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July 1

PM Narendra Modi addresses Udyami Bharat

- During the event, Mr Modi launched the Raising and Accelerating MSME Performance (RAMP) Scheme, Capacity Building of First-Time MSME Exporters Scheme and new features of the Prime Minister's Employment Generation Programme PMEGP.
- He added that the Centre has increased the budget by more than 650 percent in the last eight years to strengthen the Micro, Small and Medium Enterprises (MSME) sector.
- A self-reliant fund of 50 thousand crore rupees has been released for the sector. The Prime Minister also asked MSMEs to register on the GeM portal for supplying goods to the government.
- Modi said the government has decided that for orders up to 200 crore rupees, no global tender will be undertaken and this is in some ways a reservation for the MSMEs.
- Under the Emergency Credit Line Guarantee Scheme, the central government has ensured 3.5 lakh crore rupees for the MSMEs.

Finance Minister Nirmala Sitharaman announces the Business Reform Action 2020

- In the report, seven states have been identified as the top achievers based on implementation of the Business Reforms Action Plan. The states are Andhra Pradesh, Gujarat, Haryana, Karnataka, Punjab, Telangana and Tamil Nadu.
- The report further mentioned that Himachal Pradesh, Madhya Pradesh, Maharashtra, Odisha, Uttarakhand and Uttar Pradesh figure under the Achievers category. While Assam, Chhattisgarh, Goa, Jharkhand, Kerala, Rajasthan and West Bengal have been placed in the Aspirers category.
- Andaman and Nicobar, Bihar, Chandigarh, Daman and Diu, Dadra and Nagar Haveli, Delhi, Jammu and Kashmir, Manipur, Meghalaya, Nagaland, Puducherry and Tripura have been clubbed under the Emerging Business Ecosystems category.

Raksha Mantri Shri Rajnath Singh approves enhanced monetary limits for procurement of Drugs and consumables for Ex-Servicemen Contributory Health Scheme (ECHS)

- He approved the enhancement of the monetary ceiling for purchase of Not Available, emergent, lifesaving and essential drugs by 100 per cent in all categories of polyclinics from Authorised Local Chemists. This will ensure easy and timely availability of medicines for ECHS beneficiaries.
- There have been various representations from the veterans regarding supply of medicines.
- The government has already undertaken a series of modifications to procedures of procurement of medicines for ECHS beneficiaries.

India's external debt rose to \$620.7 bn in FY22, up 8% YoY

- The external debt to GDP ratio declined to 19.9% at end-March 2022, from 21.2% a year earlier.
- Valuation gains on account of the appreciation of the U.S. dollar vis-à-vis the Indian rupee and major currencies including the Japanese yen and euro was estimated at \$11.7 billion.
- Excluding the valuation effect, external debt would have increased by \$58.8 billion instead of \$47.1 billion at end-March 2022 over end-March 2021, the RBI said.
- India's long-term debt (with original maturity of above one year) rose to \$499.1 billion, recording an increase of \$26.5 billion over its level at end-March 2021, RBI data showed. During the same period, the share of short-term debt in total external debt increased to 19.6% from 17.6%.
- Similarly, the ratio of short-term debt to foreign exchange reserves increased to 20%. U.S. dollar-denominated debt remained the largest component of external debt, with a share of 53.2%.
- Separately, the RBI said net claims of non-residents on India increased by \$5.6 billion during the fourth quarter of 2021-22 to \$359.8 billion in March 2022.

Govt keeps interest rates on small savings schemes unchanged for Q2FY23

- A hike in small savings rate was expected in view of a surge in yields on government bonds, to which their returns are linked as per a formula, amid a surge in inflation and increases in key interest rates by the Reserve Bank.
- This is the ninth quarter in a row that small savings rates have been held at the same level after rates were reduced in the range of 0.5% to 1.1% on different instruments for the April to June 2020 quarter.
- For July to September, the Sukanya Samriddhi scheme will continue to earn 7.6%, the Senior Citizens Saving Scheme will earn 7.4%, PPF 7.1%, Kisan Vikas Patra 6.9%, and NSC 6.8%. Five-year term deposits will fetch 6.7% interest.

