are used to calculate the age of inanimate things. Instead of carbon, decays of other radioactive elements that might be present in the





material become the basis for the dating method. Two commonly employed methods for dating rocks are

- Potassium-argon dating: The radioactive isotope of potassium decays into argon, and their ratios can give a clue about the age of rocks.
- Uranium-thorium-lead dating: Uranium and thorium have several radioactive isotopes, and all of them decay into the stable lead atom. The ratios of these elements present in the material can be measured and used to make estimates about age.
- Cosmogenic nuclide dating: It is used to determine how long an object has remained exposed to sunlight. It is regularly applied to study the age of ice cores in polar regions.

Under security cover, Dera Sacha Sauda head leaves Sunaria jail on 40-day parole

- Parole is a system of releasing a prisoner with suspension of the sentence.
- The release is conditional, usually subject to behaviour, and requires periodic reporting to the authorities for a set period of time.

Furlough

- A broadly similar but subtly different concept is furlough, which is given in case of long-term imprisonment.
- While furlough is seen as a matter of right, to be granted periodically irrespective of any reason and merely to enable the prisoner to retain family and social ties, parole is not a matter of right and may be denied to a prisoner even when he makes out a sufficient case.
- Temporary release under provisions for parole or furlough is given by the state, but its decision can be challenged before a court of law.

Karnataka Hijab row: 2-judge SC bench delivers split verdict

- A split verdict is passed when the Bench cannot decide one way or the other in a case, either by an unanimous decision or by a majority verdict.
- Split verdicts can only happen when the Bench has an even number of judges. This is why judges usually sit in Benches of odd numbers (three, five, seven, etc.) for important cases, even though two-judge Benches known as Division Benches are not uncommon.





• In case of a split verdict, the case is heard by a larger Bench. The larger Bench to which a split verdict goes can be a three-judge Bench of the High Court, or an appeal can be preferred before the Supreme Court. In the case of the hijab verdict, the CJI, who is the 'master of the roster', will constitute a new, larger Bench to hear the matter.

Earlier cases with a split verdict

- A two-judge Bench of the Delhi High Court delivered a split verdict in petitions challenging the exception provided to marital rape in the Indian Penal Code (IPC).
- Madras High Court Division Bench order on the challenge to the disqualification of AIADMK MLAs owing allegiance to TTV Dinakaran (2018).

OCT 17

Ultra infectious new Omicron variant BF.7 detected in India

- Omicron BF. 7 is the latest sub-variant of the Omicron variant, first detected in Northwest China's Inner Mongolia Autonomous Region.
- It is also known as the '**Omicron spawn**'.
- This new variant is fast spreading to several other countries including the United States, UK, Australia and Belgium.
- Being a sub-variant of Omicron BA.5, BF.7 reportedly has enhanced immunity evasion in comparison to its parental strain.
- This means that people who have been infected before or have taken the COVID-19 vaccines can get infected with BF.7.
- The symptoms associated with the BF.7 sub-variant is similar to other sub-variants of Omicron.





• This includes headache, persistent cough, changes in sense of smell, chest pain, hearing loss and shaking, abdominal pain, diarrhoea, runny nose, sore throat and fatigue.

In last 3.5 months, consumer panels cut pendency by 11%

- In the past three and-half months, consumer commissions across the country have disposed of 68,587 cases, bringing down pendency by nearly 11%.
- Status: It is a quasi-judicial commission.
- Origin: It was set up in 1988 under the Consumer Protection Act of 1986.
- Head Office: New Delhi.
- Governance: It is headed by a sitting or retired judge of the Supreme Court of India.
- Powers: Under Section 21 of Consumer Protection Act, 1986, NCDRC will have jurisdiction to entertain a complaint valued more than one crore.
- Appeal: Any person aggrieved by an order of NCDRC, may Appeal against such order to Supreme Court of India within a period of 30 days.

Securing Livelihoods in the Himalayas

- The Union Environment ministry in association with the United Nations Development Programme (UNDP) has been implementing 'Secure Himalaya' project to conserve the habitats of snow leopards.
- The 'Secure Himalaya' project is funded by the Global Environment Facility.
- It supports the government's efforts for conservation of snow leopard and its habitat by developing and implementing a landscape-based approach for Himalayan ecosystems, and addresses key issues of habitat degradation, threatened livelihoods and illegal trade in wildlife.
- It was launched in 2017.

Components:

- Conservation of key biodiversity areas and their effective management to secure long-term ecosystem resilience, habitat connectivity and conservation of snow leopard and other endangered species.
- Securing sustainable community livelihoods and natural resource management in high range Himalayan ecosystems.





- Enhancing enforcement, monitoring and cooperation to reduce wildlife crime and related threats.
- Gender Mainstreaming, Monitoring, evaluation and knowledge management.

Project Landscapes:

- Changthang, Ladakh Landscape, Jammu & Kashmir
- Lahaul-Pangi and Kinnaur Landscapes,
- Gangotri-Govind and Darma-Byans Landscapes,
- Khangchendzonga-upper Teesta Valley.

Sri Lanka seeks Indian gaurs for reintroduction into the wild

Indian Bisons are one of the largest extant bovines. It is one of the largest species among the wild cattle, reaching a shoulder height of up to 220 cm.

- Habitat:
 - They are found on the forested hills and grassy areas of south to south east Asia.
- Distribution:
 - There are about 13,000 to 30,000 gaurs in the world with approximately 85% of the population present in India. It is also found in Burma and Thailand.
 - The Western Ghats in southern India constitute one of the most extensive extant strongholds of gaur, in particular in the Wayanad
 Nagarhole – Mudumalai – Bandipur complex.
 - The first-ever population estimation exercise of the Indian gaur carried out in the Nilgiris Forest Division in February 2020 estimated around 2,000 Indian gaurs to be inhabiting the division.
 - The gaur is the State Animal of Goa and Bihar.
- Conservation:
 - It is a protected species and included in Schedule I of the Wild Life Protection Act, 1972
 - Listed as "vulnerable" in the International Union for Conservation of Nature (IUCN) Red List.
 - It is listed in CITES Appendix I.

Wildlife or Zoological Diplomacy





• It means the translocation and reintroduction of a species, particularly between neighbouring countries with similar eco-systems. It is considered as a potent tool in engaging different nations.

Examples:

- Recently India translocated cheetahs from Namibia.
- American bison herds were supplemented with animals from Canada after the U.S. herds were almost all wiped out.
- The U.K. has recently introduced the European bison (Wisent) after an estimated 10,000 years in June 2022.
- Israel has for decades pursued reintroductions, including of Persian fallow deer. Arabian oryx and other species have been released into the Negev desert.
- South Africa has recently used the export of cheetahs to other African countries as a diplomatic tool during the post-apartheid era.

International Day of Rural Women being celebrated

- It focuses on gender equality and women empowerment in rural areas.
- It is to celebrate and highlight their achievements and contributions towards rural development and agriculture.
- The theme for International Day of Rural Women 2022 is "Rural Women, key for a world free from hunger and poverty".
- In the year 1995, the Fourth World Conference on Women was conducted in Beijing, China, and the main topic of discussion was the empowerment of women.
- It was when the UN suggested that 15 October could be observed as International Day of Rural Women to appreciate the contribution of rural women in agriculture, food production, and food safety.
- It was on 18 December 2007 when the UN declared that October 15 would be observed annually as International Day of Rural Women worldwide.

EY-CII report says India to attract \$475-bn FDI in 5 years

• The report titled 'Vision—Developed India: Opportunities and Expectations of MNCs', added that 71% of MNCs working in India consider the country an important destination for their global expansion.





The optimism is driven by both short-term as well as long-term prospects.

- FDI in India has seen a consistent rise in the last decade, with FY 2021-22 receiving FDI inflow of \$84.8 billion despite the impact of the COVID-19 pandemic and geopolitical developments on investment sentiment.
- India is seen as an emerging manufacturing hub in global value chains, as a growing consumer market and as a hub for ongoing digital transformation.
- Over 60% of MNCs in the report stated improvement in the business environment in the last three years.
- According to the survey, top expectations from the government include enhanced effectiveness of the national single window for approval / clearances; greater tax certainty, and stronger contract enforcement mechanism, among other measures.

Foreign direct investment (FDI):

- Foreign direct investment (FDI) is an investment from a party in one country into a business or corporation in another country with the intention of establishing a lasting interest.
- With FDI, foreign companies are directly involved with day-to-day operations in the other country.
- FDI enters in India through either of the two routes:
 - Automatic route
 - The non-resident or Indian company does not require prior nod of the RBI or government of India for FDI.
 - Government-approval route
 - The government's approval is mandatory and the company will have to file an application through Foreign Investment Facilitation Portal.

Centre plans 22 'bhasha kendras'

- The centres, called bhasha kendras, will be established under the Union ministry of education's Indian Knowledge System (IKS) initiative.
- These language centres will be in line with the National Education Policy (NEP) 2020, that emphasises on promoting regional languages.
- The centres will be given three broad responsibilities.





- **First,** they will prepare small booklets of 100-200 pages of the IKSrelated literature and manuscripts available in their designated languages.
 - The centres will also be translating these works into Sanskrit and English.
- **Second,** these centres will be to enrich their designated Indian languages with modern science and social models.
 - They will be asked to translate 1,000 pages of material in other languages into their designated language.
- **Third,** they will develop courses at the undergraduate level.

China's 'Wolf Warrior' Diplomacy

- It is a tactic for the Chinese government to extend its ideology beyond China and counter the West and defend itself.
- It is an unofficial term for the more aggressive and confrontational style of communication that Chinese diplomats have taken to in the last decade.
- It confronts head-on any criticism of China in the public sphere.
- A 2015 Chinese action film, titled 'Wolf Warrior', and its sequel have served as the inspiration for the term.
- The change in strategy has been attributed to many reasons, such as Xi Jinping's more authoritarian tendencies as compared to earlier leaders, deteriorating US-China relations under former US President Donald Trump, the coronavirus pandemic-related accusations on China, etc.

What is 'meat' from plants and is 'just like' meat vegetarian?

- "Plant-based" refers to products that bio-mimic or replicate meat, seafood, eggs, and milk derived from animals by looking, smelling, and tasting like them.
- Plant-based dairy products include ice-cream that isn't simply frozen dessert that replaces milk fat with vegetable oil.
- Even the proteins and other solids-not-fat ingredients are sourced from plants.
- As for plant-based dairy, the main products are milk from oats, almond, soyabean, coconut, and rice. Among these, oat milk is considered the closest to regular milk in taste and texture.





- Animal meat contains protein, fat, vitamins, minerals, and water, just like plants.
- This biochemical similarity allows for finding analogues in the plant kingdom or making them through mechanical, chemical, or biological treatment of such ingredients.
- The challenge lies in replicating muscle tissue that plants don't have. The unique spatial arrangement of proteins in these tissues is what creates the distinct texture of animal meat.
- That's why plant-based mutton samosas, kebabs or keema, having a simpler texture, are easier to make than larger whole cuts of animal meat.

India stands third in the world in terms of fish production

- India is the 3rd largest fish producing and 2nd largest aquaculture nation in the world after China.
- In the recent past, Indian fisheries has witnessed a shift from marine dominated fisheries to inland fisheries, with the latter emerging as a major contributor of fish production from 36% in the mid-1980 to 70% in the recent past.

Pradhan Mantri Matsya Sampada Yojana (PMMSY):

- The vision is to bring about Blue Revolution through sustainable and responsible development of fisheries sector.
- The main motto of PMMSY is 'Reform, Perform and Transform'in the fisheries sector.
- Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying is the implementing agency.
- The PMMSY is an umbrella scheme with two separate components Central Sector Scheme and Centrally Sponsored Scheme.





OCT 18

NHAI InvIT looks to raise additional Rs 3,800 cr: Minister Nitin Gadkari

- These InvIT bonds will be listed on BSE and NSE, providing an opportunity for investors to invest and trade.
- NHAI InvIT is the infrastructure investment trust sponsored by the National Highways Authority of India (NHAI) to support the government's National Monetisation Pipeline (NMP).
- NHAI's InvIT is a Trust established by NHAI under the Indian Trusts Act, 1882 and SEBI (Security and Exchange Board of India) regulations.
- The Union Cabinet chaired by Prime Minister Narendra Modi had approved the NHAI's Infrastructure Investment Trust (InvIT) in December 2019.
- Infrastructure investment trusts are institutions similar to mutual funds, which pool investments from various categories of investors and invest them into completed and revenue-generating infrastructure projects, thereby creating returns for the investor.
- The capital market regulator notified the SEBI (Infrastructure Investment Trusts) Regulations, 2014 on September 26, 2014, and these trusts are likely to help facilitate investment in the infrastructure sector.
- Structured like mutual funds, they have a trustee, sponsor(s), investment manager and project manager.
- While the trustee (certified by Sebi) has the responsibility of inspecting the performance of an InvIT, sponsor(s) are promoters of the company that set up the InvIT.

BJP to hold a Pasmanda Muslim meeting in UP, 'first by a party'

- Pasmanda is a Persian word that means the 'ones left behind'.
- The word is used to describe the depressed classes among Muslims who have been deliberately or consciously excluded from the fruits of power and privilege.
- Backward, Dalit, and tribal Muslims use the word Pasmanda as an umbrella identity to flag caste-based discrimination within the community.
- The term 'Pasmanda Muslims' was first used in 1998 by Ali Anwar Ansari when he founded the Pasmanda Muslim Mahaz.





• Muslim society in India consists of several status groups or biradaris that are broadly sorted in three categories: the Ashrafs (the 'noble' elite or the 'honourable ones'), the Ajlafs (backward Muslims), and the Arzals (Dalit Muslims).

Kerala governor threatens to remove ministers if their statements lower dignity of his office

- Article 163: There shall be a council of ministers with the chief minister as the head to aid and advise the governor in the exercise of his functions, except in so far as he is required to exercise his functions in his discretion.
- Article 164: The chief Minister shall be appointed by the Governor and the other Ministers shall be appointed by the Governor on the advice of the Chief Minister, and the Ministers shall hold office during the pleasure of the Governor.
- Article 174: The Governor can also summon, prorogue, and dissolve the Legislative Assembly. By convention, he does this on the advice of the Council of Ministers while they enjoy the confidence of the Assembly.
- **Article 200:** Every Bill passed in an Assembly has to be sent to the Governor, after which he has four options
 - to assent to the Bill,
 - withhold assent,
 - \circ $\;$ reserve the Bill for the consideration of the President, or
 - return the Bill to the legislature, asking it to reconsider the Bill or an aspect of it. The Governor can also suggest an amendment to the Bill.

EdCIL pays a dividend of Rs 16 Crore for the year 2021-2022

- EdCIL (India) Limited is a Mini Ratna Category-I CPSE of the Ministry of Education, Government of India.
- **Miniratna Category-I status:**The CPSEs which have made profit in the last three years continuously, pre-tax profit is Rs.30 crores or more in at least one of the three years and have a positive net worth are eligible to be considered for grant of Miniratna-I status.
- **Miniratna Category-II status:** The CPSEs which have made profit for the last three years continuously and have a positive net worth are eligible to be considered for grant of Miniratna-II status.





- Miniratna CPSEs should have not defaulted in the repayment of loans/interest payment on any loans due to the Government.
- Miniratna CPSEs shall not depend upon budgetary support or Government guarantees.

This year too, only green crackers to be sold

- Green crackers are low-emission crackers, free of harmful chemicals such as sulphur, nitrates, arsenic, magnesium, sodium, lead, and barium, which reduce the emission of up to 30%.
- Emit noise in the range of 100-130 deciBels.
- Come with a green logo and Quick Response (QR) code to differentiate from conventional firecrackers.
- The crackers developed by the Council of Scientific and Industrial Research (CSIR) falls under three categories:
 - SWAS:
 - SWAS is safe water releaser, which suppresses the dust released by releasing water vapour in the air. It does not comprise potassium nitrate and sulphur and the particulate dust released will reduce approximately by 30 per cent.
 - STAR:
 - STAR is the safe thermite cracker, which does not comprise potassium nitrate and sulphur, emits reduced particulate matter disposal and reduced sound intensity.
 - SAFAL:
 - SAFAL is safe minimal aluminium which has minimum usage of aluminium, and used magnesium instead. It ensures reduction in sound in comparison to traditional crackers.

Conventional firecrackers:

- Composed of charcoal or thermite in combination with oxidizing agents such as nitrates or chlorates, sulfur agents, and coloring agents.
- Include salts of strontium, sodium, barium, calcium, and copper as well as white metals, which produce more particulate matter (PM).
- Emit sound between 160-200 deciBels.

IHBAS joins central scheme to address mental health issues





- Tele Mental Health Assistance and Networking Across States (Tele-MANAS) initiative was launched on occasion of World Mental Health Day.
- Its objective is to provide free tele-mental health services all over the country round the clock, particularly catering to people in remote or under-served areas.
- It is an initiative of the Union Ministry of Health and Family Welfare.
- NIMHANS is the nodal centre and International Institute of Information Technology-Bangalore (IIITB) providing technology support.
- Tele-MANAS will be organised in two tier system;
 - Tier 1 comprises of state Tele-MANAS cells which include trained counsellors and mental health specialists.
 - Tier 2 will comprise of specialists at District Mental Health Programme (DMHP)/Medical College resources for physical consultation and/or e-Sanjeevani for audio visual consultation.
- Presently there are 5 regional coordination centres along with 51 State/UT Tele MANAS cells.

E-Manas:

• E-Manas is the tele-counselling programme which was launched by the Karnataka government during the first wave of COVID-19 in association with NIMHANS to help people through the stress of the pandemic and lockdown.

Union Minister Jitendra Singh launches integrated portal for pensioners

- The Anubhav portal was created on the call of Prime Minister in 2015 with a vision to preserve rich experience of retired official in digital form.
- An award scheme to incentivize and encourage more retiring employees to submit their write-ups was introduced in 2016.
- It provides a platform to retiring government employees for sharing their experiences while working in different Ministries or Departments of the government.
- It also provides them with an opportunity to convey information related to their contribution in enhancing the effectiveness of the various government policies.
- It is envisaged that this culture of leaving notes by retirees will become the foundation stone of good governance and administrative reforms in future.





• 92 Ministries, Departments or Organizations have registered on Anubhav Portal of this Department and 8722 write-ups have been published as on 30th September.

Prime Minister Launches 'One Nation One Fertiliser' Scheme

- All subsidised soil nutrients urea, di-ammonium phosphate (DAP), Muriate of Potash (MoP), and NPK - will be marketed under the single brand Bharat across the nation.
- With the launch of this scheme, India will have a common bag design across the country like Bharat urea, Bharat DAP, Bharat MOP, Bharat NPK, and so on.
- The rationale is that since fertilizers of a particular category must meet the nutrient-content specifications of the Fertilizer Control Order (FCO), there is no product differentiation among different brands for each type of fertilizer. For example, all DAP fertilizer brands must have 18% nitrogen and 46% phosphorus.
- The One Nation One Fertiliser scheme will also prevent the criss-cross movement of fertilisers and reduce high freight subsidies.

PM- Kisan Samruddhi Kendras (PM-KSK):

- The Union government also intends to convert more than 3.3 lakh fertiliser retail shops in the country into PM- Kisan Samruddhi Kendras (PM-KSK) in a phased manner.
- The PM-KSK will supply agri-inputs like seeds, fertilisers, and farm implements. It will also provide testing facilities for soil, seeds and fertilisers.
- Information about government schemes will also be provided.

415 million exited poverty in India in 15 years: UNDP

- About 41.5 crore people exited poverty in India during the 15-year period between 2005-06 and 2019-21, out of which two-third exited in the first 10 years, and one-third in the next five years.
- The incidence of poverty fell from 55.1% in 2005-06 to 16.4% in 2019-21 in the country.
- The deprivations in all 10 MPI indicators saw significant reductions as a result of which the MPI value and incidence of poverty more than halved.





- Improvement in MPI for India has significantly contributed to the decline in poverty in South Asia.
- It is for the first time that it is not the region with the highest number of poor people, at 38.5 crore, compared with 57.9 crore in Sub-Saharan Africa.
- The report doesn't fully assess the effects of the COVID-19 pandemic on poverty in India as 71% of the data from the National Family Health Survey-5 (2019-2021) relied upon for MPI were collected before the pandemic.
- Bihar is the poorest State in 2015-2016, saw the fastest reduction in MPI value in absolute terms. The incidence of poverty there fell from 77.4% in 2005-2006 to to 34.7% in 2019-2021.

Ending Poverty a Challenge:

- India has by far the largest number of poor people worldwide at 22.8 crore, followed by Nigeria at 9.6 crore.
- Two-third of these people live in a household in which at least one person is deprived in nutrition.
- There were also 9.7 crore poor children in India in 2019-2021
- About 4.2% of the population in the country still live in severe poverty.
- Rural areas account for nearly 90% of poor people.

Global Multidimensional Poverty Index:

- The report produced by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI).
- It was first launched in 2010.
- The global MPI constructs a deprivation profile of each household and person through 10 indicators spanning health, education and standard of living and includes both incidence as well as intensity of poverty.
- All indicators are equally weighted within each dimension.
- The global MPI identifies people as multi-dimensionally poor if their deprivation score is 1/3 or higher.

CAA norms can be applied to Hindu Tamils from Lanka

• The Citizenship Amendment Act, 2019 amends the Citizenship Act, 1955.





- It seeks to grant citizenship to a class of migrants belonging to Hindu, Sikh, Buddhist, Jain, Parsi or Christian communities from Afghanistan, Bangladesh or Pakistan who entered India on or before December 31, 2014.
- It exempts the members of the six communities from any criminal case under the Foreigners Act, 1946 and the Passport Act, 1920. The two Acts specify punishment for entering the country illegally and staying here on expired visas and permits.
- It was passed by Parliament on December 11, 2019 and the Act was notified within 24 hours on December 12.
- The Joint Committee on Citizenship (Amendment) Bill, 2016, in its report to the Lok Sabha on January 7, 2019, mentioned the reason provided by the Ministry of Home Affairs (MHA) for not including Sri Lanka under the ambit of the amendment.
- According to the Ministry of Home Affairs (MHA), the guidelines of the Standard Operating Procedure issued by the Centre on December 29, 2011, would take care of the migrants or refugees from other countries, including Sri Lanka and Myanmar.

OCT 19

India-U.K. form Joint Working Group to further defence cooperation

- Defence industry organisations from India and the U.K. have decided to create a new Defence Industry Joint Working Group (JWG) for more effective cooperation.
- It was decided on the sidelines of DefExpo 2022 in Gandhinagar on October 18, 2022. DefExpo-2022 has representation from 20 U.K. defence companies.
- The JWG is part of an ongoing initiative between the two countries to strengthen the defence and security partnership.





- The U.K. recently issued its first Open General Export License in the Indo-Pacific region to India, shortening delivery times for defence procurement.
- The U.K. industry is already integrating Indian defence suppliers into their global supply chain.
- The Royal Air Force (RAF) recently conducted a subject matter expertise exchange with Defence Research and Development Organisation (DRDO) during the visit of Eurofighter Typhoon, Voyager and A-400 in New Delhi and also held joint-flying exercises with the Indian Air Force (IAF).

Grazing animals key to long-term soil carbon stability: IISc study

- The 16-year-long study carried out by CES and DCCC researchers states that large mammalian herbivores like the Yak and Ibex play a crucial role in stabilising the pool of soil carbon in grazing ecosystems such as the Spiti region in the Himalayas.
- Experimental removal of grazing by herbivores from such ecosystems was found to increase the fluctuations in the level of soil carbon, which can have negative consequences for the global carbon cycle.
- According to the study, since soil contains more carbon than all plants and the atmosphere combined, it is important to ensure its persistence.
- When plants and animals die, dead organic matter remains in the soil for a long duration before microbes break it down and release carbon into the atmosphere as carbon dioxide.
- "The soil pool is a reliable sink for trapping carbon. Maintaining stable levels of carbon in the soil is therefore key to offsetting the effects of climate change".
- A key factor underlying the carbon level fluctuations was nitrogen.
- Depending on the soil conditions, nitrogen can either stabilise or destabilise the carbon pool.
- Grazing by herbivores, however, changes their interactions in ways that tip the balance in favour of the former.

Six new spider species discovered from across the country

• Arachnologists from the Centre for Animal Taxonomy and Ecology (CATE), Christ College, Irinjalakuda in Kerala have recently discovered six new species of spiders from across the country.





• The new species of spiders were found from the Garo hills in Meghalaya, the Thar desert of Rajasthan, Wayanad Wildlife Sanctuary, Kottappara hills near Kothamangalam, Thumboormuzhi butterfly garden near Athirappilly, and the University of Calicut campus.

Siamspinops garoensis:

- Studies conducted on the Garo hills of Meghalaya resulted in the first spotting of the genus Siamspinops from India with a new species Siamspinops garoensis.
- This belongs to the family of flat spiders, Selenopidae.
- This spider lives in the crevices of rocks on hills.
- The yellowish brown spider measures about 10 mm in length.
- There is a black circle around its eyes and black patches on the abdomen.

Jumping spiders:

- Two new species of spiders coming under the family of jumping spiders (Salticidae) were discovered from the Thar desert of Rajasthan and the Kurichiyad forest ranges of the Wayanad Wildlife Sanctuary.
 - Afraflacilla miajlarensis, the Thar species, is characterised by white fine hairs on a black head and black horizontal lines on the abdomen. This spider stays among dry leaf blades.
 - Afraflacilla kurichiadensis, the Wayanad species, is characterised by red patches around the eyes and white hairs on the abdomen. The bulged first pair of legs are also a special feature of this species. This spider lives in the moist deciduous forest of Kurichiyad.

Feather- legged spiders:

• The next spider species lacks a venom gland and belongs to the family of feather- legged spiders (Uloboridae). This new species has been named as Philoponella rostralis, due to the presence of a beak like structure on the male reproductive organ.

Spiny-legged spiders:





• Two new species of spiders belonging to the family of spiny-legged spiders (Oxyopidae) have been discovered from the Thumboormuzhi butterfly garden, near the Athirappilly waterfalls, and on the Calicut University campus.

What is nihonshu and why is Japan seeking a GI tag?

- This is the first time a product from Japan has filed for a tag at the Geographical Indication Registry in Chennai.
- In Japan, nihonshu is regarded as a special and valuable beverage made from fermenting rice.
- People traditionally drink nihonshu on special occasions, such as festivals, weddings or funerals, but it is also consumed on a daily basis. Thus, it is an integral part of the lifestyle and culture in Japan.
- The sake market (almost all are nihonshu) is the second largest brewed liquor (such as beer) market in Japan.
- For making nihonshu three main raw materials rice, koji-kin (a type of fungal spore) and water are required.
- The production of nihonshu follows an alcoholic fermentation method called parallel multiple fermentation and involves raw material treatment, koji making, starter culture making, mash making, pressing, heat sterilisation and bottling.
- The rice and koji used should originate in Japan.
- The economy of Japan was based around rice, which was used as a sort of quasi-money before the establishment of a monetary economy in the Meiji period (1869-1912).
- As a result, nihonshu production was thoroughly under the government's control.
- As nihonshu's production became more industrialised in the Edo period (1603-1868), those who had special licences began hiring many farmers in the agricultural off-season.
- They gradually won a reputation as craftsmen, which resulted in the establishment of the hierarchical Toii system (Toii is the person responsible for sake brewing), likened to an apprenticeship or guild system.

U.S. returns 307 antiquities, valued at nearly \$4 million, to India





- Vishnu and Lakshmi with Garuda, dating to the 11th century C.E., which was allegedly stolen from a temple in Central India.
- A Chola-era Sambandar bronze idol, a Chola-era Devi idol in stone, bronze idols of Vinayaga, Narasimha with Lakshmi, a wooden idol of Muruga and wooden chauri bearers are other items that had been taken from Tamil Nadu.
- "Antiquity" is an article or object that is at least 100 years old.
- It could be a coin, sculpture, painting or epigraph, or any object or article taken from a building or a cave, or anything that illustrates the science, art, crafts or customs or religion or literature of a bygone age, or anything of historical interest.
- If it is a manuscript or record of any scientific, historical, literary or aesthetic value, it should be at least 75 years' old.
- An art treasure is a human work of art, other than an antiquity, declared to be a treasure by the Centre for its artistic value after the artist's death.
- Antiquities in India are governed by The Antiquities and Art Treasures Act, 1972 which falls within the purview of the Archaeological Survey of India ("ASI"), Union Ministry of Culture.
- Possession of an unregistered antiquity is a punishable offence under law.
- Section 14(3) of the Act makes it mandatory for "every person who owns, controls or is in possession of any antiquity" to register it before a registering officer within 15 days of its coming into his control or possession and obtain a certificate of registration.
- Antiquities can be sold, but only by a licensed person. However, Section 3 of the Act prohibits export of an antiquity by anyone other than the Centre or its agencies.
- A jail term of six months, or with fine, or both. Besides, the antiquity is also liable to be confiscated.

PM reviews the progress of National Maritime Heritage Complex at Lothal, Gujarat

- The Rs.3500 crore project is being built at the historic Indus Valley Civilization region of Lothal in Gujarat under the Sagarmala Scheme of the Ministry of Ports, Shipping and Waterways.
- NMHC is to be developed as a first of its kind in the country dedicated to the legacy of Maritime Heritage of India, to showcase India's rich and diverse maritime glory.





- Lothal was one among the prominent cities of the traditional Harappan civilization dating to 2400 BC, located in Gujarat, a crucial western state of India.
- It is located along the **Bhogava river**, a tributary of Sabarmati, in the Gulf of Khambat.
- Archaeological excavations have discovered the oldest man-made dockyard, over 5000 years old, in Lothal.

Lok Sabha Speaker Shri Om Birla to address the National Conference on Tourist Police Scheme on 19th Oct

- The agenda of the Conference is implementation of uniform Tourist Police Scheme at pan-India level for developing the tourist specific policing.
- It also aim to provide safer ecosystem to the foreign and domestic tourists in and around tourist destinations.
- Under the scheme, a pool of trained policemen would be made available to render policing service to the tourists and would control the crimes at the places of tourist interest.
- The rules of the district police of the concerned state shall be applicable to the Tourist Police, unless the contrary appears from the content or from rules in this scheme.
- Tourist Police Station will work under the jurisdiction of district police (Superintendent of Police) for all policing purpose.

First 11 awardees of WISER programme to promote participation of women in international R&D and industry projects facilitated

- It was launched by Indo-German Science & Technology Centre (IGSTC) for encouraging women researchers in joint R&D projects.
- WISER will enable gender equality and women's participation in Science and Technology through IGSTC's program.
- This programme will be in addition to the ongoing flagship 2+2 program of the Centre.
- This program by IGSTC, a joint initiative of the Department of Science and Technology (DST), Government of India and the Federal Ministry of Education and Research (BMBF), Government of Germany, will support women scientists holding regular/long term research positions in academia or research institutes/industry.





Union Minister Dr Jitendra Singh launches Single Integrated Pensioners' Portal aimed at "Ease of Living" for the Central Government Pensioners

- Single Integrated Pensioners' Portal developed in collaboration with State Bank of India and aimed at "Ease of Living" for the Central Government Pensioners.
- All the remaining 16 Pension disbursing banks shall now begin their integration with BHAVISHYA.
- Bhavishya 9.0 version was being released recently with its integration with the Pension Disbursing Banks.

BHAVISHYA:

- BHAVISHYA is a Portal for Pension Payment and Tracking System is being integrated with Pension Seva portal of SBI and will enable Pensioners to get all information and services at one place with single login.
- On completion of all phases of this integration the retirees can choose a Bank and Branch for opening an online Pension Account, check their monthly pension slips, Form 16, Status of Life Certificate as well as change their Pension Disbursing Bank through BHAVISHYA.
- 'Bhavishya' platform was made mandatory for all central government departments since 01.01.2017.
- BHAVISHYA has recently been rated as the 3rd best portal among all Government of India service portals by National e-Governance Service Delivery Assessment (NeSDA).
- The following portals have now been merged with BHAVISHYA window: CPENGRAMS, ANUBHAV, ANUDAAN, SANKALP & Pension DASHBOARD.

National Metallurgist Award- 2022; Last date of Receiving of Application extended to 31st October 2022

- National Metallurgists Day Awards, was instituted in 1962 by the then Ministry of Steel & Mines.
- It aims to recognize and honor outstanding contributions of Metallurgists in the metallurgical field covering operation, research, design, education, waste management, energy conservation and their specific contribution to achieve objectives of ATMA NIRBHAR BHARAT.





- The awards are given on an annual basis, only to Indian nationals.
- Nominations for the award shall be invited online on the Ministry of Steel's Portal or the centralized portal being developed by Ministry of Home Affairs. Nominations will be through companies/ organizations or from the public through self-nomination.
- The first award was given in 1963 and subsequently every year thereafter.

OCT 20

Tamil Nadu's mission to save the critically endangered vultures

- The committee, which has a two-year tenure, will take steps for monitoring the conservation and recovery of existing vulture sites and mapping of vulture populations across the State for creating safe zones.
- It will work to eliminate the use of toxic veterinary drugs (Diclofenac), the main reason for vulture fatalities.
- Prevention of poisoning of cattle carcasses, the principal food of vultures, is also one of the responsibilities of the newly formed committee.

In Tamil Nadu, four species of vultures are found —

- the Oriental white-backed vulture,
- the long-billed vulture,
- the red-headed vulture, and
- the Egyptian vulture.
- The first three are residents and can be found in the landscapes of the Nilgiris and Sathyamangalam.
- There is evidence of Egyptian vulture breeding only at one site in Dharmapuri.





Vulture population:

- 96% of India's vulture population declined between 1993 and 2003.
- Therefore, the Central government put into place two action plans to protect the species at the national level the first in 2006 and the second, ongoing plan for 2020-2025.
- One of the important action points in this nationwide plan is the formation of State-level committees to save the critically endangered population of vultures.

Vulture species in India:

- 9 species of vultures are found in India.
- Of these nine species, 4 are listed as Critically Endangered species of Vultures and one as endangered species in IUCN red list of endangered species.

Species of Vultures found in India and their Conservation Status:

- Indian Vulture or Long-billed vulture (Gyps indicus)-Critically Endangered
- Indian White-backed Vulture (Gyps bengalensis)-Critically Endangered
- Red-headed Vulture (Sarcogypscalvus)Critically Endangered
- Slender-billed Vulture (Gyps tenuirostris)- Critically Endangered
- Egyptian Vulture (Neophronpercnopterus)- Endangered
- Cincerous Vulture (Aegypiusmonachus)- Near Threatened
- Bearded Vulture (Gypaetusbarbatus)-Near Threatened
- Himalayan Vulture (Gyps himalayansis)-Near Threatened
- Griffon Vulture (Gyps fulvus)- Least Concern

Govt. to launch Swadesh Darshan 2 with chosen destinations from 15 States

- Fifteen States are part of the first phase which include Madhya Pradesh, Karnataka, Tamil Nadu, Uttar Pradesh, and Maharashtra.
- The initiative is being taken as part of the first phase of the 'Swadesh Darshan 2'.
- Some of the prominent places identified are Jhansi and Prayagraj in Uttar Pradesh, Gwalior, Chitrakoot and Khajuraho in Madhya Pradesh and Ajanta and Ellora in Maharashtra.





- It is promoted as part of India's new domestic tourism policy which moves away from theme-based tourist circuits and focuses on revving up destination tourism.
- The Swadesh Darshan Scheme was launched by the Centre in 2014-15 for the integrated development of theme-based tourist circuits.
- Under the scheme, the Ministry of Tourism provides financial assistance to State governments, Union Territory Administrations or Central Agencies for development of tourism infrastructure in the country.
- The Swadesh Darshan scheme is 100% centrally funded.
- According to the third Tourism Satellite Account for 2017-18, 2018-19, and 2019-20, the contribution of tourism to the employment of the country is 14.78%, 14.87 % and 15.34 % respectively.
- The total jobs generated by the by tourism are 72.69 million (2017-18), 75.85 million (2018-19) and 79.86 million (2019-20).

11% of world's crypto, Web3 talent is in India: NASSCOM

- The study titled "The India Web3 Start-up Landscape, An Emerging Technology Leadership Frontier," was aimed at promoting a broader understanding of the diverse possibilities with Web3 and the landscape of Web3 start-ups in the country.
- According to the study, in the last two years, Indian Web3 start-ups have grown to a 450-plus community with four unicorns.
- Between 2021-2022 alone, India registered more than 170 new Web3 start-ups, yielding over 50% CAGR growth since 2015.
- While global response to Web3 was still shaping up, India's growing economy, demographic dividend, and exponential adoption of emerging technologies across sectors, positioned the country to become one of the highest growth markets for Web3 globally.
- Web 3.0 or Web3 is the third generation of the World Wide Web.
- It is an evolving term that refers to a "read-write-execute" web with decentralization as its bedrock.
- It speaks about a digital world, built leveraging the blockchain technology, where people are able to interact with each other without the need of an intermediary.
- Web 3.0 will be driven by Artificial Intelligence and machine learning.
- It has now become a buzzword incorporating concepts such as blockchain technologies, metaverse and non-fungible tokens (NFTs).





Ministry of Panchayati Raj organizes two-day National Training Workshop on People's Plan Campaign–2022 – Sabki Yojana Sabka Vikas

- Ministry of Panchayati Raj organises People's Plan Campaign (PPC) every year (Sabki Yojana Sabka Vikas) from 2nd October to 31st December.
- This year also PPC-2022 was launched on 2October, 2022 to prepare District/ Block/ Gram Panchayat Development Plans for the year 2023-2024.

nd

- The Ministry of Panchayati Raj has evolved thematic approach aggregating 17 Sustainable goals into 9 broad themes of Localised Sustainable Development Goals (LSDGs) at grassroots level.
- In this PPC 2022, Panchayats will prepare Gram Panchayat Development Plan (GPDP) on these 9 themes by adopting Whole-of- Government and Whole-of-Society approach.
- The Panchayat Development Plan aims to strengthen the role of elected representatives of Panchayats and SHG Women under DAY-NRLM in effective Gram Sabha.
- The Ministry's Plan document terms GPDP as a catalyst for transforming rural India and describes it as a comprehensive participatory process which involves full convergence with schemes of all related Central Ministries, line departments related to 29 subjects listed in the Eleventh Schedule of the Constitution.

Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM):

- DAY-NRLM aims at mobilizing rural poor households into **Self Help Groups (SHGs)** in a phased manner and provide them long-term support to diversify their livelihoods, improve their incomes and quality of life.
- Most of Mission's interventions are being implemented and scaled up by the SHG women themselves who are trained as community resource





persons (CRPs) – Krishi Sakhis, Pashu Sakhis, Bank Sakhis, Bima Sakhis, Banking Correspondent Sakhis etc.

• The Mission is also working on empowering the SHG women through awareness generation and behaviour change communication on issues like domestic violence, women's education and other gender related concerns, nutrition, sanitation, health etc.

14th Tribal Youth Exchange Programme held in New Delhi

- Nehru Yuva Kendra Sangathan has been organizing Tribal Youth Exchange Programme since 2006 for the development and main streaming of Tribal Youth in collaboration and financial support from Department of Left Wing Extremism (LWE), Ministry of Home Affairs, Govt. of India.
- During this financial year 2022-23, 26 Tribal Youth Exchange Programmes are being organized by NYKS across the country.
- The aim of this programme is to sensitize LWE Tribal Youth to Rich Cultural Heritage of India.
- It also aims to enable them to appreciate the concept of unity in diversity, expose them to development activities and industrial advancement and at help the tribal youth to develop emotional linkages with their peer groups in other part of the country and enhance their self-esteem.

AK-203 assault rifles production to begin by year-end

- Under an over ₹ 5,000 crore contract, over 6.1 lakh AK-203 assault rifles will be manufactured in India with technology transfer from Russia.
- The Indo-Russia Rifles Private Limited was set up in 2019 to produce the Russian-origin Kalashnikov assault rifles in Korwa Ordnance Factory in Amethi district.
- AK203 is the advanced version of the Kalashnikov assault rifle family, the first of which was the AK-47.
- The AK-203 assault rifles will replace the INSAS rifles that have been in service for over three decades.
- The weapon fires 7.62×39 cartridges and weighs 3.8 kg without ammo.
- The modern version of the Russian-origin rifle has an effective range of 300 metres or more than three football fields, is lightweight and robust.