PSLV-C53/DS-EO Mission

- PSLV-C53 is the second dedicated commercial mission of NewSpace India Limited (NSIL). It is designed to orbit DS-EO satellite along with two other co-passenger satellites from Singapore.
- This is the 55th mission of PSLV and 15th mission using PSLV-Core Alone variant. The mission proposes to demonstrate the utilization of the spent upper stage of the launch vehicle as a stabilized platform for scientific payloads subsequent to the separation of the satellites.
- PSLV-C53 carries three satellites. DS-EO, a 365 kg and NeuSAR, a 155 kg satellite both belonging to Singapore. Third satellite is a 2.8 kg Scoob-1 of Nanyang Technological University (NTU), Singapore.
- PSLV Orbital Experimental Module (POEM)DS-EO carries an Electro-Optic, multi-spectral payload that will provide full color images for land classification, and serving Humanitarian Assistance and Disaster Relief needs.
- NeuSAR is Singapore's first small commercial satellite carrying a SAR payload, which is capable of providing images in day and night and under all weather conditions.
- SCOOB-I satellite is the first satellite in the Student Satellite Series (S3-I), a hands-on student training program from the Satellite Research Centre (SaRC) at Singapore's NTU School of Electrical and Electronic Engineering.

Concern over acute shortage of key leprosy drug

- Clofazimine is one of the three essential drugs in the Multi Drug Treatment of Multibacillary Leprosy (MB-MDT) cases, along with Rifampicin and Dapsone.
- According to the World Health Organization (WHO), leprosy is endemic in several States and Union Territories of India, with the annual case detection rate of 4.56 per 10,000 population.
- The prevalence rate of leprosy is 0.4 per 10,000 population in the country.
- Of the new cases detected during 2020-21, 58.1% were multibacillary, 39% were women, 5.8% were children less than 14 years of age, and 2.41% had visible deformities. The rate of visible deformities was 1.1 per million population.

July 2

Cabinet approves Categorization of the Coalition for Disaster Resilient Infrastructure

- The Union Cabinet has approved the categorization of the Coalition for Disaster Resilient Infrastructure (CDRI) as an 'International Organization' and signing of the Headquarters Agreement (HQA) with CDRI for granting it the exemptions, immunities and privileges as contemplated under the United Nations (Privileges & Immunities) Act, 1947.
- Deputing experts to other countries, that are particularly vulnerable to disaster risk and / or require support for post disaster recovery and also bringing in experts from member countries to India, for similar purposes;
- Deploying funds globally and receive contributions from member countries, for CDRI activities;
- Providing an independent and international legal persona so that it can efficiently and effectively carry out its functions internationally.

- On 28th August, 2019, the Cabinet had approved the setting up of CDRI with its Secretariat in New Delhi along with a support of Rs. 480 crore to CDRI.
- The CDRI was launched by the Hon'ble Prime Minister of India during the United Nations Climate Action Summit on the 23rd September, 2019, at New York.
- Since its launch, thirty-one (31) Countries, six (06) International Organizations and two (02) private sector organizations have joined as members of CDRI.

India's largest floating solar power project fully operational

- NTPC declared Commercial Operation of the final part capacity of 20 MW out of 100 MW Ramagundam Floating Solar PV Project at Ramagundam, Telangana with effect from July 01, 2022.
- With the operationalisation of 100-MW Solar PV Project at Ramagundam, total commercial operation of Floating Solar Capacity in Southern Region rose to 217 MW.
- Earlier, NTPC declared Commercial operation of 92 MW Floating Solar at Kayamkulam (Kerala) and 25 MW Floating Solar at Simhadri (Andhra Pradesh).
- The solar modules are placed on floaters manufactured with HDPE (High Density Polyethylene) material.

ISRO's 'POEM'

- The PSLV Orbital Experimental Module is a platform that will help perform in-orbit experiments using the final, and otherwise discarded, stage of ISRO's workhorse rocket, the Polar Satellite Launch Vehicle (PSLV).
- The PSLV is a four-stage rocket where the first three spent stages fall back into the ocean, and the final stage (PS4) — after launching the satellite into orbit — ends up as space junk.
- However, in PSLV-C53 mission, the spent final stage will be utilised as a "stabilised platform" to perform experiments.
- POEM is carrying six payloads, including two from Indian space start-ups Digantara and Dhruva Space.

- According to ISRO, POEM has a dedicated Navigation Guidance and Control (NGC) system for attitude stabilisation, which stands for controlling the orientation of any aerospace vehicle within permitted limits.
- The NGC will act as the platform's brain to stabilize it with specified accuracy.
- POEM will derive its power from solar panels mounted around the PS4 tank, and a Li-Ion battery. It will navigate using "four sun sensors, a magnetometer, gyros & NavIC.