- As per a report by the Stockholm International Peace Research Institute, India figures amongst the key arms importing destination globally.
- India has for decades been Russia's largest arms importer, with Russian weapons accounting for nearly 70% of India's military arsenal.
- The two nations have earlier collaborated to manufacture the BrahMos missiles, which are a key component of India's missile defence systems.
- Furthermore, the defence trade between India and Russia has crossed \$15 billion since 2018, in the backdrop of some big deals including the \$5.43 billion S-400 long range air defence systems.

What is avian flu, the disease afflicting viral TikTok emu Emmanuel?

- Avian influenza is a disease caused by an influenza A virus, affecting birds across many species.
- It can have significant consequences for the poultry industry, due to its potential impact on bird health, production and even international trade.
- Although avian influenza does not usually infect people, it is considered a zoonotic virus. That means it can be transmitted to humans through contact with infected birds, and sporadic cases have been seen when outbreaks happen in poultry.
- Some avian influenza viruses are more pathogenic than others.
 - Pathogenic means disease-causing, so if highly pathogenic avian influenza gets into a poultry farm, it can cause sudden and significant mortality.
- Symptoms:
 - Avian influenza infections in humans can cause a range of clinical symptoms, from mild upper respiratory symptoms to severe pneumonia.
- Some strains of avian influenza, such as highly pathogenic H5N1 and H7N9, can cause significant disease in humans, and in some instances even death.
- Treatment:
 - Recommended standard treatment for humans is with antiviral drugs, and will depend on individual circumstances and severity of the symptoms.

Classification of Influenza:





- The influenza virus, which causes illness, is classified by WHO into four types: A, B, C, and D.
- According to the US Centers for Disease Control and Prevention (CDC), only the influenza A and B viruses are known to cause epidemics.
- The C type virus usually causes mild respiratory illness, while the D type virus typically affects cattle and is not known to infect humans.
- Only the influenza A virus is divided into subtypes and the subtype is based on two proteins on the surface of the virus, hemagglutinin (H) and neuraminidase (N).

Impact of influenza:

- Humans can be infected with avian, swine and other zoonotic influenza viruses, such as
 - Avian influenza virus subtypes A (H5N1), A (H7N9), and A (H9N2)
 - Swine influenza virus subtypes A (H1N1), A (H1N2) and A (H3N2)
- According to the WHO, influenza is known to affect 5-10% of adults and 20-30% of children across the world every year.

Indigenous UAV Rustom-2 to complete user trials by August 2023

- Rustom-2 is also known as **Tapas-BH** (Tactical Airborne Platform for Aerial Surveillance-Beyond Horizon 201).
- It has been designed and developed by the Aeronautical Development Establishment (ADE), Bengaluru, with the production partners being Hindustan Aeronautics Ltd. (HAL) and Bharat Electronics Ltd.
- It is powered by a small turbofan engine. The engine is Russian TRDD-50MT originally designed for cruise missiles.
- It is being developed to carry out surveillance and reconnaissance (ISR) roles and is capable of carrying different combinations of advanced payload and capable of auto landing, among others.
- Its navigation was done using GAGAN satellites through the onboard SATCOM system.
- High endurance UAVs are a priority requirement for the Indian armed forces especially in view of the stand-off with China in eastern Ladakh.

India Post Payments Bank (IPPB) and Reserve Bank Innovation Hub (RBIH) Collaborate for innovations in Financial Product and Services





- The Reserve Bank Innovation Hub (RBIH) is a wholly-owned subsidiary of the Reserve Bank of India (RBI).
- It was set up to promote and facilitate an environment that accelerates innovation across the financial sector.
- RBIH will provide the platform to anchor a shared vision among all financial ecosystem stakeholders and aid them in crafting forward-looking innovation strategies while addressing the most pressing issues in the Indian financial sector.
- The organisation serves as a focal point to position India as a global innovation hub for a network of financial services providers, fintech innovation hubs, policymakers, technologists, academia, and the investor community.
- The network will be empowered to ideate, incubate new capabilities, and enable access to sustainable, secure, and frictionless financial services for over a billion Indians.

Sri Lankan Author Shehan Karunatilaka Wins Booker for 'The Seven Moons of Maali Almeida'

- The Booker Prize for Fiction, formerly known as the Booker–McConnell Prize and the Man Booker Prize, is a literary prize.
- It was established in
- Objective:
 - To promote the finest in fiction by rewarding the best novel of the year written in English.
- Eligibility:
 - The Booker Prize awards any novel originally written in English and published in the UK and Ireland in the year of the prize, regardless of the nationality of their author.
 - The novel must be an original work in English (not a translation)
 - It must be published by a registered UK or Irish imprint; selfpublished novels are not eligible.
- Prize Money:
 - The winner receives £50,000 as well as the £2,500 awarded to each of the shortlisted authors. In this case, thanks to the award being shared, the prize money would be split between the two winners.
- Organizations involved:





- Man Group:Man Group is an active investment management firm founded in 1783. It has sponsored the Man Booker Prize since 2002
- The Booker Prize Foundation: It is a registered charity established in 2002. Since then it has been responsible for the award of the Man Booker Prize for Fiction, and for the Man Booker International Prize since its inauguration in 2005.

OCT 21

Army's 4th round of emergency procurement to be from India

- The Indian Army, which has made three tranches of Emergency Procurements (EP) in the last few years, is preparing for a fourth round of EP which will be entirely from the domestic industry.
- Three tranches of EPs were executed under which 68 contracts worth ₹ 6,000 crore were placed.
- Emergency financial powers were granted to the armed forces by the Defence Ministry in the past under which they could procure weapons systems up to ₹300 crores on an "urgent basis without any further clearances to cut short the procurement cycle.
- It also gives them an opportunity to test various systems in the field before going in for larger acquisition through the capital budget route.

In Kerala, 'honesty shops' on school campuses help inculcate virtues among children

- It was launched in 2008.
- It is part of the Student Police Cadet (SPC) project.





- It was conceived to inculcate better civic sense among students and mould them as responsible youth who will react positively to the demands of society.
- There is no salesman at these counters and students can drop the money for each item in the collection box kept on a table.

German Chancellor says Russia using 'scorched-earth tactics': What is this strategy

- Scorched earth tactics form part of a military strategy which seeks to destroy anything that could be of use to the enemy, including energy supplies, bridges, provision stores, agricultural fields, road and railway links, etc.
- The destruction could be carried out by the enemy, or by the retreating army of a country which does not want invaders to use its resources.
- Harming civilians as part of this strategy has been banned under the 1977 Geneva Convention.
- The strategy seeks to deplete the enemy's resources to sustain warfare, and also break their morale by inflicting heavy hardships on combatants and non-combatants alike.
- According to the Oxford Reference, the "term was first used in English in 1937 in a report of the Sino-Japanese conflict, and is apparently a translation of Chinese jiāotŭ".

Past Instances:

- Scorched earth policy has been part of warfare since ancient times, with the nomad Scythians using the tactics in their war against the Persian Achaemenid Empire led by King Darius the Great (who ruled 522 BCE to 486 BCE).
- A notable example of the use of this tactic came during the American civil war in 1864, when Union General William Tecumseh Sherman and his soldiers burnt everything in sight as they marched through Confederate areas.
- In India, the armies of Maratha leader Chhatrapati Shivaji were known for their scorched earth tactics.

Actor Anna May Wong, The Asian-American To Be Featured On US Currency





- Her birth name was Wong Liu-Tsong.
- She was born to second-generation Chinese immigrants in Los Angeles, Wong started her film career at the age of 14 as an extra in The Red Lantern (1919).
- She gained critical acclaim only three years later when she played the leading role in The Toll of the Sea (1922), one of the first Technicolour films.
- She was also the first Asian American leading actor in a television show, The Gallery of Madame Liu-Tsong (1951).
- The American Women Quarters Program is a four-year program that celebrates the accomplishments and contributions made by women to the development and history of U.S.A.
- Beginning in 2022, and continuing through 2025, the U.S. Mint will issue up to five new reverse designs each year.
- The American Women Quarters may feature contributions from a variety of fields, suffrage, civil rights, abolition, government, humanities, science, space, and the arts. The women honored will be from ethnically, racially, and geographically diverse backgrounds.

October storm in Bay of Bengal after 3 years: When, where it is likely to hit

- The months of October-November and May-June see storms of severe intensity develop in the North Indian Ocean comprising the Bay of Bengal and the Arabian Sea with an average of five developing in a calendar year.
- In the past 131 years, October saw 61 storms develop in the Bay of Bengal, according to the Regional Specialised Meteorological Centre (RSMC).
- The east coast, notably Odisha, has faced many of its severest storms in October, including the Super Cyclone of 1999.
- After the withdrawal of the Southwest monsoon, there is a rise in ocean heating, which leads to rise in sea surface temperature over the Bay of Bengal.
- The atmospheric moisture availability over the ocean region, too, is higher.
- So, when remnant systems from the South China Sea reach the Bay of Bengal, they get conducive conditions, aiding the formation and intensification of cyclones in October.





- In some years, ocean-atmospheric factors hinder this phenomenon.
- For instance, in 2020, weak La Nina conditions along the equatorial Pacific Ocean prevented a cyclonic formation near India's coasts.
- In comparison with the Bay of Bengal, only 32 storms have developed in the Arabian Sea in October since 1891.
- Climatologically too, the IMD states that of the five storms formed in the North Indian Ocean in a calendar year, four are in the Bay of Bengal and one in Arabian Sea.

This September was 5th warmest in 143 years: NOAA report

- According to NOAA latest report, this year's September was the fifth warmest in 143 years, with the recorded global average temperature rising by 0.88 degree Celsius over the 20th century average.
- September 2022 marked the 46th-consecutive September and the 453rd-consecutive month with temperatures above the 20th-century average.
- Higher than normal temperatures were recorded over Africa, north America, southern Asia, Atlantic, and northern South America regions.
- Near normal or cooler temperatures were recorded over Europe, northern Asia, most parts of India, and south-eastern Pacific Ocean.
- This was mainly due to above average rainfall over northern and southern Asia, Australia, central Europe, Caribbean islands and south-eastern US.
- In September 2022, the sea-ice extent coverage dropped to the eighth lowest ever.
- The Arctic sea ice now cover 5.95 lakh square miles below the 1981-2010 average, whereas the Antarctica sea ice is 1.90 lakh square miles below average.

National Oceanic and Atmospheric Administration (NOAA):

- The National Oceanic and Atmospheric Administration (NOAA) is a U.S. government agency that was formed in 1970 as a combination of several different organizations.
- The purpose of NOAA is to study and report on the ocean, atmosphere, and coastal regions of Earth.

National Media Award for best campaign on voter's education & awareness-2022





- The awards are to recognise the outstanding contribution by Media Houses to promote electoral participation by creating awareness about accessible elections, educating people about the electoral process and raising awareness among the general public about the relevance and importance of voting and registration.
- The awards will be in the form of a citation, plaque and cash prize and will be presented on the National Voter's Day (25th January, 2023).
- The awards will be given in the following four categories:
 - Print Media
 - Electronic (Television) Media
 - Electronic (Radio) Media and
 - Online (Internet)/Social Media

Nearly 46 tonnes single-use plastic items seized, Rs 41 lakhs fined during special drive

- In a bid to reduce plastic pollution, India from July 1, 2022 banned 19 SUP items.
- Plastic carry bags of thickness less than 75 microns are also prohibited under the Plastic Waste Management Rules. Their thickness will have to be increased to 120 microns from December 31, 2022.
- Plastic wrapping material less than 50 microns in thickness and plastic sachets used for selling and storing tobacco, pan masala and gutkha are also not allowed.

Single-use plastics:

- Single-use plastics, often also referred to as disposable plastics, are commonly used for plastic packaging and include items intended to be used only once before they are thrown away or recycled.
- Application:These include, among other items, grocery bags, food packaging, bottles, straws, containers, cups and cutlery
- Benefits:Single-use plastic bags are widely used because they are strong, cheap and hygienic ways to transport goods.
- Environmental impact: They can take up to thousands of years to decompose, contaminating soil and water, and posing significant ingestion, choking and entanglement hazards to wildlife on land and in the ocean.





Mission DefSpace launched by PM Modi in Gujarat

- The space programme aims to develop innovative solutions for the Defence Forces through industry & startups.
- Importantly, the initiative will prepare India for future possibilities in space domain and will also increase the country's preparation further.
- Under Mission DefSpace, 75 challenges are being opened to get innovative solutions, based on the defence requirements in the space domain.
- The programme will focus on various challenges in this area that have been reviewed and identified by the three defence services.
- There are more than 60 developing countries with whom India is sharing its space science. Many African countries and many other small countries are benefiting from this.
- The 'South Asia satellite' is an effective example of this. By next year, ten ASEAN countries will also get real-time access to India's satellite data.

PM & UNSG Launch Mission LiFE at Statue of Unity, Gujarat

- It was first proposed by the Prime Minister at COP 26, Mission LiFE.
- It envisioned as an India-led global mass movement that will nudge individual and collective action to protect and preserve the environment.
- The global movement will showcase sustainable goals and climate actions taken by countries and individuals around the world.
- It makes the fight against climate change democratic, in which everyone can contribute with their respective capacities.
- It emboldens the spirit of the P3 model, i.e. Pro Planet People.
- It functions on the basic principles of 'Lifestyle of the planet, for the planet and by the planet'.
- It aims at following a three-pronged strategy for changing people's collective approach towards sustainability.
- This includes nudging individuals to practice simple yet effective environment-friendly actions in their daily lives (demand), enabling industries and markets to respond swiftly to the changing demand (supply), and to influence government and industrial policy to support both sustainable consumption and production (policy).





OCT 22

Pakistan out of FATF's grey list after 4 years

- The FATF is a global watchdog that was founded to tackle money laundering initially but its role became prominent post the 9/11 terror attacks. Following the attacks, the FATF expanded its operations and included terror financing under its purview.
- There are currently **39 members of the FATF; 37 jurisdictions and 2 regional organisations** (the Gulf Cooperation Council and the European Commission).
- The FATF maintains two lists
 - \circ a blacklist and a grey list.
- Countries on its blacklist are those that the watchdog deems noncooperative in the global effort to curb money laundering and terrorfinancing.
- The **grey list** are officially referred to as 'Jurisdictions Under Increased Monitoring'.
 - 23 countries remain under watch.
 - Among these countries are the Philippines, Syria, Yemen, the United Arab Emirates, Uganda, Morocco, Jamaica, Cambodia, Burkina Faso, and South Sudan, and the tax havens of Barbados, Cayman Islands, and Panama.
- It constitutes those nations that present significant risks of money laundering and terror-financing but which have committed to working closely with the FATF in the development and implementation of action plans that address their deficiencies.
- If the country is not actively tackling money laundering or terror funding, it is then blacklisted.
- So far, only two countries have been blacklisted, they are Iran and North Korea.

Viral spillover risk increases with climate change in High Arctic lake sediments

• In this study, while it was found that the risk of viral spillovers increases with changes in the environment at a particular location, driven by global





warming, this by itself does not guarantee a higher possibility of a pandemic occurring via viruses here.

- This is because there is another important link in the process.
- As long as viruses and their 'bridge vectors' that act as hosts and lead to their spread are not simultaneously present in the environment, the likelihood of dramatic events probably remains low.
- Climate change leads to shifts in species ranges and distributions, new associations can emerge, bringing in vectors that can mediate viral spillovers, as simulations recently highlight.

'Viral spillover':

- Viruses are some of the most abundant entities on earth, but they need to infect a host's cell in order to replicate.
- According to the research, these virus/host relationships seem relatively stable within superkingdoms, the major groupings of organisms.
- However, below this rank, viruses may infect a new host from a reservoir host (in which it usually resides) by being able to transmit sustainably in a novel host a process defined as 'viral spillover'.

Draft of National Credit Framework (NCrF) for public consultation

- National Credit Framework is a next generation, multidimensional instrument under National Education Policy (NEP).
- National Credit Framework (NCrF) aims to enable the integration of academic and vocational domains to ensure flexibility and mobility between the two.
- It is an umbrella framework for skilling, re-skilling, up-skilling, accreditation & evaluation encompassing our people in educational & skilling institutions and workforce.

'Credits' in the education system:

- Credits are essentially a "recognition that a learner has completed a prior course of learning, corresponding to a qualification at a given level", according to the draft document.
- In other words, it is a way of quantifying learning outcomes. For example, the Choice-Based Credit System (CBCS) followed by many universities in India.





Credit frameworks:

- Credit frameworks are guidelines to be followed by schools, colleges and universities in adopting the credit system.
- For example, the National Higher Education Qualification Framework (NHEQF) lays out the guidelines for higher educational institutions that want to implement the credit system.

NCrF different from the existing frameworks:

- The proposed NCrF seeks to integrate all the frameworks under one umbrella.
- Moreover, it also brings the entire school education system under the ambit of credits for the first time.
- So far, only the National Institute of Open Schooling followed a credit system. The NCrF also covers skill and vocational education.

Central committee to probe 'illegal' felling of trees in Corbett National Park: NGT

- The NGT's move came after reports on the felling of trees in the Corbett Tiger Reserve (CTR).
- The report had quoted a Forest Survey of India (FSI) report stating that over 6,000 trees were illegally cut to pave the way for the Pakhro tiger safari project at the tiger reserve.

Jim Corbett National Park:

- Jim Corbett National Park is a part of the larger Corbett Tiger Reserve
- It is located in Nainital district of Uttarakhand.
- The park encompasses the Patli Dun valley formed by the Ramganga river.
- The national park was established in 1936 as Hailey National Park to protect the endangered Bengal tiger.
- It is named after Jim Corbett who played a key role in its establishment.
- Key facts:
 - It is the oldest national park in India.
 - It was the first area to come under the Project Tiger initiative in 1973.





Are critically endangered Great Indian Bustards now migrating to Pakistan?

- The Great Indian Bustard, found mainly in the Indian subcontinent, is the flagship grassland species of India.
- It is one of the largest flying birds in the world, and India's heaviest flying bird.
- The male bird weighs upto 12-15 kg and female bird up to 5-8 kg.
- Physical description:
 - Black crown on the forehead contrasting with the pale neck and head.
 - The body is brownish and the wings are marked with black, brown and grey.
- Diet:
 - They feed on grass seeds, insects like grasshoppers and beetles, and sometimes even small rodents and reptiles. The species primarily feed on meswak, sewan grass.
- Distribution:
 - Its population of about 150 in Rajasthan accounts for 95% of its total world population.
 - They are mainly in Jaisalmer district of Rajasthan, including the Desert National Park which is the natural habitat of the species.
 - Grasslands of Kutch in Gujarat which is home to second-largest bustard population in India.
 - Arid regions of Maharashtra (Solapur), Karnataka (Bellary and Haveri) and Andhra Pradesh (Kurnool)
 - It is the State bird of Rajasthan.
- Conservation status:
 - Listed in Schedule I of the Indian Wildlife (Protection)Act, 1972,
 - Listed in Appendix I of CITES,
 - Listed as Critically Endangered on the IUCN Red List.
- Breeding season:
 - $\circ~$ The breeding season spans from March to October.
- Captive breeding:
 - The captive breeding of GIBs was taken up in the DNP through a project executed by the Dehradun-based Wildlife Institute of India in 2019.





- As many as 24 GIB chicks are being reared in DNP by a team supported by the International Fund for Houbara Conservation of United Arab Emirates.
- Threats:
 - Occasional poaching outside Protected Areas,
 - Habitat loss due to widespread agricultural expansion, infrastructural development such as irrigation, roads, electric poles, as well as mining and industrialization,
 - Bustards, with their poor frontal vision and heavy bodies, have also died due to collision with high tension electric wires.

Centre launches programme to strengthen Kashi-Tamil Nadu bond

- 'Kashi-Tamil Sangamam' programme would be held from November 16 to December 16.
- This programme, which would be a part of the 'Ek Bharat Shreshtha Bharat' initiative which is aimed at rekindling the civilisational link between the new Kashi and Tamil Nadu — both deep centres of knowledge.
- Building a heritage bridge for the new generation was a key feature of the National Education Policy.
- As part of the programme, 2,500 people divided into 12 groups would be travelling to Varanasi by train during the period.
- The journey points in Tamil Nadu would be Chennai, Rameswaram and Coimbatore.
- The groups would include students, teachers, artisans and people from various walks of life.
- The tours would include seminars, lectures, group meetings and visits to the Kashi Vishwanath temple and centres of important Tamil cultural heritage in Varanasi.
- The knowledge partners for the programme would be IIT-Madras and the Banaras Hindu University, while the Uttar Pradesh government would be the host State.

Don't wait for complaints to act against hate speech, Supreme Court tells police

• There is no specific legal definition of 'hate speech'.





- In general, hate speech is considered a limitation on free speech that seeks to prevent or bar speech that exposes a person or a group or section of society to hate, violence, ridicule or indignity.
- Provisions in law criminalise speeches, writings, actions, signs and representations that foment violence and spread disharmony between communities and groups and these are understood to refer to 'hate speech'.

Article 19 and Hate Speech:

- Article 19(2) of the Constitution guarantees freedom of speech and expression to all citizens of India.
- This article is subjected to certain restrictions, namely, sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.
- Provisions in clauses (2) to (6) of Article 19 authorizes the State to restrict the exercise of the freedom guaranteed under the article.

Legal Provisions:

- Sections 153A and 505 of the Indian Penal Code are generally taken to be the main penal provisions that deal with inflammatory speeches and expressions that seek to punish 'hate speech'.
- Under Section 153A, 'promotion of enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony', is an offence punishable with three years' imprisonment.
- Section 505 of Indian Penal Code (IPC)makes it an offence to making "statements conducing to public mischief".
- Section 8 of Representation of the People Act, 1951 disqualifies a person from contesting election if he is convicted for indulging in acts amounting to illegitimate use of freedom of speech and expression.

U.P. bags top honours at PMAY-U Awards 2021

- The Mission will be implemented during 2015-2022.
- It is implemented by the Union Ministry of Housing and Urban Affairs (MoHUA).





- Mission:To achieve the goal of Housing for All in Urban areas by 2022, when the Nation completes 75 years of its Independence.
- Features:Under it, central assistance will be provided to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs for:
 - In-situ Rehabilitation of existing slum dwellers using land as a resource through private participation
 - Credit Linked Subsidy
 - Affordable Housing in Partnership
 - Subsidy for Beneficiary-led individual house construction/enhancement.
- Funding:Credit linked subsidy component will be implemented as a Central Sector Scheme while other three components will be implemented as Centrally Sponsored Scheme (CSS).
- Eligibility:All statutory towns as per Census 2011 and towns notified subsequently would be eligible for coverage under the Mission.

"Quality, quantity and continuity" are the core principle for success of Jal Jeevan Mission (JJM) – Vice President

- Mission Objective: To ensure HarGharJal (piped water supply) to all rural households by 2024 under the Jal Jeevan Mission.
- Executing agency: Department of Drinking Water and Sanitation under the Jal Shakti Mantralaya.
- Strategy:
 - This Mission will focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture.
 - The Mission will converge with other Central and State Government Schemes to achieve its objectives of sustainable water supply management across the country.
- Funding Pattern:
- The fund sharing pattern is in the proportion of:
 - 50:50 between Centre and States,
 - 90:10 for Himalayan and North-Eastern <u>States.In</u> case of UTs, 100% funding is provided by the Central government.





Uttarakhand Governor felicitates astronomers, encourages young scientists at commemoration of 50 years of telescope

- It is a world-class telescope located near Nainital.
- The telescope at Manora Peak was established in 1972 when ARIES was known as the UP State Observatory (UPSO).
- It has been extensively used for optical observations of comets, occultation by planets and asteroids, star-forming regions and star clusters, variable stars, transients, active galactic nuclei, etc.
- Some of the breakthrough science results contributed by the telescope include the discovery of new rings around Saturn and the rings of Uranus.
- The instrumentation and science capabilities of ST have paved the way for setting up National and International facilities by ARIES, such as the 3.6m DOT and the 4 meter International Liquid Mirror Telescope at Devasthal.

OCT 23

Maharashtra withdraws 'general consent' to CBI:

The Maharashtra government has withdrawn "general consent" given to the Central Bureau of Investigation (CBI) to probe cases in the state.

What consent is necessary?

The CBI is governed by the Delhi Special Police Establishment Act that makes consent of a state government mandatory for conducting investigation in that state.

There are two kinds of consent:





Case-specific and general– Given that the CBI has jurisdiction only over central government departments and employees, it can investigate a case involving state government employees or a violent crime in a given state only after that state government gives its consent.

• "General consent" is normally given to help the CBI seamlessly conduct its investigation into cases of corruption against central government employees in the concerned state.

What does withdrawal mean?

It simply means that CBI officers will lose all powers of a police officer as soon as they enter the state unless the state government has allowed them.

• The decision means the CBI will now have to get consent from the state government for every case it registers in Maharashtra.

Under what provision can general consent been withdrawn?

In exercise of power conferred by Section 6 of the Delhi Special Police Establishment Act, 1946, the state governments can withdraw the general consent accorded.

Can withdrawal mean that the CBI can no longer probe any case?

No. The CBI would still have the power to investigate old cases registered when general consent existed. Also, cases registered anywhere else in the country, but involving people stationed in states which have withdrawn consent, would allow CBI's jurisdiction to extend to these states.

Sri Lankan Parliament passes 20th Amendment:

20th Amendment to Sri Lanka's Constitution was recently passed.

Highlights of the 20th Amendment:

- It envisages expansive powers and greater immunity for the Executive President.
- The Amendment rolls back Sri Lanka's 19th Amendment, a 2015 legislation that sought to clip presidential powers, while strengthening





Parliament. The new legislation in turn reduces the Prime Minister's role to a ceremonial one.

Why was the 19th Amendment introduced? (Have a brief overview):

It mainly sought to weaken the power of the presidency which the 18th amendment had greatly expanded.

The 18th amendment allowed four basic changes:

- 1. The President can seek re-election any number of times;
- 2. The ten-member Constitutional Council has been replaced with a fivemember Parliamentary Council;
- 3. Independent commissions are brought under the authority of the President; and,
- 4. It enables the President to attend Parliament once in three months and entitles him to all the privileges, immunities, and powers of a Member of Parliament other than the entitlement to vote.

The Anti-Corruption Working Group:

Saudi Arabia is hosting the first-ever Ministerial Meeting of the G-20 Anti-Corruption Working Group (ACWG) virtually.

About ACWG:

Established by G20 Leaders at the Toronto Summit in 2010.

- Responsible for updating and implementing the G20 Anti-corruption Action Plan.
- Reports to G20 Leaders.
- It cooperates closely with and supports the work of relevant international organizations, including the Organization of Economic Cooperation and Development, the United Nations, the World Bank, the International Monetary Fund and the Financial Action Task Force.

What is the G20?

The G20 is an annual meeting of leaders from the countries with the largest and fastest-growing economies. Its members account for 85% of the world's GDP, and two-thirds of its population.





• The G20 Summit is formally known as the "Summit on Financial Markets and the World Economy".

Genesis of G20:

After the Asian Financial Crisis in 1997-1998, it was acknowledged that the participation of major emerging market countries is needed on discussions on the international financial system, and G7 finance ministers agreed to establish the G20 Finance Ministers and Central Bank Governors meeting in 1999.

Full membership of the G20:

Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States and the European Union.

What is G20+?

The G20 developing nations, also called G21/G23/G20+ is a bloc of developing nations which was established on August 20, 2003.

Its origins can be traced to the Brasilia Declaration signed by the foreign ministers of India, Brazil and South Africa on 6th June 2003.

• The G20+ is responsible for 60% of the world population, 26% of the world's agricultural exports and 70% of its farmers..

What are govt securities?

The Reserve Bank of India (RBI) has announced that it had decided to purchase Government securities for an aggregate amount of ₹20,000 crore under Open Market Operations (OMO).

What are govt securities?

A government security (G-Sec) is a tradeable instrument issued by the central government or state governments.

Key features:

//iasgoogle.com/





- It acknowledges the government's debt obligations.
- Such securities can be both short term (treasury bills with original maturities of less than one year) or long term (government bonds or dated securities with original maturity of one year or more).
- The central government issues both: treasury bills and bonds or dated securities.
- State governments issue only bonds or dated securities, which are called the state development loans.
- Since they are issued by the government, they carry no risk of default, and hence, are called risk-free gilt-edged instruments.
- FPIs are allowed to participate in the G-Secs market within the quantitative limits prescribed from time to time.

Why are G-secs volatile?

G- Sec prices fluctuate sharply in the secondary markets. Factors affecting their prices:

- Demand and supply of the securities.
- Changes in interest rates in the economy and other macro-economic factors, such as, liquidity and inflation.
- Developments in other markets like money, foreign exchange, credit and capital markets.
- Developments in international bond markets, specifically the US Treasuries.
- Policy actions by RBI like change in repo rates, cash-reserve ratio and open-market operations.

What are monoclonal antibodies (mAbs)?

Serum Institute of India (SII) and the International AIDS Vaccine Initiative (IAVI) have announced an agreement with pharmaceutical major Merck to develop SARS-CoV-2 neutralising monoclonal antibodies (mAbs).

What are monoclonal antibodies (mAbs)?

They are man-made proteins that act like human antibodies in the immune system.





These antibodies are co-invented by IAVI and Scripps Research as 'innovative interventions' to address the COVID-19 pandemic.

CPI-IW base year revised to 2016:

The Labour and Employment Ministry has revised the base year of the Consumer Price Index for Industrial Workers (CPI-IW) from 2001 to 2016.

• This was revised to reflect the changing consumption pattern, giving more weightage to spending on health, education, recreation and other miscellaneous expenses, while reducing the weight of food and beverages.

Uses of CPI-IW: It is used for measuring inflation in retail prices and is also used to regulate the dearness allowance (DA) of government staff and industrial workers, as well as to revise minimum wages in scheduled employments.

Testimony of sexual assault victim enough for conviction:

The Supreme Court has recently held that:

- The sole and trustworthy evidence of a woman, who is a victim of a sexual offence, is enough to find her assailant guilty.
- A woman, who is the victim of sexual assault, is not an accomplice to the crime but is a victim of another person's lust and, therefore, her evidence need not be tested with the same amount of suspicion as that of an accomplice.

The court was confirming the punishment awarded to a man found guilty under the Protection of Children from Sexual Offences Act of sexually assaulting a 13-year-old child in Tamil Nadu.

Anti-tank guided missile (ATGM), Nag

DRDO recently carried out the final user trial of the third generation anti-tank guided missile (ATGM), Nag, at the Pokhran firing range.

• Developed indigenously by the Defence Research and Development Organisation (DRDO), the Nag ATGM can be launched from both- land as well as air-based platforms.





• With a range of 4-7 km, the missile is fitted with home-developed infrared seeker and avionics, the capabilities possessed by only a few nations in the world.

Tubarial salivary glands

- They are a set of salivary glands deep in the upper part of the throat.
- They were discovered recently by Scientists in the Netherlands.
- The glands are about 1.5 inches (3.9 centimeters) in length on average and are located over a piece of cartilage called the torus tubarius.
- The glands probably lubricate and moisten the upper throat behind the nose and mouth.
- The discovery may be important for cancer treatment.

Until now, there were three known large salivary glands in humans: one under the tongue, one under the jaw and one at the back of the jaw, behind the cheek.

"Life in Miniature" project:

- It is a collaborative project between the National Museum, New Delhi, Ministry of Culture, and Google Arts & Culture.
- Several hundred miniature paintings from the National Museum, New Delhi can be viewed online on Google Arts & Culture by people around the world under this project.
- The project uses technologies like machine learning, augmented reality and digitization with high-definition robotic cameras, to showcase these special works of art in a magical new way.





OCT 24

1962 India-China War

The boundary dispute that led to the 1962 war with China remains unresolved.

- Historical legacy: The border between India and China remain disputed from pre-independent India
 - g. In the eastern sector, the McMahon Line had been drawn in 1914 without even a survey and taking China into confidence.
- Aksai Chin and Arunachal Pradesh: The main reason for the Indo-China war was a dispute over the sovereignty of the widely separated Aksai Chin and Arunachal Pradesh border regions.
 - Claim over territories: India claimed Aksai Chin to be part of Ladakh whereas China claimed it as part of Xinjiang.
- India's intelligence failure: India remained unaware that this area was already in use by China.
 - The Chinese built a 220-km-long road there only after the completion of the project was announced in 1957.
- Failure at leadership:
 - Tibet agreement in 1954: India consciously avoided discussions about the border, leaving the boundary question open.
 - The meeting between Nehru and Chinese Premier Zhou Enlai: It failed to bridge their differences.
- India had misguided optimism about the 'moral' superiority and peaceful intentions of the Chinese leadership: It resulted in a weak Indian Army that was ill-prepared and ill-equipped to face the realities of hard power.
- Underestimation of the strength of the Indian Air Force (IAF): which resulted in its offensive fleet not being used.
- Political interference in affairs was purely military mismanagement of events from the top.

Result of the war: China emerged victorious. It occupied a large part of Ladakh and Arunachal but eventually returned to territories occupied in Arunachal but retained control of about 38,000 square kilometres of Aksai Chin in Ladakh.





Impact: It severely demoralized the Indian army, showed its weakness (eventually leading to war with Pakistan in 1965) and led to decades of handicapped relations with China.

Agreement between India and China:

- 'Maintenance of Peace and Tranquillity' (1993)
- Military CBMs (1996)
- Political Parameters and Guiding Principles for the settlement of boundary question (2005)
- Border defence cooperation (2012)

FCRA and NGO

Recently, The Ministry of Home Affairs has cancelled the Foreign Contribution (Regulation) Act (FCRA) licence of the Rajiv Gandhi Foundation (RGF) and Rajiv Gandhi Charitable Trust (RGCT) for alleged violations of the provisions of the Act.

• The NGOs came under the scanner in July 2020 over the possible violations of the Prevention of Money Laundering Act, the Income Tax Act and the FCRA.

What is the FCRA?

The "Foreign Contribution (Regulation) Act" (FCRA) regulates foreign donations and ensures that such contributions do not adversely affect internal security.

- First enacted in 1976, it was amended in 2010 in which a slew of new measures was adopted to regulate foreign donations.
- The FCRA act is implemented by the Ministry of Home Affairs.
- Under the new rules notified by MHA in 2015, NGOs are required to give an undertaking that the acceptance of foreign funds is not likely to prejudicially affect the sovereignty and integrity of India or impact friendly relations with any foreign state and does not disrupt communal harmony.

The FCRA is applicable to all associations, groups and NGOs which intend to receive foreign donations. It is mandatory for all such NGOs to register themselves under the FCRA.





Provisions of the Act:

- The FCRA requires every person or NGO wishing to receive foreign donations to be registered under the Act.
- To open a bank account for the receipt of foreign funds in State Bank of India, Delhi is mandatory.
- These funds can be utilised only for the purpose for which they have been received, and as stipulated in the Act.
- The receivers of foreign funds are also required to file annual returns, and they must not transfer the funds to another NGO.

Who Cannot Receive Foreign Contributions?

- The Act prohibits the receipt of foreign funds by:
- Candidates for elections,
- Journalists or newspaper and media broadcast companies,
- Judges and government servants,
- Members of the legislature and political parties or their office-bearers, and
- Organisations of a political nature.

Registration under FCRA:

FCRA registrations are granted to individuals or associations that have definite cultural, economic, educational, religious, and social programmes.

- MHA makes inquiries through the Intelligence Bureau into the antecedents of the applicant and accordingly processes the application.
- The MHA is required to approve or reject the application within 90 days

 failing which it is expected to inform the NGO of the reasons for the same.
- Once granted, FCRA registration is valid for five years.
- NGOs are expected to apply for renewal within six months of the date of expiry of registration. In case of failure to apply for renewal, the registration is deemed to have expired.

When is a registration suspended or cancelled?

The government reserves the right to cancel the FCRA registration of any NGO if it finds it to be in violation of the Act.





- Registration can be cancelled for a range of reasons including, if "in the opinion of the Central Government, it is necessary for the public interest to cancel the certificate".
- Once the registration of an NGO is cancelled, it is not eligible for reregistration for three years.

How we can protect migrant workers

There has been massive reporting of exploitation and labour violations faced by Indian workers in the Gulf countries.

Migration to Gulf countries:

- Globally, India ranks as number one in terms of international migrants and remittances and six countries in the Gulf alone account for close to 50 per cent of Indian migrants.
- According to the Ministry of External Affairs, there are over 13.4 million Non-Resident Indians worldwide.
 - Of them, 64% live in the GCC countries, the highest being in the UAE followed by Saudi Arabia and Kuwait.
- Almost 90% of the Indian migrants who live in GCC countries are lowand semi-skilled workers, as per International Labor Organization

Issue faced by migrants:

- Ill effects of Kafala system: It is a sponsorship system in the Gulf that enables employers to wield significant power over the lives of migrant workers.
 - The media have likened employment conditions under kafala to "modern-day slavery."
- Labour rights violations: More recently, the media offered wide coverage of labour rights violations at three events the Dubai Expo, the construction of stadiums for the Qatar world cup and the Covid pandemic.
- Social security: Gulf Cooperation Council (GCC) countries have been accused of not providing healthcare services, employment and social protection for workers.
 - g witnessed during Covid 19 lockdown.





- Wage theft: The Return Migration Survey revealed that among 47 per cent who lost their jobs, 39 per cent have reported non-payment of wages and reduction in wages.
 - Similarly, during the construction of the Football Stadium in Qatar for the coming FIFA World Cup, there were several reports of nonpayment of wages, contract violations and intimidation of workers.
- Occupational safety: As per the reports published by The Guardian, 6,500 migrant workers from South Asia have died in Qatar in the last 10 years majority being Indians mainly due to occupational hazards.

Efforts taken:

- Reform by GCC countries in labour laws: Much of this is symbolic and tries to project the region as migrant-labour friendly.
 - However, the changes should be seen as a positive sign on the road to abolishing Kafala and other anti-labour laws.
- Emigration bill 2021: It envisages comprehensive emigration management, institutes regulatory mechanisms governing overseas employment of Indian nationals and establishes a framework for the protection and promotion of the welfare of emigrants.
 - The bill is yet to be passed.
- MoUs with GCC countries on domestic workers' recruitment and prevention of irregular recruitment has had very little impact.
- Madad Portal: It has enabled migrant workers from the country to file their grievances.
 - According to the Ministry of External Affairs website, about 95 per cent of the registered grievances were resolved.

Efforts needed: -

- Need for a joint effort to address the issues of migrants rather than playing a blame game during situations like the pandemic and migrant deaths.
- Developing a collective conscience on global labour mobility.
- Building regional alliances: India should play a leading role in building regional alliances in the South Asia-GCC corridor.
- Involving stakeholders: A joint effort of all stakeholders including government, trade unions, recruitment agents and civil society can bring notable changes.





Cuban Missile Crisis (CMC)

Context: The world marks 60 years since the fateful events of the Cuban missile crisis. The US President recently invoked revisiting the Cuban missile crisis.

Reason for the crisis: During the Cold war phase, USA and USSR were sceptical of each other moves. In retaliation to the USA placing Jupiter missiles in Turkey, USSR wanted to place its missile in Cuba (a socialist country and very close to the USA). This led to CMC.

The Agreement: After UN intervention, the crisis was averted with each side withdrawing its missiles. Also, the USA agreed not to invade Cuba again.

Consequences: The agreement was seen as demoralizing for USSR, it led to the ouster of its president Khrushchev whereas John F. Kennedy was heralded for his statesmanship. The event highlighted the dangers of nuclear brinkmanship. Also, in 1963, the United States, the Soviet Union, and Great Britain signed a treaty banning atmospheric and underwater nuclear testing.

SC directions on hate speech

Context: Recently Supreme court has directed the police chiefs of Delhi, Uttar Pradesh and Uttarakhand to take "immediate" suo motu action against any hate speech by lodging criminal cases without waiting for formal complaints.

What is Hate Speech?

Hate speech is an incitement to hatred against a particular group of persons marginalized by their religious belief, sexual orientation, gender, and so on.

• The Law Commission, in its *267th report* on hate speech, said such utterances have the potential to provoke individuals and society to commit acts of terrorism, genocide, and ethnic cleansing.

Laws on hate speech in India

• India does not have a formal legal framework for dealing with hate speech, a set of provisions of the Indian Penal Code (IPC), loosely defining hate speech, are invoked.