Dak Karmayogi

- This portal has been developed 'In-House' under vision of 'Mission Karmayogi', which was conceptualized by Prime Minister Narendra Modi with a view to bring efficiency in actions of all the employees of Government of India and transforming efficiency of bureaucracy with 'Minimum Government' and 'Maximum Governance'.
- 'Dak Karmayogi' portal will enhance the competencies of about 4 lakh Gramin Dak Sevaks & Departmental employees by enabling the trainees to access the uniform standardized training content online or in blended campus mode to enable them to effectively deliver a number of G2C services for enhanced customer satisfaction.

IFSCA issues regulatory framework for Angel Funds to facilitate investments in start-ups

- A Fund Management Entity (FME) in IFSC will be able to launch Angel Fund by filing a placement memorandum with the Authority under a Green Channel, i.e. the schemes can open for subscription by investors immediately upon filing the placement memorandum with the Authority.
- Angel Funds shall accept investments from accredited investors or investors who are willing to commit at least USD 40,000 over 5 years.
- Angel Funds are permitted to invest in start-ups as well as other regulated angel schemes in IFSC, India, foreign jurisdictions upon receiving consent from the desirous investors.
- While investment(s) by an Angel Fund in a start-up is capped at USD 1,500,000, the Angel fund is permitted to invest in subsequent rounds of

fund raising by the start-up in order to protect its shareholding from dilution, subject to certain conditions.

July 3

2022 UN Ocean Conference

- The overall theme of the Conference was: “Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions.”
- The UN Ocean Conference concluded, with governments and heads of state agreeing on a new political declaration to Save Our Ocean.
- Recognizing a “collective failure to achieve Ocean related targets” so far, leaders renewed their commitment to take urgent action and to cooperate at all levels, to fully achieve targets.
- The signatories emphasized the particular importance of implementing the Paris Agreement of 2015, and last November’s Glasgow Climate Pact to help ensure the health, productivity, sustainable use, and resilience of the ocean.
- India committed to a Coastal Clean Seas Campaign and will work toward a ban on single use plastics.
- The United Nations Decade of Ocean Science for Sustainable Development (2021-2030) aims to achieve the science we need, for the ocean we want.

Iran applies to join BRICS group of emerging countries

- Iran, which holds the world’s second-largest gas reserves, wants to join the BRICS group of Brazil, Russia, India, China and South Africa.
- The term BRIC was coined by Goldman Sachs economist Jim O’Neill in 2001 to describe the startling rise of Brazil, Russia, India, and China. The BRIC powers had their first summit in 2009 in Russia. South Africa joined in 2010.

- Argentina had also applied to join. Argentine President Alberto Fernandez, currently in Europe, has in recent days reiterated his desire for Argentina to join BRICS.
- China has by far the largest economy in the BRICS grouping, accounting for more than 70 of the group's collective 27.5 trillion US dollars in economic might. India accounts for about 13 per cent, with Russia and Brazil each accounting for about seven per cent, according to IMF data.
- BRICS account for more than 40 per cent of the world's population and about 26 per cent of the global economy.

NASA successfully launches a rocket from Australia's remote Northern Territory

- According to Equatorial Launch Australia, the rocket blasted off from the Arnhem Space Centre on the Dhupuma Plateau, near the township of Nhulunbuy.
- The rocket is expected to travel more than 300 kilometres into space on its mission to observe the Alpha Centauri 'A' and 'B' constellations, the nearest star systems to the Earth.
- Australia has a unique connection to Alpha Centauri. The Alpha Centauri can only be seen from the Southern Hemisphere and is one of the "pointers" to the Southern Cross constellation depicted on the nation's national flag.
- This Launch also made history for Australia as the first commercial space launch in the country. According to NASA, it was the first of three launches, with a further two planned for 4th and 12th of July.

Centre amends Foreign Contribution Regulation Act allowing relatives to freely send Rs ten lakh to India

- The amended rule now allows relatives to send 10 lakh rupees without informing the government. If the amount exceeds, the individuals will now have three months to inform the government against 30-days earlier.
- The amended rule also gives more time to the organisations to inform the government about opening of bank accounts for utilization of funds received under 'registration' or 'prior permission' category.