- Section 295 of IPC: it defines and prescribes punishment for deliberate and malicious acts, intended to outrage the religious feelings of any class by insulting its religion or religious beliefs.
 - Origin: it was brought in 1927 (Rangila Rasool case). Its antecedent lies in the "communally charged atmosphere of North India in the 1920s.
- Section 298 IPC penalises 'uttering, words, etc., with deliberate intent to wound the religious feelings of any person.
- Section 153A IPC penalises 'promotion of enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony'.
- Section 66A of the IT Act: punishes sending offensive messages through communication services is added when such speech is made online.
- Part VII of the Representation of People Act, 1951 classifies hate speech as an offence committed during elections into two categories: corrupt practices and electoral offences.

Supreme court rulings on 295A:

- Ramji Lal Modi v State of Uttar Pradesh (1957): Supreme Court upheld the law on the grounds that it was brought in to preserve "public order".
 - Public order is an exemption to the fundamental right to freedom of speech and expression and the right to religion recognised by the Constitution.
- Baba Khalil Ahmed v State of Uttar Pradesh (1960): the Supreme Court said that the "malicious intent" of the accused can be determined not just from the speech in question but also from external sources.
- Baragur Ramachandrappa v State of Karnataka, (2007): The SC adopting a pragmatic approach ordered that public order supersedes the individual interest of free speech.

RBI monitoring Bank

Context: RBI has put Dhanalakshmi Bank under observation due to decreasing capital-to-risk-weighted asset ratio(CRAR) of the Bank.

What is the role of RBI in the functioning of banks-

Under the Banking regulations act 1949, RBI has the duty to inspect and regulate all commercial banks including Basel norms, CRR, SLR etc.





The capital-to-risk weighted assets ratio or capital adequacy ratio measures a bank's financial stability by measuring its available capital as a percentage of its risk-weighted credit exposure.

Under the Basel norms, a bank must keep a minimum Capital to Risk Weighted Asset Ratio(CRAR) of 9% or higher.

- As NPA increases→ asset quality decreases→RWA increase→ And so Bank would need to increase their CRAR to maintain the confidence of the market.
 - In Dhanalakshmi bank, NPA increased but CRAR decreased. Hence RBI took it under direct observation.

Terms:

Basel Norms: These norms were set by the member countries of the Bank of International Settlements to ensure global financial stability.

Liquidity coverage ratio should be more than or equal to one.

• It means a bank has enough high-quality liquid assets(cash, gold etc) to survive a high-stress scenario of cash outflow(the bank run) for at least 30 days or more.

Prompt Corrective Action framework: Under PCA, all commercial banks are monitored for asset quality and capital sufficiency. Accordingly, they are classified into three risk categories(the higher the number higher the risk). All commercial banks and Non-deposit taking NBFCs are covered under the PCA norms of RBI. NABARD sets PCA norms for Regional Rural banks.

• Exit from PCA norms is possible only if no breach is detected in 4 consecutive quarterly audit statements.

NAREDCO Finance Committee

Context: National Real Estate Development Council (NAREDCO), has formed a "NAREDCO Finance Committee" (NFC) to enable real estate developers easy access to funds based on merit and viability of the projects.

NAREDCO is an apex body formed under the aegis of the Ministry of Housing and Urban Affairs (MoHUA).





Highlights:

Significance:

- The newly-formed Committee will focus on project financing, which would fulfil the practical requirements of construction by adhering to the construction cycle.
- The NFC has been formed to help the industry and developers infuse liquidity into the system and help the consumers too with ready-to-move-in projects.

InvITs

Context: The Government of India is increasingly using the InvIT route to monetise assets held by government entities and bring in broad-based public shareholding.

What are Infrastructure investment trusts (InvITs)?

An Infrastructure Investment Trust (InvIT) are an in-between vehicle that has features of stocks, bonds and mutual funds. It is a pooled investment vehicle like a mutual fund but applicable to the Infrastructure sector.

- While mutual funds invest the sum received in financial securities, an InvIT invests the same in real infrastructure assets like roads, power plants, transmission lines, pipelines etc.
- They are regulated under the Sebi (Infrastructure Investment Trusts) Regulations, 2014 and the Indian Trust Act, 1882.

How do they work?

InvITs list on the bourses to raise money to acquire a portfolio of infrastructure assets that are already running and generating regular cash flows.

Sugarcane production shifting from South to North: NSO report

Context: According to the latest National Statistical Office (NSO) report-Between 2011 and 2020 period Six sugarcane-producing northern Indian states saw a 42 per cent increase in their output value while that of five states from the south declined 32.4 per cent during the same period.





Reason for production shifting:

This northward shift in sugarcane production is on account of the larger irrigated area in the region and higher State Advisory Price (SAP) over and above the Centre's Fair and Remunerative Price (FRP) being offered in the north, especially by Uttar Pradesh.

FRP is fixed under a sugarcane control order, in 1966. It is the minimum price that sugar mills are supposed to pay to the farmers. However, states determine their own State Agreed Price (SAP) which is generally higher than the FRP.

About NSO:

The National Sample Survey Office (NSSO) merged with the Central Statistical Office (CSO) to form the National Statistical Office (NSO) in 2019. It comes under the Ministry of Statistics and Programme Implementation (MOSPI).

Basmati Rice

Context: Five new varieties of seeds of Basmati rice, developed by a group of Indian scientists are all set to bring revolutionary changes in the way Basmati rice is cultivated in the country.

- Three of the five varieties can resist two common diseases of paddy (one bacterial and one fungal).
- The other two varieties can save 35% of water as the method of Direct Sowing of Rice (DSR) can be used to raise them.
- These two seeds are resistant to herbicides too, helping the farmers control weeds more efficiently.

Basmati rice production in India:

India is known for its Basmati rice, with seven States — Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Delhi, Uttar Pradesh and Uttarakhand earmarked for geographical indication (GI).

- Basmati, known for its mouthfeel, aroma, and length of the grain when cooked and tasted, has a market abroad and brings about ₹ 30,000 crores in foreign exchange every year.
- While 75% of the export is to West Asian countries, European Union countries also import Indian Basmati.





• However, recently, the export to EU countries faced certain hurdles due to the increase in the pesticide residue levels in the rice from India.

Doping Violations

Context: Kamalpreet Kaur, the 26- year-old Indian discus thrower, was banned for three years with effect from March 29 after she tested positive for a prohibited substance earlier this year.

- According to the Athletics Integrity Unit (AIU) of World Athletics, 62 Indian athletes have been caught doping or in possession of banned substances.
- Only Russia has recorded more doping violations than India with 87 athletes receiving punishment.

How are anti-doping activities regulated?

World Anti-Doping Code (WADC) states an athlete is required to provide a sample at any time and at any place to an anti-doping organisation that commands authority to carry out anti-doping activities in the country.

- At international events, the organiser is expected to carry out the testing, for example, the International Olympics Committee (IOC) in the case of the Olympics.
- If tested positive for intake of any banned substance, the individual player, upon the decision of the organising body, is not only liable to be disqualified but also stands to forfeit all medals, points and prizes.
- The punishment does not apply to other competitions that the athlete participated in unless it is established that the same drug was used to alter the performance capability of the other competitors too.
- As for team sports, in case two or more members of the team are found to violate the anti-doping code, the entire team could forfeit points and prizes and be disqualified.

What is WADA?

Established in 1999, WADA is a global, independent anti-doping agency responsible for facilitating education, scientific research, development of antidoping capacities, and ensuring compliance with the World Anti-Doping Code (WADC).





• India has the National Anti-Doping Agency (NADA).

What is WADC?

WADC is the fundamental and universal document dictating the terms of administration and jurisprudence pertaining to all anti-doping activities.

Neanderthals

Context: Nobel laureate Savante Paabo and his team-led study of neanderthal DNA has given new insights into the family life of neanderthals.

Who were neanderthals-

Neanderthal was a member of a group of archaic humans who lived in Eurasia in periods from 2 lakh to 24000 years ago(in the Pleistocene epoch). According to recent theories, all of them were either wiped out or merged into larger homo sapien groups.

What do recent studies suggest-

- They lived in close units of 14-20 members only.
- DNA evidence in the study of coalescence time suggests that nearly 60% of female members in neanderthal groups migrated from elsewhere.
- This is in contrast to earlier theories that men constituted a major migrant group.
- The sophisticated structure of skeletons suggests that neanderthals buried their dead.

Important terms to know

- Names to remember Chagyrskova and Okladnikova– limestone caves in Russia.
- Coalescence time: It is the time gap indicating how far in the past their most recent ancestors lived.

Sampurnanand Optical Telescope(SOT)

Context: Sampurnanand Optical Telescope completed 50 years of operations





About ST: Name after the former chief minister of Uttar Pradesh Dr Sampurnanand, the 104-cm Sampurnanand Telescope, situated at ARIES, Manora Peak in Nainital. It was installed in 1972.

Some landmark observations: Discovery of rings of Uranus, and additional rings around Saturn, afterglows of Gamma-ray-bursts (GRBs) and micro-lensing events etc.

OCT 25

The controversy around Bhoota Kola ritual depicted in Kantara

- Bhoota Kola is an annual ritual performance where local spirits or deities are worshipped.
- It is believed that a person performing the ritual has temporarily become a god himself.
- This performer is both feared and respected in the community and is believed to give answers to people's problems, on behalf of the god.
- There are several 'Bhootas' who are worshipped in the Tulu-speaking belt of Dakshina Kannada, Uttara Kannada and Udupi districts of Karnataka.
- It is usually performed in small local communities and rural areas.

India successfully test fires Agni Prime ballistic missile off Odisha coast

- The 'Agni Prime' is a two-stage canisterised solid-propellant missile with dual redundant navigation and guidance system.
- The nuclear-capable missile has been designed and developed by the Defence Research and Development Organisation (DRDO).
- The surface-to-surface ballistic missile has a range of 1000 to 2000 km.
- The Agni Prime missile, the smallest and lightest among the entire Agni series of ballistic missiles.





- It weighs 50 per cent less than the Agni 3 missile and has new guidance and propulsion systems.
- In addition, since it is canisterised, it can be launched from rail or road, be stored for longer periods and can be transported as per operational requirements.

List of Agni missiles:

- Agni-I
 - The Agni-I is a short to medium-range ballistic missile.
 - Range: 700-800 Km
- Agni-II
 - The Agni-II is a medium-range ballistic missile equipped with two solid fuel stages.
 - Range: 2000 Km
- Agni-III
 - The Agni-III is an intermediate-range ballistic missile equipped with two solid fuel stages.
 - Range: 3000 Km
- Agni-IV
 - The Agni-IV is an intermediate-range ballistic missile equipped with two solid fuel stages.
 - Range: 4000 Km
- Agni-V
 - The Agni-V is an intercontinental range ballistic missile with three solid fuel stages.
 - Range: 5000 Km

Eknath Shinde govt restores CBI's general consent to probe cases in Maharashtra

- CBI is governed by The Delhi Special Police Establishment (DSPE) Act, 1946, and it must mandatorily obtain the consent of the state government concerned before beginning to investigate a crime in a state.
- Section 6 of The DSPE Act ("Consent of State Government to exercise of powers and jurisdiction") says: "Nothing contained in section 5 (titled "Extension of powers and jurisdiction of special police establishment to other areas") shall be deemed to enable any member of the Delhi Special Police Establishment to exercise powers and jurisdiction in any area in a





State, not being a Union territory or railway area, without the consent of the Government of that State".

- The CBI's position is in this respect different from that of the National Investigation Agency (NIA), which is governed by The NIA Act, 2008, and has jurisdiction all over the country.
- The consent of the state government to CBI can be either case-specific or "general".
- General consent is normally given by states to help the CBI in the seamless investigation of cases of corruption against central government employees in their states.
- This is essentially consent by default, which means CBI may begin investigations taking consent as having been already given.
- In the absence of general consent, CBI would have to apply to the state government for its consent in every individual case, and before taking even small actions.

Partial solar eclipse happening today. Where and when to watch in India

- An eclipse happens when the moon while orbiting the Earth, comes in between the sun and the Earth, due to which the moon blocks the sun's light from reaching the Earth, causing an eclipse of the sun or a solar eclipse.
- There are three types of eclipses.
- Total solar eclipse:
 - This happens when the sun, moon and Earth are in a direct line. The dark silhouette of the Moon completely covers the intense bright light of the Sun. Only the much fainter solar corona is visible during a total eclipse which is known as a Totality.
- Partial solar eclipse:
 - This happens when the sun, moon and Earth are not exactly lined up.
 - The shadow of the moon appears on a small part of the sun.
- Annular solar eclipse:
 - This happens when the moon is farthest from the Earth, which is why it seems smaller.
 - In this type of an eclipse, the moon does not block the sun completely, but looks like a "dark disk on top of a larger suncolored disk" forming a "ring of fire".





Pradhan Mantri Bhartiya Janaushadhi Pariyojana significantly reduced patients' out-of-pocket expenditure: Mansukh Mandaviya

- To make available quality medicines, consumables and surgical items at affordable prices for all and reduce out of pocket expenditure of consumers/patients.
- To popularize generic medicines among the masses and eliminate the notion that low priced generic medicines are of inferior quality or are less effective.
- Generate employment by engaging individual entrepreneurs in the opening of JanaushadhiKendras.
- Pharmaceuticals & Medical Devices Bureau of India (PMBI) is the implementing agency of Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP).
- PMBI was established in December, 2008 under the Department of Pharmaceuticals, Government of India.
- Jan Aushadhi Scheme was launched by the Department of Pharmaceuticals in 2008 across the country.
- In 2015, the Jan Aushadhi Scheme was revamped as Pradhan Mantri Jan Aushadhi Yojana (PMJAY).
- In 2016, it was again renamed as Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP).

Five new varieties to expand India's Basmati platter

- Three of the five varieties can resist two common diseases of paddy.
 - Bacterial leaf blight (BLB) and blast (leaf and collar) diseases caused by the fungus Magnaporthe oryzae.

New Varieties:

- New varieties are
 - Pusa Basmati 1847,
 - Pusa Basmati 1885 and
 - Pusa Basmati 1886.
- All these varieties have two genes to resist BLB and two genes to resist blast disease.
- The other two can save 35% of the water now required as the seeds can be directly sown, obviating the need for transplanting seedlings.





- These two seeds are resistant to herbicides too, helping the farmers control weeds more efficiently.
- In the next three years, all of the five seeds will have the combined qualities of disease and herbicide resistance.
- India is known for its Basmati rice, with the produce from seven States

 Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Delhi, Uttar Pradesh and Uttarakhand — earmarked for Geographical Indication.
- Basmati, known for its mouthfeel, aroma, length of the grain when cooked and taste, has a market abroad and brings about ₹ 30,000 crore in foreign exchange every year.
- While 75% of the export is to West Asian countries, European Union countries also import Indian Basmati.
- However, recently, the export to EU countries faced certain hurdles due to the increase in the pesticide residue levels in the rice from India.
- Pesticides and fungicides used against these diseases increased the residue levels permitted in developed countries.

Invisible killer threatens India's sandalwood forests

- It is caused by phytoplasma bacterial parasites of plant tissues which are transmitted by insect vectors.
- The disease was first reported in Kodagu in 1899.
- It is being classified as "vulnerable" by the International Union for Conservation of Nature in 1998.
- Presently, there is no option but to cut down and remove the infected tree to prevent the spread of the disease.
- Between 1 and 5% of sandalwood trees lost every year due to the disease.
- SSD has been one of the major causes for the decline in sandalwood production in the country for over a century.

ISRO's heaviest rocket successfully places 36 satellites in orbit

- This mission is being undertaken as part of the commercial arrangement between New Space India Limited (NSIL) and m/s Network Access Associates Limited (m/s OneWeb Ltd), a U.K. based company.
- OneWeb is a joint venture between India's Bharti Enterprises and the U.K. government.





- This is OneWeb's 14th launch, bringing the constellation to 462 satellites. This launch represents more than 70% of its planned 648 Low Earth Orbit (LEO) satellite fleet that will deliver high-speed, low-latency connectivity worldwide.
- The 43.5 metre LVM3 weighing around 644 tonne carried 36 satellites weighing 5,796 kg or about 5.7 tonne.

Launch Vehicle Mark III (LVM3) -M2:

- The Indian Space Research Organisation (ISRO) has renamed the Geosynchronous Satellite Launch Vehicle (GSLV) Mark -III as Launch Vehicle Mark-III, mainly to identify its task of placing satellites into a variety of orbits.
- Launch Vehicle Mark III (LVM3) -M2 is the dedicated commercial satellite mission of New Space India Limited (NSIL), a Central Public Sector Enterprise (CPSE) under the Department of Space, Government of India.
- The LVM3 rocket (earlier called the Geosynchronous Launch Vehicle Mark III or GSLV-MK3) can carry up to 8 tonnes into low earth orbit (LEO-up to 1,200 km above the Earth).
- The rocket is a three-stage launch vehicle consisting of two solid propellant S200 strap-ons on its sides and core stage comprising L110 liquid stage and C25 cryogenic stage.
- The PSLV is much lighter and can carry between 1.4 and 1.75-tonne payloads.

Plant spotted in Palakkad is second species of the genus Allmania, say researchers

- It is named Allmania multiflora.
- The species is quite special from both the botanical and conservation points of view.
- Allmania multiflora is only the second species of this genus identified so far anywhere.
- It is an annual herb that grows to a height of about 60 cm, erect, with branches arising from the base.
- The stem is red to violet at the base and green above.
- Found at heights ranging between 1,000 to 1,250 metres.





- Shorter tepals and wider gynoecium (parts of the flower), shorter bracts and in the diameter of the seeds are among the characteristics that distinguishes it from Allmania nodiflora.
- Flowering and fruiting occurs from May to September.
- Allmania multiflora has been so named for having a higher number of florets within an inflorescence.
- Given its small population, the researchers have assessed it as Critically Endangered, applying IUCN Red List criteria.

Allmania nodiflora:

- It is distinct from Allmania nodiflora, which so far had been accepted as the lone Allmania species.
- The first species, Allmania nodiflora, was originally published under the genus Celosia as Celosia nodiflora in 1753.
- Specimens found in Ceylon (Sri Lanka) were first described as Allmania nodiflora in 1834.

Odisha Government has started working on Sukapaika River revival plan

- This is probably the first serious attempt being made to restore a river to its original shape in Odisha.
- The problem has started in 1952, when the state government blocked the starting point of the Sukapaika with an embankment to save the villages around it from floods.
- Subsequently, in 1957, two major projects Hirakud Dam in Sambalpur district and Naraj barrage at Cuttack — were built upstream on the Mahanadi, ostensibly to control floods in it.
- The river dried up due to the development of the Taladanda Canal System, a major canal of the State.

Sukapaika River:

- Sukapaika is one of the several distributaries of the mighty Mahanadi river in Odisha.
- It branches away from the Mahanadi at Ayatpur village in Cuttack district and flows for about 40 kilometres (km) before rejoining its parent river at Tarapur in the same district.





• In the process, it drains a large landmass comprising over 425 villages under 26 gram panchayats in three blocks — Cuttack Sadar, Nischintakoili and Raghunathpur.

OCT 26

Remaining global carbon budget meagre, the World needs rapid and transformative actions: Shri Bhupender Yadav at LMDC ministerial

- It comprises of around 18 developing countries from Asia and other regions.
- India is part of the LMDC grouping along with Egypt, Indonesia, Malaysia, Iran, Bangladesh, Sri Lanka, the Philippines and others.
- It represents about 50 per cent of the world's population.
- It usually presents a common front at climate negotiations.

U.S. considers HAWK air defence equipment for Ukraine

- HAWK, short for 'Homing All the Way Killer', entered service with the US Army in 1959, during the Vietnam War.
- It is a **mobile air defense system**.
- It is a medium-range surface to air missile.
- It underwent upgrades over the decades that followed, including a major one in 1971 that produced the so-called I-HAWK (or improved HAWK), with a kill probability of 85%.
- The first versions of the system had a range of 25 km for aerial targets, and an altitude of 14 km. After modernization: the maximum target interception range increased to 40 km with a maximum interception altitude of 18 km.
- The HAWK system was the predecessor to the **PATRIOT missile defence system** that Raytheon built in the 1990s.





• US forces largely stopped using HAWK from the early years of the new century.

United Nations Day is celebrated on October 24.

- It marks the anniversary of the entry into force in 1945 of the U.N. Charter.
- With the ratification of this founding document by the majority of its signatories, including the five permanent members of the Security Council, the United Nations officially came into being.
- The Charter of the United Nations is the founding document of the United Nations.
- It was signed on 26 June 1945, in San Francisco, at the conclusion of the United Nations Conference on International Organization, and came into force on 24 October 1945.
- The United Nations can take action on a wide variety of issues due to its unique international character and the powers vested in its Charter, which is considered an international treaty.
- As such, the UN Charter is an instrument of international law, and UN Member States are bound by it.
- The UN Charter codifies the major principles of international relations, from sovereign equality of States to the prohibition of the use of force in international relations.
- The mission and work of the Organization have been guided by the purposes and principles contained in its founding Charter, which has been amended three times in 1963, 1965, and 1973.

What was Neanderthals' family life like? DNA grants a glimpse

- Nobel laureate Svante Paabo and his team have recently published one of the biggest genetic studies yet of Neanderthals, providing clues about their community life and structure.
- Neanderthals are a hominin species that existed for at least 200,000 years throughout Europe and western Asia, and disappeared about 27,000 years ago.
- During this time, they witnessed some of the coldest climatic conditions ever known in these regions.





- Many of their physical features suggest that they were adapted for the cold, such as their barrel-shaped chests, shorter limbs, and larger brains, all of which suggest a body shape adapted for retaining heat.
- Their face was also distinctive. The central part of the face protruded forward and was dominated by a very big, wide nose.
- They excelled at hunting animals and making complex stone tools
- They were first discovered in 1856.
- Many Europeans and Asians have between 1 per cent and 4 per cent Neanderthal DNA while African people south of the Sahara have almost zero.

Russia tells Ukraine planning 'dirty bomb' attack

- It is a bomb that contains radioactive material, such as uranium, which is scattered through the air when its conventional explosive detonates.
- It doesn't need to contain highly refined radioactive material, as is used in a nuclear bomb. Instead, it could use radioactive materials from hospitals, nuclear power stations or research laboratories.
- This makes them much cheaper and quicker to make than nuclear weapons. They can also be carried in the back of a vehicle.
- However, as weapons, they are very unreliable.
- For the radioactive material in a dirty bomb to be scattered across its target zone, it has to be reduced to powder form.
- But if the particles are too fine or released into strong winds, they will scatter too widely to do much harm.
- Material used:
 - Cesium-137
 - Cobalt-60
 - Iridium-192
 - Dynamite

President of India to Present Silver Trumpet and Trumpet Banner to The President's Bodyguard on October 27, 2022

- The PBG is the oldest regiment of the Indian Army.
- It is the senior-most unit of the Army, whose distinction is in its position as 'Right of the Line' on all official and ceremonial occasions. The PBG, thus, takes precedence over all other regiments and corps.





- The PBG was raised in 1773 at Benares (now Varanasi) by then Governor Warren Hastings, with a strength of 50 handpicked troopers.
- This nucleus of the Bodyguard was later augmented by another 50 horsemen, provided by Raja Cheyt Singh of Benares, thus bringing the overall strength of the regiment up to 100 horses and men by the end of that year.
- The establishment of the regiment varied through the years, being augmented in times of war and it attained its maximum strength of 1,929 all ranks, as per the Army List of 1845, just prior to the First Sikh War.
- The PBG continued to be a select Cavalry Unit, primarily for the personal and battlefield security of the Governor and later Governor General, who often had to personally lead his forces into battle.
- The Raising Charter clearly spelt out the role of the PBG, namely "To act as Bodyguard to the Governor in peace and to accompany him as Commander-in-Chief in battle".
- This unique band of select troops, in over two centuries of service, has seen action in various roles — as mounted and dismounted cavalry; Artillery, with 'Galloper Guns' in the Egyptian Expedition of 1801-1802; Marines in 1809, protecting naval transports in the Bay of Bengal; and more recently as mechanised and airborne troops.
- As of today, PBG is a small body of handpicked men, comprising four officers, 14 Junior Commissioned Officers (JCOs) and 161 troopers backed by administrative support personnel.
- This establishment has not changed much since the 19th century.
- Its men are trained for operational duties, both, as tankmen and airborne troops in addition to their ceremonial role.
- The physical standards for the PBG are very specific with six feet being the minimum height for a trooper.
- Men of the PBG are expert horsemen, adept at ceremonial punctilio, trained combat paratroopers, armoured vehicle crewmen and tradesmen.
- Honed in diverse combat skills, the PBG personnel have proven their worth in battle as well as in mounted tourneys and equestrian skills.

Deep depression over Bay of Bengal has intensified into cyclonic storm Sitrang

• Cyclones are centres of low pressure surrounded by closed isobars and having increasing pressure outwards.





- As air enters an area of low pressure from all directions, the Coriolis Effect bends the direction of the wind to the right of its path.
- This creates a counter clockwise rotation around the low and convergence near the centre of the system. As the air collides near the centre it is forced aloft where divergence takes air away from the centre of the system.
- A Cyclone is a system of low level convergence and high level divergence with a rising column of air in the centre of the rotating air mass. If the upper air is not diverging then there cannot be a cyclone present.
- Cyclones are broadly of two types:
 - Temperate cyclones (caused in middle and high latitudes, thus does not occur in India)
 - Tropical cyclones

Diwali

- Diwali, which is the festival of lights, stands for the triumph of light over darkness, good over evil and falls on the day of 'amavasya' or new moon in the Hindu month of Kartik.
- It usually falls in mid-October and mid-November on Kartik Amavasya.
- The festival is extended over five days, beginning with Dhanteras and ending with Bhai Dooj.
- According to Hindu mythology, the legends associate Diwali with Lord Ram's return to Ayodhya with his wife, Mata Sita, and brother, Lakshman, after spending 14 years in exile and defeating the King of Lanka, Ravan.
- People of Ayodhya marked the occasion by lighting rows of lamps and diyas.
- The tradition has continued to date and is celebrated as the festival of Diwali.
- In Chennai and Tamil Nadu, people observe Narak Chaturdashi.
- In West Bengal, devotees worship Goddess Kali rather than Goddess Lakshmi on the third day of Diwali.

Gujarati new year 'Bestu Varsh' being celebrated on October 26, 2022

• In Gujarat, the New Year which is popularly known as Bestu Varsh is celebrated as part of the five-day Diwali Celebrations.





- Ideally, Gujarati New Year falls on Pratipada of Shukla Paksha in the Kartik month; therefore, it is generally celebrated on Govardhan Puja during Diwali.
- People begin their New Year by visiting temples in the morning.
- Homes are decorated with Asopalav torans and marigold flowers, and attractive Rangoli at the entrance to welcome guests on the New Year.

Rishi Sunak becomes Britain's first Indian-origin Prime Minister

- Since the Conservative party has a majority in the current U.K. parliament, the winner of the party leadership contest will automatically become prime minister.
- Under usual circumstances, British prime ministers are chosen in a general election held every five years.
- Instead of voting for the nation's leader directly, as is the case in presidential electoral systems, the public chooses between delegates of each party to represent their local area, known as a constituency.
- The party that wins the most constituencies wins the election, and the leader of that party typically becomes the prime minister.
- Party leaders are chosen by an internal process normally in advance of a general election, or in the case that a leader steps down or is forced out.
- To take part in the race, a Conservative member of parliament needs to be nominated by at least 20 colleagues.
- First, MPs whittle the candidates down in a series of secret ballots, whereby the candidate with the fewest votes is eliminated at each round until two are remaining.
- In the second stage, card-carrying grassroots party members vote on the final two candidates.





OCT 27

Union Finance Minister Smt. Nirmala Sitharaman attends the 7th Annual Meeting of Board of Governors of Asian Infrastructure Investment Bank

- The theme of this year's Annual Meeting was "Sustainable Infrastructure Toward a Connected World".
- What is AIIB? AIIB is a multilateral development bank that aims to improve economic and social outcomes in Asia.
- Headquarters: Beijing, China.
- Board of Governors: All powers of the Bank are vested in our Board of Governors, which is the highest decision-making body under our Articles of Agreement.
- Membership: AIIB has 105 members. China is the AIIB's largest shareholder with a 26.5% voting share. India is the second-largest, with 7.5%, followed by Russia, which has a 5.97% voting share.
 - India is a Founding Member of AIIB. India also has the largest project portfolio within AIIB.

Last date to submit applications for means-cum-merit scholarship is 31 October

- Under the Scheme, scholarships are awarded to meritorious students of economically weaker sections to arrest their drop out at class VIII and encourage them to continue their education at secondary stage.
 - $\circ~$ This is a 100% centrally sponsored scheme.
- NMMSS is boarded on the National Scholarship Portal (NSP) a one stop platform for scholarship schemes given to students.
- The scholarships are disbursed directly into the bank accounts of selected students by electronic transfer through Public Financial Management System (PFMS) following DBT mode.
- One lakh fresh scholarships are awarded to selected students from class IX every year and their continuation / renewal in classes X to XII for students studying in State Government, Government-aided and local body schools. The amount of scholarship is Rs. 12000/- per annum
- Students whose parental income from all sources is not more than Rs. 3,50,000/- per annum.





• The students must have minimum of 55% marks or equivalent grade in Class VII examination for appearing in the selection test for award of scholarship (relaxable by 5% for SC/ST students).

Include photos of Lakshmi and Ganesha on currency notes

• Delhi Chief Minister Arvind Kejriwal recently appealed to the Union government to print images of Goddess Lakshmi and Lord Ganesh on new currency notes for the country's "economic prosperity.

Role of RBI in issuing notes

- Section 22 of The Reserve Bank of India Act, 1934, gives RBI the "sole right" to issue banknotes in India.
- Section 25 states that "the design, form, and material of bank notes shall be such as may be approved by the Central Government after consideration of the recommendations made by the [RBI's] Central Board".
- The RBI's Department of Currency Management has the responsibility of administering the core function of currency management. If the design of a currency note has to change, the Department works on the design and submits it to RBI, which recommends it to the central government. The government gives the final approval.

Minting of coins

- The Coinage Act, 2011 gives the central government the power to design and mint coins in various denominations. In the case of coins, the role of the RBI is limited to the distribution of coins that are supplied by the central government.
- The government decides on the quantity of coins to be minted on the basis of indents received from the RBI on a yearly basis. Coins are minted in four mints owned by the Government of India in Mumbai, Hyderabad, Kolkata and Noida.

Types of notes issued so far

• Ashoka Pillar Banknotes: The first banknote issued in independent India was the Re 1 note issued in 1949. It replaced the portrait of King George





with the symbol of the Lion Capital of the Ashoka Pillar at Sarnath in the watermark window.

- Mahatma Gandhi (MG) Series, 1996
- Mahatma Gandhi series, 2005
- Mahatma Gandhi (New) Series, 2016

Two more Indian beaches accorded the coveted 'Blue Flag' tag

- With the new additions, the number of beaches certified under the Blue Flag Certification is twelve.
- The other Indian beaches in the blue list are Shivrajpur-Gujarat, Ghoghla-Diu, Kasarkod and Padubidri-Karnataka, Kappad-Kerala, Rushikonda- Andhra Pradesh, Golden-Odisha, Radhanagar- Andaman and Nicobar, Kovalam in Tamil Nadu and Eden in Puducherry beaches.
- The Blue Flag programme was started in France in 1985 and in areas out of Europe in 2001. It promotes sustainable development in freshwater and marine areas through four main criteria: water quality, environmental management, environmental education and safety.
- It can be obtained by a beach, marina, or sustainable boating tourism operator, and serves as an eco-label.
- The certification is awarded by the Denmark-based non-profit Foundation for Environmental Education (FEE). It is awarded annually to beaches and marinas in FEE member countries.
- Forty-eight countries currently participate in the program, and 5042 beaches, marinas, and boats have this certification.

Vice President Jagdeep Dhankhar visits Golden Temple

- Guru Ramdas Sahib, the 4th of 10 Sikh gurus, started the construction of the temple and its pool in the 1500s as a place of worship for all.
- The temple has been renovated many times, adding features such as the marble inlays along the floor.
- Maharaja Ranjit Singh, founder of the Sikh Empire of India (1799-1849) had the temple's upper floors covered in 750 kilos of pure gold.
- The Sikh scripture, the Guru Granth Sahib, is housed within the golden temple of Harmandir Sahib.

Saudi Aramco executive spent week in Chamoli jail for carrying satellite phone





- He was arrested under sections of the Indian Telegraph Act and the Indian Wireless Telegraphy Act.
- It's not legal to carry satellite phone in India unless you have permission.Visitors to the country are specifically advised not to carry a satellite phone without permission.
- Restrictions on the possession and use of these phones were tightened after the Pakistani terrorists who attacked Mumbai in November 2008 used these devices to keep in touch with their Lashkar-e-Taiba handlers.
- A notification on the website of the Department of Telecommunications says: "Satellite phones are permitted:
 - (i) With specific permission/ NOC from Department of Telecommunications, Government of India; or
 - (ii) As provisioned by M/s BSNL in accordance with license granted to M/s BSNL for provision and operation of satellite based service using Gateway installed in India".

India to expand NaVIC use to civilian sectors, make signals more secure: ISRO

- NaVIC or the Indian Regional Navigation Satellite System (IRNSS) uses **seven satellites** to provide real-time positioning and timing services in India and an area **extending up to 1,500 km from the country's borders.**
- Of the seven satellites used by NaVIC at present, three are in the geostationary orbit and four in the geosynchronous orbit.
- Its use is currently restricted and is now utilised for tracking and delivering information about natural disasters, providing emergency warning alerts to fishermen travelling into the deep sea, and monitoring public traffic in India.
- Currently, NavIC is **only compatible with the L5 and S bands** and hasn't easily penetrated into the civilian sector. A major forthcoming change is to **add the L1 band into NavIC.** This bandwidth is part of the GPS and is the most used for civilian navigational use.

Years after Bt cotton, GEAC clears environmental release of GM mustard

• The approval will make GM mustard only the second approved transgenic crop in India after Bt cotton, and the first such food crop that





can be commercially cultivated by farmers. The GEAC approval is valid for the next four years.

• Though the GEAC had cleared the proposal in 2017, the Ministry had vetoed it and suggested that the GEAC hold more studies on the GM crop. The recommendation will now again go for the approval of the Environment Ministry.

Hybrid mustard

- Hybridisation involves crossing two genetically dissimilar plant varieties that can even be from the same species. The first-generation (F1) offspring from such crosses tend to have higher yields than what either parent can individually give.
- Scientists at Delhi University's Centre for Genetic Manipulation of Crop Plants (CGMCP) have developed the hybrid mustard DMH-11 containing two alien genes isolated from a soil bacterium called Bacillus amyloliquefaciens.
- The CGMCP scientists have deployed the barnase-barstar GM technology to create a robust and viable hybridisation system in mustard. This system was used to develop DMH-11 by crossing a popular Indian mustard variety 'Varuna' (the barnase line) with an East European 'Early Heera-2' mutant (barstar).
- DMH-11 is claimed to have shown an average 28% yield increase over Varuna.
- The move is seen as giving a boost to cultivation of mustard and eventually reducing the country's edible oils import bills.
- India had to import edible oil worth nearly \$19 billion in 2021-22. Though mustard is cultivated in India in around seven million hectares of land, the per hectare yield of current variety is very low at 1-1.2 tonnes per hectare compared to the global average of around 2.3-3 tonnes.

7th ASEAN-India Ministerial Meeting held on Agro-Forestry under the cochairmanship of Union Agriculture Minister

- In the meeting, the progress in implementation of various programs and activities under the Medium Term Action Plan of ASEAN-India Cooperation (Year 2021-2025) was reviewed.
- The meeting also welcomed the 30th anniversary of ASEAN-India relations.





The Association of Southeast Asian Nations (ASEAN)

- It was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN: Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Brunei Darussalam joined ASEAN in 1984, followed by Viet Nam in 1995, Lao PDR and Myanmar in 1997, and Cambodia in 1999, making up what is today the ten Member States of ASEAN.
- India's relationship with ASEAN has emerged as a key cornerstone of our foreign policy. The relationship has evolved from the 'Look East Policy' enunciated in early 1990s which led India to become a Sectoral Partner of ASEAN in 1992, a Dialogue Partner in 1996 and a Summit-level Partner in 2002.

New technology for retrofitting non-earthquake-resistant buildings can prevent major damage in old settlements

- Most buildings, technically called unreinforced masonry (URM), were not built using modern building codes. Thus they are much more likely to experience damage or collapse during an earthquake.
- SC-URBM can resolve the problem of spread of settlements in earthquake-prone areas with constructions that have been built without following earthquake-preventive building codes.
- SC-URBM can significantly enhance the energy dissipation capacity and ductility of the retrofitted building without compromising its strength. Hence such buildings would have resulting superior performance in comparison to URBM buildings during earthquakes.
- It involves embedding of reinforced concrete (RC) bands through the partial thickness of the wall and can be implemented or retrofitted in old buildings.





OCT 28

Floating trash barrier developed by Bengaluru firm emerges winner in clean waterbody challenge

- Floating trash barrier could address the serious environmental issue of floating solid waste pollution plaguing India's water bodies.
- The FTB uses the natural flow of water to bring the trash to the riverbank where it is deployed and from there the trash is manually or mechanically removed.
- The FTB is deployed in eight cities Bengaluru, Chennai, Puducherry, Hyderabad, Mysuru, Thanjavur, Tuticorin and Coimbatore.
- The FTB is said to be successful in cleaning up the Cooum in Chennai and the Musi in Hyderabad.
- In Bengaluru, it has been deployed in some storm-water drains, and Nagawara and Dasarahalli lakes.
- Cleaning and Restoring India's Water Bodies Challenge was conducted by the Office of the Principal Scientific Advisor (PSA).
- The challenge was conducted by the Waste to Wealth Mission Swachh Bharat Unnat Bharat Mission under the Office of the PSA during November 27, 2020 and February 17, 2021.

100 years of Saka Panja Sahib: Why a railway station in Pakistan holds significance in Sikh history

- On October 30, 1922 two Sikhs died and several other Sikh protesters, including women, were injured at Hasan Abdal railway station after the railway authorities under the then-British government refused to stop the train ferrying Sikh prisoners from Amritsar to Attock.
- The Sikhs from nearby Panja Sahib wanted to serve langar (community kitchen food) to the Sikh prisoners but were told by the station master at Hasan Abdal station that the train would not stop at the station.
- In protest, the Sikhs squatted on the railway tracks and as the train approached, the Sikhs, who were determined to halt the train, continued to stay put, demanding their right to serve langar to the Sikh prisoners.





- The train finally came to a screeching halt, but only after crushing many of Sikh protesters of whom Bhai Karam Singh and Bhai Partap Singh died after sustaining serious injuries.
- Since then, both Sikhs are hailed as martyrs of Saka Panja Sahib who sacrificed their lives fighting for rights of Sikhs against the British.
- The history of the shrine Gurdwara Panja Sahib, in Hasan Abdal of Pakistan, is far older than the Saka Panja Sahib incident.
- The gurdwara was built on the site believed to be visited by Sikhism's founder Guru Nanak Dev, along with his companion Bhai Mardana.

News Broadcasting & Digital Standards Authority, which has fined a TV channel over the Hijab issue coverage?

- It is an independent body set up by the News Broadcasters & Digital Association (NBDA).
- It serves as a representative of private television news, current affairs and digital broadcasters.
- Funded entirely by its members, the NBDA has 26 news and current affairs broadcasters (comprising 119 news and current affairs channels) as its members.
- Various senior members of Indian media organisations serve on its Board of Directors.
- It carries out activities "to promote, protect and secure the interests including the right of freedom of speech and expression of the news broadcasters, digital news media and other related entities".
- The body includes a Chairperson who is to be an eminent jurist, and other members such as news editors, and those experienced in the field of law, education, literature, public administration, etc. nominated by a majority of the Board.
- Former Supreme Court judge and jurist AK Sikri is currently serving as the Chairperson.
- The Authority may initiate proceedings on its own and issue notice or take action in respect to any matter which falls within its regulations.
- This can also be through complaints referred to the Authority by the Ministry of Information & Broadcasting or any other governmental body, or by anyone else via its website.