- A provision where an organisation/individual receiving foreign funds had to declare such contributions every quarter on its official website has also been done away with.

Chinese President Xi Jinping hosted the 14th BRICS Summit in Beijing.

- The summit was held in virtual format under the theme of 'Foster High-quality BRICS Partnership, Usher in a New Era for Global Development'.
- China is the chair of the 14th BRICS Summit happening this year which assumes importance as this was the first BRICS Summit after Russia-Ukraine war began and Russia is currently under severe economic sanction by the west led by the US.
- President Xi Jinping also hosted the High-level Dialogue on Global Development in Beijing. The Dialogue was held in virtual format under the theme of 'Foster a Global Development Partnership for the New Era to Jointly Implement the 2030 Agenda for Sustainable Development'.

Beijing Declaration

- The two day summit concluded with the Beijing Declaration.
- The declaration says that the BRICS countries support talks between Russia and Ukraine. They discussed concerns over the humanitarian situation in and around Ukraine and expressed support for United Nations, UN agencies and Red Cross to provide humanitarian assistance.
- The BRICS declaration also stated that terrorism should not be associated with any religion, nationality, civilisation or ethnic group. The summit called for finalisation and adoption of the Comprehensive Convention on International Terrorism within the UN framework.

International Day of the Seafarer 2021

- It is celebrated on the 25 of June each year to pay respect to Seafarers and sailors who help the entire world function by conducting sea transport.
- The day was proposed by International Maritime Organization in 2010 to celebrate the contribution of the seafarer to the world economy and civil society.

- Almost 90 per cent of the world's goods trade are transported by ships and behind these ships are the seafarers who work relentlessly to ensure the smooth flow of trade via water.
- The theme of this year is 'Seafarers: at the core of shipping's future. The theme seeks to increase the visibility of seafarers by drawing attention to the invaluable role they play now and will continue to play in the future.

July 4

New pathway to regulate nitrate absorption in plants

- The gene MADS27, which regulates nitrate absorption, root development and stress tolerance, is activated by the micro-RNA, miR444, therefore offers a way to control these properties of the plant.
- The researchers studied this mechanism in both rice (monocot) and tobacco (dicot) plants. The research is published in Journal of Experimental Botany.

Role of Nitrates

- Nitrogen is one of the most important macronutrients needed for development of a plant. It is a part of chlorophyll, amino acids and nucleic acids, among others. It is mostly sourced from the soil where it is mainly absorbed in the form of nitrates and ammonium by the roots.
- Nitrates also play a role in controlling genome-wide gene expression that in turn regulates root system architecture, flowering time, leaf development, etc.
- Thus, while a lot of action takes place in the roots to absorb and convert nitrogen into useful nitrates, the absorbed nitrates in turn regulate plant development apart from being useful as a macronutrient.

Powerful earthquake of magnitude 5.9 on the Richter scale struck a remote town in Afghanistan, killing over a thousand and injuring many more.

Earthquakes

- According to the theory of plate tectonics, the Earth's crust and upper mantle are made of large rigid plates that can move relative to one another. Slip on faults near the plate boundaries can result in earthquakes.
- The point inside the Earth where the earthquake rupture starts is called the focus or hypocentre. The point directly above it on the surface of the Earth is the epicentre.

Seismic waves

- Any elastic material when subjected to stress, stretches in a proportional way, until the elastic limit is reached. When the elastic limit is crossed, it breaks.
- Similarly, the Earth also has an elastic limit and when the stress is higher than this limit, it breaks. Then there is a generation of heat, and energy is released. Since the material is elastic, the energy is released in the form of elastic waves.
- These propagate to a distance determined by the extent of the impact. These are known as seismic waves.

Geographical Indications (GI) registry of Kai chutney.

- Applied under food category, the GI tag will help develop a structured hygiene protocol in the preparation of Kai chutney for standard wider use. Geographical Indications labels enhance the reputation and value of local products and support local businesses.
- People often keep a safe distance from red weaver ants as their sting inflicts a sharp pain and reddish bumps on the skin. Despite this, weaver ants are popular among the tribes of Mayurbhanj district in Odisha for the mouth-watering dish made of them — the Kai chutney.

- This savoury food item, rich in proteins, calcium, zinc, vitamin B-12, iron, magnesium, potassium, sodium, copper, fibre and 18 amino acids, is known to boost the immune system.
- Weaver ants, *Oecophylla smaragdina*, are abundantly found in Mayurbhanj throughout the year. They make nests with leaves of host trees.

Early human ancestors one million years older than thought

- The researchers analysed the fossilised remains of *Australopithecus* from Sterkfontein caves and argued they lived at the same time as their East African counterparts like the famous Lucy, complicating the way scholars have understood human evolution.

Australopithecus

- *Australopithecus*, meaning “southern ape”, was a group of hominins or now-extinct early humans, that was closely related to and almost certainly the ancestors of modern humans.
- They inhabited the planet 4.4 million to 1.4 million years ago, likely encompassing a time period longer than our own genus, *Homo*. Their fossils have been found across sites in eastern, northern, central and southern Africa.

What Sterkfontein caves

- The “Cradle of Humankind” is a 47,000-hectare paleoanthropological site, declared a World Heritage Site by UNESCO. Located 40 km northwest of Johannesburg, it contains a complex system of limestone caves, where a significant number of hominin fossils have been found.
- Within this complex lies Sterkfontein, a complex system of caves that holds a long history of hominin occupation and contains the largest number of *Australopithecus* fossils in the world.

Growing space tourism posing a risk to the climate

- The Researchers found that the soot emissions from rocket launches are far more effective at warming the atmosphere compared to other sources.

- The researchers state that routine launches by the rapidly growing space tourism industry “may undermine progress made by the Montreal Protocol in reversing ozone depletion.”

Montreal Protocol

- The Montreal Protocol is a landmark international treaty that was adopted in Montreal in 1987, and was aimed at protecting the Earth’s ozone layer by regulating the production and consumption of nearly 100 chemicals called ozone-depleting substances (ODS).
- The treaty phases down the consumption and production of various ODS in a stepwise manner.
- The United Nations Environment Programme (UNEP) states that without this treaty, ozone depletion would have increased by more than ten times by 2050, as compared to current levels.

Australia is killing millions of bees

- The recent outbreak of the deadly varroa mite, a sesame seed-sized parasite that was first spotted at a port near Sydney last week, poses a massive threat to the country’s multimillion-dollar honey industry.
- The Varroa mite, or Varroa destructor, is a parasitic insect that attacks and feeds on honeybees.
- Reddish-brown in colour, the tiny pests are known to kill entire colonies of honeybees, officials have warned. They often travel from bee to bee and also via beekeeping equipment, such as combs that have been extracted.
- The spread of the mite is largely blamed for a sharp decline in the number of honey bee colonies worldwide. It has plundered bee colonies across the globe.
- Although Varroa mites can feed and live on adult honey bees, they mainly feed and reproduce on larvae and pupae in the developing brood, causing malformation and weakening of honey bees as well as transmitting numerous viruses.

July 5

No more forced service charges

- These establishments should not add service charge automatically or by default to the food bill, the guidelines say.
- The guidelines adds that if any consumer finds that a hotel or restaurant is violating the guidelines, he or she may make a request to remove the service charge from the bill amount or lodge a complaint with the National Consumer Helpline.
- Complaints can be filed with the Consumer Commission too or with the District Collector.
- The guidelines added that component of service is inherent in the price of food and beverages offered by the restaurant or hotel.

Australia plans to supply critical minerals to Indian electric vehicle makers, space and defence programmes

- Australia will commit \$5.8 million to the three-year India-Australia Critical Minerals Investment Partnership.
- Prime Minister Anthony Albanese, soon after his May 23 election victory, had participated in the Quad Summit in Tokyo along with Prime Minister Narendra Modi, U.S. President Joe Biden and Japanese Prime Minister Fumio Kishida, where all sides pledged to focus on green and sustainable forms of energy.
- An MoU was recently signed between Khanij Bidesh India Ltd (KABIL) and the Critical Minerals Facilitation Office (CMFO) of Australia that will try to source lithium and cobalt from Australia.

Eastern Rajasthan Canal Project

- Centre has directed to stop the work on the proposed Eastern Rajasthan Canal Project (ERCP) in view of “lack of consent” by other States
- The proposed Eastern Rajasthan Canal Project (ERCP) is set to benefit 13 districts of Rajasthan through interlinking of three rivers. The project

stipulates transfer of excess water from the Chambal river basin to the regions facing water scarcity.

- Rajasthan has been demanding the national project status for ERCP for quite some time.