MoS for External Affairs V Muraleedharan attends Dakar International Forum on Peace and Security in Africa





- This is the first time that India participated at the Ministerial level in the event.
- It was formerly known as the Dakar Peace and Security Forum.
- It annually brings together many African Heads of State and Government, international partners, as well as multiple actors of Peace and Security.
- It was launched during the 2013 Élysée Summit organized by France.
- The first edition of the forum was held in December 2014 in Dakar under the high patronage of Macky SALL, President of the Republic of Senegal.

PM Modi To Lay Foundation Stone Of C-295 Transport Aircraft Manufacturing Facility In Vadodara

- This is the first project of its kind in which a military aircraft will be manufactured in India by a private company.
- 16 aircraft will be delivered in flyaway condition and 40 will be manufactured in India by the Indian Aircraft Contractor, TATA Consortium of Tata Advanced Systems Limited and Tata Consultancy Services.
- In September 2021, Cabinet Committee on Security had approved the procurement of **56 C-295MW transport aircraft from Airbus Defence and Space S.A.**
- The first 16 fly-away aircraft are scheduled to be received between September 2023 and August 2025.
- The first Made in India aircraft is expected in September 2026.
- The aircraft can be used for civilian purposes also.
- All 56 aircraft will be fitted with **indigenous Electronic Warfare suite** of Indian DPSUs Bharat Electronics Ltd and Bharat Dynamics Limited.
- After completion of delivery of 56 aircraft to IAF, M/s Airbus Defence & Space will be allowed to sell the aircraft manufactured in India to civil operators and export to countries which are cleared by the Government of India.
- **C-295MW is a transport aircraft of 5-10 tonne capacity** with contemporary technology that will replace the ageing Avro aircraft of IAF.
- It has a rear ramp door for quick reaction and para dropping of troops and cargo.
- It can carry around 40-45 paratroopers or around 70 passengers.
- Short take-off/land from semi-prepared surfaces is another of its features.





• The aircraft will strengthen the logistic capabilities of the IAF.

UNSC's counter-terror meet in India to focus on these key issues

- This will be the first such meeting of the UNSC-CTC in India since its establishment in 2001.
- The Permanent Representative of India to the UN serves as the Chair of the CTC for 2022.
- The overarching theme of the meeting would be 'countering the use of new and emerging technologies for terrorist purposes'.
- The Counter-Terrorism Committee was established by **Security Council resolution 1373** adopted unanimously on **28 September 2001** in the wake of the 9/11 terror attacks in the US.
- The Committee was tasked with monitoring implementation of resolution 1373 which requested countries to implement a number of measures aimed at enhancing their legal and institutional ability to counter terrorist activities at home and around the world.
- This includes taking steps to criminalize the financing of terrorism, freezing any funds related to persons involved in acts of terrorism, deny all forms of financial support for terrorist groups, suppress the provision of safe haven, sustenance or support for terrorists and share information with other governments on any groups practicing or planning terrorist acts.
- Besides, the Committee monitors steps taken to cooperate with other governments in the investigation, detection, arrest, extradition and prosecution of those involved in terror acts and criminalizes active and passive assistance for terrorism.

NIA agency to have offices in all states by 2024, says Home Minister

- National Investigation Agency (NIA) is the Central Counter Terrorism Law Enforcement Agency of India.
- Parent agency: Union Ministry of Home Affairs.
- Establishment:NIA was created after the 2008 Mumbai terror attacks with the enactment of the National Investigation Agency Act 2008.
- Jurisdiction:
 - The agency is empowered to deal with terror related crimes across states without special permission from the states.





- A State Government may request the Central Government to hand over the investigation of a case to the NIA, provided the case has been registered for the offences as contained in the schedule to the NIA Act.
- NIA special courts:
 - Various Special Courts have been notified by the Govt. of India for trial of the cases arising out of offences committed in various states of the Union.
 - These are presided over by a judge appointed by the Central Government on the recommendation of the Chief Justice of the High Court with jurisdiction in that region.
- Offices:
 - It is headquartered in Delhi.
 - Branches: Hyderabad, Guwahati, Kochi, Lucknow, Mumbai, Kolkata, Raipur, Jammu, Chandigarh, Ranchi, Chennai and Imphal.

India's first indigenous Overhauser Magnetometer may show the way towards reducing costs of sensing experiments essential for geomagnetic sampling

- The Indian Institute of Geomagnetism (IIG), an autonomous research institution under Department of Science & Technology, Government of India, has developed the magnetometer as part of its technology development program.
- It will pave way for reducing the cost of sampling and sensing experiments essential for geomagnetic sampling.
- The performance of this indigenously made magnetometer is at par with a commercial OVH sensor that is currently installed at the magnetic observatories of IIG.
- Overhauser Magnetometer is one of the most accurate magnetometers extensively used by all magnetic observatories around the world.
- They are known for their higher accuracy, higher sensitivity, and efficient power consumption and hence find applications in all magnetic observatories worldwide as well as in international space programs.
- It has so far been imported for such purposes in India.

Indian Army Celebrates 76th Infantry Day On 27 October





- It aims to acknowledge the contributions of Infantry, the **largest fighting arm of the Indian Army.**
- This day is commemorated to honour the brave soldiers of the infantry who fought and laid down their lives during the **India-Pakistan war in 1947.**
- The operation was started on October 27, 1947; to protect the people of **Kashmir** from the Pakistani invaders after Maharaja Hari Singh of Kashmir had signed the Instrument of Accession of Kashmir to India.
- The Indian Air force carried out the task of flying the troops of 1st Sikh Regiment into Srinagar on this day.

Pradhanmantri Sangrahalaya receives 115,161 visitors till 30 Sept

- The Pradhanmantri Sangrahalaya is a tribute to every Prime Minister of India since Independence, and a narrative record of how each one has contributed to the development of our nation over the last 75 years.
- The logo of the Sangrahalaya shows hands holding the dharma chakra, symbolising the nation and democracy.
- The Sangrahalaya will also include the Nehru Museum.
- It is located at the iconic Teen Murti complex.
- From the freedom struggle to the framing of the Constitution, the museum will have displays that showcase stories of how the respective Prime Ministers steered the nation.
- Personal items, gifts and memorabilia like medals, commemorative stamps, speeches of PMs and anecdotal representations of ideologies will be on display at the museum.
- The Teen Murti Bhawan, the site of the new museum, was the official residence of Jawaharlal Nehru, the first Prime Minister of India.
- The Nehru Memorial Museum and Library (NMML) was set up in his memory on its premises as an autonomous institution under the Union Culture Ministry.





OCT 29

Regional Connectivity Scheme (RCS)-UDAN

- UDAN (UdeDeshkaAamNaagrik) is a regional airport development and "Regional Connectivity Scheme" (RCS) of the Union Government.
- The scheme UDAN envisages providing connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports.
- Implementing Ministry: Ministry of Civil Aviation
- This is first-of-its-kind scheme globally to create economically viable flights on regional routes so that flying becomes affordable to the common man even in small towns.
- It is a key component of the National Civil Aviation Policy (NCAP) which was released by the Ministry of Civil Aviation (India) in 2016.
- The scheme is jointly funded by the central government and state governments.

Two components of UDAN:

- **Airports:**The first component is to develop new airports and enhance the existing regional airports to increase the number of operational airports for scheduled civilian flights.
- **Flight routes:**The second component is to add several hundred financially-viable, capped-airfare, new regional flight routes to connect more than 100 under-served and un-served airports in smaller towns by using "Viability Gap Funding" (VGF) where needed.

Withdrawal of the Personal Data Protection Bill was a bad move

- The Parliamentary Standing Committee on Information and Technology recently raised several questions on implication on data privacy of citizens with vague definitions of "public interest" and "national security" in the draft Indian Telecommunication Act, 2022.
- **17 DRSCs were established in Parliament in 1993** on the proposal of the Lok Sabha Rules Committee.Seven more similar committees were





established in 2004 and their numbers were thus increased **from 17 to 24.**

- The fundamental purpose of the Standing Committees is to make the Executive (i.e. the Council of Ministers) more accountable (particularly in financial matters) to the Parliament.
- They also help the Parliament to discuss the budget more effectively.
- All the Ministries or Departments of the Central Government shall be governed by the 24 Standing Committees.
- Each standing committee consists of 31 members (21 from Lok Sabha and 10 from Rajya Sabha). The members of the Lok Sabha (or Rajya Sabha) are nominated by the Speaker (or Chairman) from amongst its own members.
- **A Minister cannot be appointed**to any of the DRSCs and if a member of a DRSC becomes a minister, he ceases to be a member of that committee.
- Each standing committee's term of office **is one year**from the date of establishment.
- Out of the 24, 8 DRSCs work under the Rajya Sabha and 16 DRSCs under the Lok Sabha.

RBI to hold additional MPC meeting on November 3

- This meeting has been called as the RBI has failed to maintain the consumer price index (CPI) inflation target within the 2-6 per cent band for three consecutive quarters, or nine straight months January to September 2022.
- This is the first time since the RBI adopted an inflation-targeting monetary policy regime in 2016 that an MPC meeting has been called under the provisions of Section 45ZN of the Act.

Section 45ZN of the RBI Act:

- This section says that in case the RBI fails to meet the inflation target, it has to present a report to the government explaining the reasons for the failure.
- In the report, the central bank will have to mention the remedial actions it proposes to take, and an estimated time within which the inflation target will be achieved following the timely implementation of the proposed remedial actions.





• The report is required to be sent to the government within one month from the date on which the RBI failed to meet the inflation target.

Regulation 7 of the RBI MPC and Monetary Policy Process Regulations, 2016:

- It states that a separate meeting is required to be scheduled as part of the normal policy process to discuss and draft the report to be sent to the government.
- Currently, the Monetary Policy Committee (MPC) meets six times in a financial year, which is every two months.
- The schedule of the MPC meetings for the entire financial year is announced in advance.

Four-day Chhath Puja celebrations begin across country today

- Chhath is a Hindu festival dedicated to the Sun god and his wife Usha in order to thank them for bestowing the bounties of life on earth. The Goddess who is worshipped during the famous Chhath Puja is known as Chhathi Maiya (also known as Usha, wife of the sun god).
- The word chhath means sixth and the festival is celebrated on the sixth day of the month Kartika of the Hindu lunar Bikram Sambat calendar.
- The festival is observed over a period of four days. They rituals include holy bathing, fasting, standing in water for long periods of time, and offering prayers and food to the setting and rising sun.
- The main worshipers, called Parvaitin, are usually women. However, many men also observe this festival as Chhath is not a gender-specific festival.
- The festival is observed most elaborately in Mithila Province of Nepal, Terai-Madhesh region of Nepal, Indian states of Bihar, Jharkhand and UP. It is also more prevalent in areas where migrants from those areas have a presence.

India's Northward Development Journey Will Be Complete After Reaching Gilgit-Baltistan: Rajnath

- Gilgit-Baltistan (GB) was formerly known as the Northern Areas.
- It is the northernmost territory administered by Pakistan, providing the country's only territorial frontier, and thus a land route, with China, where it meets the Xinjiang Autonomous Region.





- To G-B's west is Afghanistan, to its south is Pakistan-occupied Kashmir, and to the east, the Union Territory of Jammu and Kashmir.
- It is Indian territory, part of the former princely state of Jammu and Kashmir that acceded to India in full after Independence, and which has been under illegal Pakistani occupation.
- Gilgit Baltistan has been under the control of Pakistan since April 1949, when the leadership of the so-called Azad Jammu and Kashmir (AJK) was forced to sign away this territory to Pakistan.
- However, the region does not have any place in the constitutional framework of Pakistan and has been kept under the tight control of the central government.
- Gilgit-Baltistan shares a border with Azad Kashmir, together with which it is referred to by the United Nations as "Pakistan administered Kashmir".
- Gilgit was part of the princely state of Jammu and Kashmir, but it was ruled directly by the British, who had taken it on lease in 1935 from Hari Singh, the Hindu ruler of the Muslim-majority state.
- On October 22, 1947, with Hari Singh dithering on accession to India, Pashtun tribal militiamen along with Pakistani forces poured into the Kashmir Valley and marched towards Srinagar in accordance with a plan known as **Operation Gulmarg**. On the way, the lashkars engaged in massive plunder and looting in Baramulla.
- Hari Singh signed the Instrument of Accession with India on October 26, 1947. The Indian Army then landed in the Kashmir Valley and began an operation to push back the Pakistani invaders.

Govt Notifies Rules For Social Media Grievance Appellate Committees

- Grievance Appellate Committees will be set up within three months by the government for resolving social media users' grievances. In this regard, a gazette notification was issued by the Ministry Of Electronics And Information Technology recently to amend the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- Each Grievance Appellate Committee will consist of a chairperson and two whole time members appointed by the Central Government.
- Any person aggrieved by a decision of the Grievance Officer may prefer an appeal to the Grievance Appellate Committee within a period of thirty





days from the date of receipt of communication from the Grievance Officer.

- It also states that the Grievance Appellate Committee will adopt an online dispute resolution mechanism.
- Grievance Appellate Committee has been introduced for hearing appeals against decisions of the Grievance Officer appointed by the intermediary.
- Privacy policy and user agreements of intermediaries are to be made available in the Eighth Schedule Indian languages.

PM Modi moots 'One Nation, One Police Uniform' idea

• His suggestion "One Nation, One Uniform" is in line with his broader attempt to introduce a uniform set of policies across the country.Currently, there is a 'one nation, one ration' card; 'one nation, one mobility' card; 'one nation, one grid' and a 'one nation, one sign language'.

Law and order:

- The Indian Constitution puts police forces under the jurisdiction of state governments, and each of the 28 states have their own police force.
- Both 'public order' and the 'police' are placed in List II (State List) of the Seventh Schedule of the Constitution, which deals with the division of powers between the Union and States.
- While police personnel in India are often associated with the colour khaki, their uniforms do differ in varying degrees in different regions.
- Since state governments and even an individual force can decide the uniform their personnel wear, there are at times inconsistencies in their official attire. For example:
 - The Kolkata Police wear white uniforms.
 - Puducherry Police constables wear a bright red cap with their khaki uniforms.
 - Delhi Traffic Police personnel wear white and blue uniforms.
- The Bureau of Police Research and Development (BPRD), under the ministry of home affairs (MHA), had designed a new all-weather friendly 'smart uniform' for Indian police in 2017 in association with the National Institute of Design (NID) and sent a report to all the states and UTs.





In poll-bound HP, announcement on Hattis leads to resentment among SCs, Gujjars in Sirmaur

- The Hattis are a close-knit community who take their name from their traditional occupation of selling home-grown crops, vegetables, meat, and wool at small-town markets known as 'haats'.
- Hatti men traditionally don a distinctive white headgear on ceremonial occasions.
- The Hatti homeland straddles the Himachal-Uttarakhand border in the basin of the Giri and Tons rivers, both tributaries of the Yamuna.
- The Tons marks the border between the two states, and the Hattis living in the Trans-Giri area in today's Himachal Pradesh and Jaunsar Bawar in Uttarakhand were once part of the royal estate of Sirmaur. Jaunsar Bawar was conquered by the British in 1814.
- Parts of the Trans-Giri region, where most of the Hatti community lives, also come under the Assembly Constituencies of Renukaji, Shillai, and Pachhad.
- The two Hatti clans, in Trans-Giri and Jaunsar Bawar, have similar traditions, and inter-marriages are common.

SC & ST Population of Himachal Pradesh:

• As per the most recent Census (2011), 5.71% of the State's population is ST and 25.19% of the population is classified as SC.

Tulu, Kodava speakers demand priority for their languages too in Kannada development Bill

- Tulu is a Dravidian language.
- It is mainly spoken in Udupi, Dakshina Kannada, Kasargod and the Western Ghats had 17,22,768 speakers as per the 2001 census.
- The native speakers of Tulu are referred to as Tuluva or Tulu people and the geographical area is unofficially called Tulu Nadu.
- **Features:**Separated early from Proto-South Dravidian, Tulu has several features not found in Tamil–Kannada. For example, it has the past perfect and the future perfect, like French or Spanish, but formed without an auxiliary verb.
- **Status:**At present, Tulu is not an official language in the country.





• **Tulu culture:**Tulu has a rich oral literature tradition with folk-song forms like paddana, and traditional folk theatre yakshagana.

Kodava:

- It is a Dravidian language.
- Kodava, which is also called Coorgi, is spoken mainly in Kodagu district.
- According to the 2001 census, the total number of Kodava speakers are 166,187, compared to 1,22,000 in the 1997 census.

Kannada Language Comprehensive Development Bill, 2022

- The Bill aims for the effective implementation of Kannada as the official language of the state with English being the second communication language.
- The bill envisages reservation of jobs for Kannadigas both in the government and private organisations.
- It also has the provision to deny incentives such as tax holiday, tax rebate or exemption and discount in land procurement to the private companies, which do not provide reservation for Kannadigas in employment.
- The job applications have to clear the Kannada language examination that is equivalent to the first language or second language in SSLC (secondary school leaving certificate). Those who have studied Kannada as the first or second language in SSLC or equivalent are exempted from this examination.
- The bill does not specify the quantum reservation on jobs and education or the ranks of the posts to be coming under the purview of reservation.
- All communications, notifications from the state government will be mandated to be in Kannada.
- The proceedings of courts and their orders should be in Kannada based on the situation.
- The bill envisages imposing a fine of Rs 5,000 for any violation if the offence is for the first time.
- The second time offence and third time offence will attract a file of Rs 10,000 and Rs 20,000 respectively.





OCT 30

A new target found to combat AMR Salmonella

- The rapid and unselective use of traditional antibiotics gives rise to the emergence of drug resistant phenotype in typhoidal and non-typhoidal Salmonella serovars.
- It has increased the difficulties in curing Salmonella-induced food-borne illnesses (majorly typhoid or paratyphoid fever, gastroenteritis, and diarrhoea) worldwide.
- **Salmonella typhimurium ST313** is an invasive non-typhoidal Salmonella serovar, causes bloodstream infection in the malnourished and immunocompromised population of sub-Saharan Africa.
- The MDR phenotype in this pathogen was provided by Salmonella Genomic Island-1 (SGI-1), which confers protection against a wide range of antibiotics, including ampicillin (pse-1), chloramphenicol/florfenicol (floR), streptomycin/spectinomycin (aadA2), sulphonamides (sul1), and tetracycline (tetG) (ACSSuT).
- Further emergence of extensively drug-resistant (XDR) S. Typhimurium ST313 (having multi-drug resistant (MDR) and resistance against extended-spectrum beta-lactamase and azithromycin) in Africa posed a significant threat to global health.
- Recent studies reported an annual incidence of as many as 360 cases of typhoid fever per 1,00,000 people, with an annual estimate of 4.5 million cases and 8,930 deaths (0.2% fatality rate) in India.
- The continuous adaptation of this bacteria to the available antibiotics creates a risk of developing antimicrobial resistance in the future.
- The recent study showed that outer membrane porins of Salmonella Typhimurium play an essential role in the survival of the bacteria in the presence of antibiotics.

Salmonella infection:

- It is a disease caused by the bacteria Salmonella.
- Salmonella Typhimurium and salmonella typhi are two types of salmonella bacteria.
- It is usually characterized by acute onset of fever, abdominal pain, diarrhoea, nausea and sometimes vomiting.





• Salmonella is 1 of 4 key global causes of diarrhoeal diseases.

Tuberculosis deaths and disease increase during the COVID-19 pandemic

- With 28% cases, India was among the eight countries accounting for more than two-third (or 68.3%) of the total TB patients' count.
- The other countries were Indonesia (9.2% cases), China (7.4%), the Philippines (7%), Pakistan (5.8%), Nigeria (4.4%), Bangladesh (3.6%) and the Democratic Republic of the Congo (2.9%).
- The burden of drug-resistant TB (DR-TB) also increased by 3% globally between 2020 and 2021.
- India was among the three countries others being Indonesia and the Philippines that accounted for most of the reduction in 2020 (67% of the global total).
- They made partial recoveries in 2021, but still accounted for 60% of the global reduction compared with 2019, according to the report.
- Tuberculosis (TB) is caused by **bacteria (Mycobacterium tuberculosis)**that most often affect the lungs.
- It is curable and preventable disease.
- Two kinds of tuberculosis infection:
 - **Latent TB** The bacteria remain in the body in an inactive state. They cause no symptoms and are not contagious, but they can become active.
 - **Active TB -** The bacteria do cause symptoms and can be transmitted to others.
 - About one-quarter of the world's population has latent TB.
 - People infected with TB bacteria have a 5–15% lifetime risk of falling ill with TB.
 - However, persons with compromised immune systems, such as people living with HIV, malnutrition or diabetes, or people who use tobacco, have a much higher risk of falling ill.
- Transmission:
 - TB is spread from person to person through the air.
 - When people with lung TB cough, sneeze or spit, they propel the TB germs into the air.
 - Even after inhaling a few drops of these germ, a person can get infected.