NHRC seeks report on harassment of Chakmas in Arunachal

- The Chakma people are a tribal group from the eastern-most regions of the Indian subcontinent.
- They are the largest ethnic group in the Chittagong Hill Tracts region of southeastern Bangladesh, and the second-largest in Mizoram, India (Chakma Autonomous District).
- Other places in Northeast India also have significant Chakma populations. Around 60,000 Chakma people live in Arunachal Pradesh, India; a first generation migrated there in 1964 after the Kaptai Dam tragedy. Another 79,000 Chakmas live in Tripura, India, and 20,000-30,000 in Assam, India.

Saving Chenkurinji from climate change

- Belonging to the Anacardiaceae family, the tree was once abundant in the hills on the southern parts of the Aryankavu Pass in Kerala's Kollam district, but its presence has been fast receding from the area over the years.
- *Gluta travancorica* is very susceptible to climate change and the present condition of the species is quite bad with low regeneration performance.
- Though the flowering usually happens in January, of late, the species has reported a tendency to extend the process due to climate change. It's an adaptation strategy to increase the chances of germination and maintain a minimum viable population.
- Though the tree is also seen inside the shola forests near Ponmudi, effective pollination hardly takes place in the habitat.

July 6

Fields Medal, the 'Mathematics Nobel'

- The other winners were French mathematician Hugo Duminil-Copin of the University of Geneva; Korean-American June Huh of Princeton; and Briton James Maynard of the University of Oxford.
- Viazovska, 37, is only the second female Fields Medalist, after the Iranian Maryam Mirzakhani in 2014.

Fields Medal

- The Fields Medal is awarded by the International Mathematical Union (IMU), an international non-governmental and non-profit scientific organisation that aims to promote international cooperation in mathematics.
- The Fields Medal is awarded every four years to one or more mathematicians under the age of 40 in recognition of “outstanding mathematical achievement for existing work and for the promise of future achievement”.
- The honour carries a physical medal of 14K gold. There is also a cash award of CAD 15,000.
- **Indian-origin winners:** Among the more than 60 mathematicians who have been awarded the Fields Medal since 1936, there are two of Indian origin — Akshay Venkatesh of the Institute for Advanced Study at Princeton, who won in 2018, the last time the honour was announced, and Manjul Bhargava of the Department of Mathematics at Princeton University, in 2014.

Uzbekistan says 18 killed in Karakalpakstan unrest

- The name Karakalpakstan is derived from the Karakalpak people, an ethnic minority group of around 2 million. Karakalpak translates to ‘black hat’, referring to their traditional headgear.
- The Karakalpaks consider themselves to be a distinct cultural group in Uzbekistan. Their Turkic language – Karakalpak – is closely related to

Kazak. Their separate language is a crucial aspect of their cultural identity.

- In their genealogical narrative, the Karakalpaks claim to share a common point of origin with the neighbouring Kazakhs, Uzbeks and Turkmen, but believe that over time they diverged from the others. This narrative marks the Karakalpaks as culturally separate from their neighbouring groups.
- When Uzbekistan declared its independence from the Soviet Union in August 1991, Karakalpakstan was formally recognized as an autonomous republic in Uzbekistan's constitution of 1992, and has the right to secede from on the basis of a nation-wide referendum.



India-Australia Critical Minerals Investment Partnership

- Critical minerals are elements that are the building blocks of essential modern-day technologies, and are at risk of supply chain disruptions.
- These minerals are now used everywhere from making mobile phones, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines. Based on their individual needs and strategic considerations, different countries create their own lists.

- However, such lists mostly include graphite, lithium and cobalt, which are used for making EV batteries; rare earths that are used for making magnets and silicon which is a key mineral for making computer chips and solar panels.
- Aerospace, communications and defence industries also rely on several such minerals as they are used in manufacturing fighter jets, drones, radio sets and other critical equipment.
- As countries around the world scale up their transition towards clean energy and digital economy, these critical resources are key to the ecosystem that fuels this change.

The three new 'exotic' sub-atomic particles discovered at CERN

- The three “exotic” additions — a new kind of “pentaquark” and the first-ever pair of “tetraquarks” — to the growing list of new hadrons found at the LHC will help physicists better understand how quarks bind together into these composite particles.
- CERN — Conseil Européen pour la Recherche Nucléaire — is the original name of the European Organisation for Nuclear Research, which runs the particle accelerator complex that houses the LHC, the world’s largest and most complex collider.
- The LHC, re-ignited after three years in April, was cranked up to unprecedented levels of energy on July 5, and has begun smashing together protons at almost the speed of light, which could throw up “new” physics beyond the Standard Model.