Multidrug-resistant tuberculosis (MDR-TB)





- Drug resistance emerges when anti-TB medicines are used inappropriately, through incorrect prescription by health care providers, poor quality drugs, and patients stopping treatment prematurely.
- Multidrug-resistant tuberculosis (MDR-TB) is a form of TB caused by bacteria that do not respond to first-line anti-TB drugs.
- MDR-TB is treatable and curable by using second-line drugs.

Kinnaur youth seek affidavit from candidates against construction of hydropower projects

- It is a proposed **804 megawatt project over the Satluj River.**
- The **run-of-the-river (ROR) project** envisages construction of a concrete gravity dam of ±88 metre high above the deepest foundation level across river Satluj near Jangi village, and underground powerhouse on the right bank upstream of Tehsil boundary (Kashang Nallah).
- The diversion of water will involve construction of a 12-km-long tunnel.
- Construction of the dam will result in the submergence of about 156.2917 ha of land, out of which 143.2093 ha is forest land and 13.0824 ha is private.
- The length of the reservoir will be 10.6 km.
- Kinnaur district is mainly marked by its cold desert, tribal population, fragile topography, rich and diverse culture, apple orchards, off-season vegetables and the Satluj River.
- The river has been dammed at multiple places along the valley to create an additional feature to Kinnaur's identity as Himachal's hydropower hub, which locals believe is a malediction.
- An integral part of the old Hindustan-Tibetan Route, Jangram Valley, lies on the right bank of the Satluj river in the district.
- Chilgoza pine:
 - Another major impact is connected to the forest of Chilgoza pine, which has a patchy distribution across arid mountain valleys in Afghanistan, Pakistan and India.
 - **Kinnaur has the largest Chilgoza forests**, covering an area of around 2,000 hectares.
 - Chilgoza pine is well-known for its edible seeds and is rich in carbohydrates, proteins, and other medicinal values.
 - $\circ~$ It is classified as an endangered and rare tree species.





 Jangi, one of the affected Gram Panchayat from this JTP HEP, has one of the largest patches of chilgoza in the country, according to Himachal Pradesh's State of Environment report.

Run-of-river hydro projects:

- ROR projects are seen as a "green" alternative to high-dam hydropower projects such as the Tehri Hydropower Project.
- This is because an ROR dam diverts the river flow in a controlled environment to generate electricity and sends the water back to the river, whereas a high-dam project stores river water in a reservoir.

Gujarat to form panel to study all aspects of Uniform Civil Code

- A Uniform Civil Code is one that would provide for one law for the entire country, applicable to all religious communities in their personal matters such as marriage, divorce, inheritance, adoption etc.
- Article 44 of the Constitution lays down that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.

Directive Principles of State Policy:

- Article 44 is one of the Directive Principles of State Policy.
- These, as defined in Article 37, are not justiciable (not enforceable by any court) but the principles laid down therein are fundamental in governance.
- While Article 44 uses the words "state shall endeavour", other Articles in the 'Directive Principles' chapter use words such as "in particular strive"; "shall in particular direct its policy"; "shall be obligation of the state" etc.

Uniform Civil Code (Goa):

- Goa, a former Portuguese colony, was incorporated into the Union of India in 1961. In 1987, Goa was made a separate state.
- The Uniform Civil Code (UCC) was introduced in Goa in the year 1870 by the erstwhile Portuguese rulers.
- It was retained even after the territory was merged with India in the year 1961.





Kalanamak rice, 'Buddha's gift to people, is now small, strong

- Kalanamak is a traditional variety of paddy with black husk and strong fragrance.
- It is considered a gift from Lord Buddha to the people of Sravasti when he visited the region after enlightenment.
- Grown in 11 districts of the Terai region of north-eastern Uttar Pradesh and in Nepal, the traditional variety has been prone to 'lodging', a reason for its low yield.
- Its yield is barely two to 2.5 tonnes per hectare.
 - Lodging:
 - Lodging is a condition in which the top of the plant becomes heavy because of grain formation, the stem becomes weak, and the plant falls on the ground.
- The traditional Kalanamak rice is protected under the Geographical Indication (GI) tag system.
- It's recorded in the GI application that Lord Budhha gifted Kalanamak paddy to the people of Sravasti so that they remembered him by its fragrance.

New varieties:

- Addressing the problem, the Indian Agriculture Research Institute (IARI) has successfully developed two dwarf varieties of Kalanamak rice.
- They have been named
 - Pusa Narendra Kalanamak 1638 and
 - Pusa Narendra Kalanamak 1652.
- The IARI says the new name is in recognition of its association with the Acharya Narendra Dev University of Agriculture and Technology in Ayodhya, for testing the two varieties.
- The yield of the new varieties is double that of the traditional variety. The IARI and the Uttar Pradesh Council of Agriculture are working together to make the seeds available to farmers at the earliest.

Northeast monsoon arrives over South India, declares IMD

- India receives rainfall during two seasons.
- About 75 per cent of the country's annual rainfall is received from the Southwest monsoon between June and September.





- The Northeast monsoon, on the other hand, occurs during October to December, and is a comparatively small-scale monsoon, which is confined to the Southern peninsula.
- Also called the **winter monsoon**, the rainfall associated with the Northeast monsoon is important for Tamil Nadu, Puducherry, Karaikal, Yanam, coastal Andhra Pradesh, Kerala, north interior Karnataka, Mahe and Lakshadweep.

AMPRI converts red mud into X-ray shielding tiles

- It has converted red mud into X-ray shielding tiles in a green and economically viable manner through a ceramic route by adding a certain weight percentage of high Z material and binder with it.
- These tiles can be used to build radiation shielding structures in diagnostic X-rays, CT scanner rooms, Cath labs, bone mineral density, dental X-rays, etc., instead of the toxic lead sheet to protect the public from radiation hazards.
- Red Mud is the waste generated in the Bayer process of alumina production from bauxite.
- It is also known as bauxite residue.
- Red Mud is defined as a "High Volume Low Effect Waste".
- Nearly 1 to 1.5 tonnes of RM is being generated while producing one tonne of alumina from the bauxite ore through the Bayer process.
- It is considered to be toxic due to its extreme alkalinity and heavy element leaching.
- Annually about 175 million tonnes of red mud have been generated globally and stored in a specially designed clay-lined pond.
- Among that India is producing nearly 9 million tonnes of red mud every year.
- The clay-lined ponds often broke out and pollute soil, groundwater, and air and become fatal for both humans and wildlife.
- Red mud is one of the underutilized industrial wastes and getting accumulated over the years due to an increase in alumina production as well as inadequate technologies for its large-scale utilization.
- The red mud contains 30 55% of Fe2O3, which is suitable for attenuating high-energy ionizing radiations like X- and gamma rays.

4th edition of Goa Maritime Symposium to be conducted from October 31





- **The theme of GMS-2022** is "Maritime Security Challenges in the Indian Ocean Region: Converting Common Maritime Priorities into Collaborative Mitigation Frameworks".
- The theme is underpinned by the idea of **'Security and Growth for All in the Region' (SAGAR)** and five principles of Maritime Security enunciated by the Hon'ble Prime Minister of India.
- The participants of the Symposium comprise Captains/ Commanders and equivalent-rank officers from Navies/ Maritime forces from friendly foreign countries viz., Bangladesh, Comoros, Indonesia, Madagascar, Malaysia, Maldives, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka, and Thailand, besides India.

Goa Maritime Symposium (GMS):

- It was conceptualised and instituted by the Indian Navy in 2016.
- It is a forum for fostering collaborative thinking, cooperation and mutual understanding between India and key maritime nations of the Indian Ocean Region (IOR).
- The symposium is conducted biennially by the **Naval War College** (**NWC**), **Goa**, and three editions of the event have been organised thus far.

INDIAN NAVY PARTICIPATES IN MAIDEN TRILATERAL EXERCISE WITH MOZAMBIQUE AND TANZANIA

- Indian Navy is represented by the guided missile frigate, INS Tarkash, a Chetak helicopter and MARCOS (Special Forces).
- The exercise has three broad objectives:
 - capability development to address common threats through training and sharing of best practices,
 - enhancing interoperability, and
 - Strengthening maritime cooperation.
- These exercises reflect India's and the Indian Navy's commitment to enhancing maritime security and cooperation with maritime neighbours in the Indian Ocean Region and promoting SAGAR, Safety and Growth for All in the Region.





ECI to host a two day International Conference on 'Role, Framework & Capacity of EMBs' as the lead for the Cohort on 'Election Integrity' as a follow on to the Summit for Democracy"

- Theme is 'Role, Framework & Capacity of Election Management Bodies'.
- It will have discussions on the current & future challenges being faced by the Election Management Bodies' with respect to their role and framework to ensure 'election integrity'.

'Summit for Democracy':

- It was an initiative of US President and hosted in December 2021.
- Following this Summit, a "Year of Action" was proposed with events and dialogues on themes related to Democracy and to host an in-person 'Leaders' Summit for Democracy' subsequently.
- The Summit also developed two platforms 'Focal Groups' and 'Democracy Cohorts' to facilitate participation in the Year of Action.
- As part of the 'Summit for Democracy' Year of Action, India through the ECI, is leading the 'Democracy Cohort on Election Integrity' to share its knowledge, technical expertise and experiences with other democracies of the world.
- ECI, as its lead, has proposed to also provide training and capacity building programmes to Election Management Bodies (EMBs) across the world and provide technical consultancy as per needs of other EMBs.





OCT 31

Union Home Minister's "Special Operation Medal" for the year 2022 awarded for 4 Special Operations

- The medal was **constituted in 2018** with the objective to recognize those operations, which have high degree of planning, high significance for the security of the country/State/UT and have significant impact on the security of larger sections of the society.
- The award shall be conferred for Special Operation in the areas such as counter terrorism, border action, arms control, prevention of narcotics smuggling and rescue operations.
- All recommendations for the award is sent to the MHA within three months of the special operation.
- It is announced on 31st of October every year.
- In a year, normally 3 Special Operations are considered for the award and in extra ordinary circumstances; the award may be given up to 5 Special Operations to encourage State/UT Police.

Actress called Samantha Ruth Prabhu diagnosed with Myositis

- What is myositis? It is a rare condition that causes muscles to become weak, painful and tired. Myo means muscle, it is means inflammation. When muscles are inflamed, they may be swollen and susceptible to pain.
- Causes: It is usually caused by a problem with the immune system, where it mistakenly attacks healthy tissue. In most cases, the exact cause of myositis is unknown and therefore considered idiopathic.
- Prevalence: Around 4-22 cases per one lakh population. Myositis can affect both children and adults. With the exception of one type of myositis, women are more likely to be affected by this disease than men.
- Types of myositis:
 - Dermatomyositis
 - Inclusion-body myositis
 - Juvenile myositis
 - Polymyositis
 - Toxic myositis





- Symptoms: The general symptoms may include muscle pain and soreness, fatigue, trouble swallowing, and difficulty breathing.
- Treatment: Since there is no one medical treatment that fits all, immunosuppressant drugs are recommended along with physical therapy, exercise, stretching, and yoga which can help keep muscles strong and flexible and prevent muscle atrophy.

PM announces ex-gratia from PMNRF for the victims of mishap in Morbi

- Prime Minister's National Relief Fund (PMNRF) was established entirely with public contributions and does not get any budgetary support.
- The corpus of the fund is invested in various forms with scheduled commercial banks and other agencies. Disbursements are made with the approval of the Prime Minister.
- PMNRF has not been constituted by the Parliament. The fund is recognized as a Trust under the Income Tax Act and the same is managed by Prime Minister or multiple delegates for national causes.
- PMNRF accepts voluntary contributions from Individuals, Organizations, Trusts, Companies and Institutions etc.
- All contributions towards PMNRF are exempt from Income Tax under section 80(G).
- The resources of the PMNRF are utilized to render immediate relief to families of those killed in natural calamities like floods, cyclones and earthquakes, etc.
- Assists partially to defray the expenses for medical treatment like heart surgery, kidney transplantation, cancer treatment of needy people and acid attack etc.

Amur falcons begin to arrive in Manipur after travelling over 20,000 km

- Migration Journey:
 - Locally known as Akhuipuina, the bird arrives mainly in Manipur and Nagaland on its southbound migration from breeding grounds in North China, Eastern Mongolia and far-east Russia en-route to its wintering grounds in South Africa.
 - The one-way journey via India is about 20,000 km long and the birds do this twice a year.
- Conservation efforts:





- Amur falcon is protected under the Wildlife Protection Act 1972 and included under its Schedule IV.
- Hunting of the birds or possessing its meat is punishable with imprisonment up to three years or a fine up to Rs 5,000.
- In 2018, the forest department started a conservation programme by radio-tagging the birds to study their migratory route.
- IUCN status is Least Concern.

Prime Minister praises plantation drive of Central Reserve Police Force jawans

- The Central Reserve Police Force (CRPF) is the premier central police force of the Union of India for internal security.
- It functions under the authority of the Ministry of Home Affairs (MHA) of the Government of India.
- Originally constituted as the Crown Representative Police in 1939, it is one of the oldest Central para military forces (now termed as Central Armed Police Force).
- CRPF was raised as a sequel to the political unrest and the agitations in the then princely States of India following the Madras Resolution of the All-India Congress Committee in 1936 and the ever-growing desire of the Crown Representative to help the vast majority of the native States to preserve law and order as a part of the imperial policy.
- It became the Central Reserve Police Force on enactment of the CRPF Act on 28th December 1949.

Duties performed by the CRPF are

- Crowd control, Riot control
- Counter Millitancy / Insurgency operations, Dealing with Left Wing Extremism
- Overall co-ordination of large scale security arrangement specially with regard to elections in disturbed areas.
- Protection of VIPs and vital installations.
- Checking environmental de-gradation and protection of local Flora and Fauna
- Fighting aggression during War time
- Participating in UN Peace Keeping Mission
- Rescue and Relief operations at the time of Natural Calamities.





PM Modi inaugurates Maze Garden and Miyawaki Forest at Gujarat's Ekta Nagar

- **The Miyawaki Forest** is named after the technique developed by Japanese botanist Dr Akira Miyawaki to plant saplings of various species close to each other to **develop a dense urban forest**.
 - Through the Miyawaki method, a **forest can be developed in just two to three years** while it takes at least 20 to 30 years through the traditional method.
 - The **growth of plants is ten times faster using this method** and as a result, the forest developed is thirty times denser.
 - The Miyawaki Forest will include a Native Floral Garden, Timber Garden, Fruit Garden, Medicinal Garden and a Digital Orientation Centre.
- Maze garden: Sprawling over three acres with a pathway of 2,100 metres, this is the largest maze garden in the country. It has been designed in the shape of a 'Shriyantra', which is believed to bring positive energy to the place.

IMD predicted moderate rain in Tamil Nadu, Puducherry, Karaikal, Kerala and Mahe from 30 October-3 November.

- IMD was established in 1875. It is the **National Meteorological Service** of the country and the principal government agency in all matters relating to meteorology and allied subjects.
- **The Director General of Meteorology** is the Head of the India Meteorological Department.
- There are 6 Regional Meteorological Centres, each under a Deputy Director General with headquarters at Mumbai, Chennai, New Delhi, Calcutta, Nagpur and Guwahati.
- Its headquarter is in New Delhi.
- At present IMD is under the **Ministry of Earth Sciences (MoES).**
- IMD Mandate:
 - To take meteorological observations and to provide current and forecast meteorological information for weather-sensitive activities like agriculture, shipping, aviation, offshore oil explorations, etc.
 - To warn against severe weather phenomena like tropical **cyclones**, **norwesters**, **duststorms**, **heavy rains and snow**, **cold and heat waves**,





- To provide meteorological statistics required for agriculture, water resource management, industries, oil exploration and other nation-building activities.
- To conduct and promote research in meteorology and allied disciplines.

Monetary Policy Committee of the Reserve Bank of India (RBI) will convene to formulate its response to the Government of India about the high rate of inflation in the country.

- Under the "i**nflation-targeting" regime** that began in 2016, the central bank is required to target an inflation rate of 4 per cent, with a leeway of 2 percentage points on either side.
- **Retail inflation** which is calculated using the Consumer Price Index (CPI) has been outside the RBI's comfort zone for three consecutive quarters beginning January.
- **Under the RBI Act, 1934**, if the central bank fails to meet the inflation target for three consecutive quarters, it is required to provide the following information to the government:
- reasons for the failure to achieve the inflation target;
- remedial actions proposed to be taken; and
- an estimate of the time period within which the inflation target shall be achieved pursuant to timely implementation of the proposed remedial actions.

MPC

- Under Section 45ZB of the amended **RBI Act, 1934,** the central government is empowered to constitute a **six-member MPC** to determine the policy interest rate required to achieve the inflation target. **The first such MPC was constituted on September 29, 2016.**
- **Functions**: MPC shall determine the Policy Rate required to achieve the inflation target", and that "the decision of the Monetary Policy Committee shall be binding on the Bank".
- Members:
 - **RBI Governor** as its ex officio chairperson, the **Deputy Governor** in charge of monetary policy, an **officer of the Bank** to be nominated by the Central Board, and **three persons** to be appointed by the central government.





• The last category of appointments must be from "persons of ability, integrity and standing, having knowledge and experience in the field of economics or banking or finance or monetary policy".

Kanye West says he was beaten to pulp after outrage over his anti-Semitic rants

- Anti-Semitism refers to any form of prejudice against the Jewish people. However, the term itself is a misnomer as Semitic designates a language group, not a race.
- Though anti-Semitism can linguistically be used to describe a prejudice against speakers of the Semitic languages (including **Arabs and Ethiopians**,) in practical terms, it is **commonly used specifically to pertain to Jews**.
- Racial anti-Semitism, most commonly associated with the Nazis, stems from a belief that Jews are a distinct, inferior race with inherent genetic traits. This form usually manifests in the belief that Jews need to be exterminated altogether.
- **Religious anti-Semitism** traces its roots to the early days of Christianity and is accompanied by a notion that **Jews should be converted to other faiths.**
- Social anti-Semitism is a form of exclusion of Jews from social situations. For example, a practice was reported in 1959 which claimed that Jews in America were routinely excluded from golf and sports clubs.
- **Economic anti-Semitism** posits that Jews have a disproportionate degree of control over global and national financial institutions, and that their stronghold over those institutions ought to be diminished.
- **Political anti-Semitism** is the attempt to **keep Jews out of power**. It is often conflated with **anti-Zionism**, a movement that denies the Jewish right to a national homeland

Rashtriya Ekta Diwas or National Unity Day 2022

- National Unity Day or Rashtriya Ekta Diwas is celebrated on October 31, every year since 2014 to mark the birth anniversary of the Iron Man of India, Sardar Vallabhbhai Patel.
- This year marks the **147th birth anniversary of freedom fighter Vallabhbhai Patel**.





- Sardar Vallabhbhai merged 565 princely states to make India one nation. This is the reason why National Unity Day is celebrated on his birth anniversary.
- Sardar Vallabhbhai Patel was appointed as the **first Deputy Prime Minister and Home Minister of India from 1947 to 1950.**
- He was so influenced by Gandhiji's ideas that in the year 1920 in the non-cooperation movement, he adopted indigenous Khadi items and started boycotting foreign clothes.
- Patel led the **Satyagraha movement in Nagpur in 1923** against the British law of banning the hoisting of the Indian Flag.
- He was the second candidate for the post of President after Mahatma Gandhi at the Lahore session of the Indian National Congress in 1929.
- In the year 1950, the health of Sardar Vallabhbhai Patel started deteriorating and on 15 December 1950, he said goodbye to the world.
- **Ahmedabad's airport** has also been named Sardar Vallabhbhai Patel International Airport.
- In 2013, Narendra Modi laid the foundation stone of Sardar Patel's memorial in the Narmada district of Gujarat. It was named the **Statue of Unity.**