Quarks

- Quarks are elementary particles that come in six “flavours”: up, down, charm, strange, top, and bottom. They usually combine together in groups of twos and threes to form hadrons such as the protons and neutrons that make up atomic nuclei.
- But they can also combine into four-quark and five-quark particles, called tetraquarks and pentaquarks. These exotic hadrons were predicted by theorists about six decades ago — around the same time as conventional hadrons — but they have been observed by LHCb and other experiments only in the past 20 years.

PM to inaugurate Golden Jubilee celebrations of Agradoot group

- Agradoot was started as an Assamese bi-weekly.
- It was established by Kanak Sen Deka, senior journalist of Assam.
- In 1995, Dainik Agradoot, a daily newspaper, was started and it has developed as a trusted and influential voice of Assam.

Nairobi flies, which are causing disease in Sikkim

- Nairobi flies, also called Kenyan flies or dragon bugs, are small, beetle-like insects that belong to two species, *Paederus eximius* and *Paederus sabaesus*.
- They are orange and black in colour, and thrive in areas with high rainfall, as has been witnessed in Sikkim in the past few weeks. Like most insects, the beetles are attracted by bright light.
- Usually, the insects attack pests that consume crops and are beneficial for humans — but at times, they come in contact with humans directly and cause harm.
- These flies do not bite, but if disturbed while sitting on anyone's skin, they release a potent acidic substance that causes burns.
- This substance is called pederin, and can cause irritation if it comes in contact with the skin, leading to lesions or unusual marks or colouring on the skin. The skin begins to heal in a week or two, but some secondary infections can occur, especially if the victim scratches the irritated skin.
- Nairobi flies is a species of insect native to East Africa. Major outbreaks have happened in Kenya and other parts of eastern Africa. Outside Africa, outbreaks have happened in India, Japan, Israel, and Paraguay in the past.

July 7

To stem Rupee slide, boost forex inflows, RBI eases FPI, NRI deposit norms

- The move comes as persistent capital outflows and a widening trade deficit have led to a sharp depreciation in the Indian rupee to new lows against the dollar.
- In order to further diversify and expand the sources of forex funding so as to mitigate volatility and dampen global spillovers, it has been decided to undertake measures to enhance forex inflows while ensuring overall macroeconomic and financial stability.
- As part of the measures, banks have been exempted from maintaining the stipulated Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) on incremental FCNR(B) and NRE term deposits mobilised up to November 4.
- It also freed banks to temporarily raise fresh FCNR(B) and NRE deposits without reference to extant regulations on interest rates, with effect from July 7 and up to October 31, 2022.
- To encourage foreign portfolio investment into debt, the RBI said the choice of government bonds available for investment under the fully accessible route (FAR) would be widened, with all new issuances of G-Secs of 7-year and 14-year tenors, including the current issuances of 7.10% GS 2029 and 7.54% GS 2036, designated as specified securities.
- The RBI also temporarily doubled the annual limit for External Commercial Borrowings (ECB) to \$1.5 billion or its equivalent.

Revenue deficit grant of Rs 7183 cr released to 14 states

- The States for which Post Devolution Revenue Deficit (PDRD) Grant had been recommended by the 15th Finance Commission during FY23 are Andhra Pradesh, Assam, Himachal Pradesh, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttarakhand and West Bengal.
- The 15th Finance Commission had recommended a total PDRD Grant of ₹ 86,201 crore to 14 States for FY23.

Election to the Office of the Vice-President of India

- Article 63 of the Constitution states that “there shall be a Vice-President of India”.
- Under Article 64, the Vice-President “shall be ex officio Chairman of the Council of the States” (Rajya Sabha).
- Article 65 says that “in the event of the occurrence of any vacancy in the office of the President by reason of his death, resignation or removal, or otherwise, the Vice-President shall act as President until the date on which a new President...enters upon his office”.
- Article 66 lays down the process of the election of the Vice-President.
- It says the Vice-President “shall be elected by the members of an electoral college consisting of the members of both Houses of Parliament in accordance with the system of proportional representation by means of the single transferable vote and the voting at such election shall be by secret ballot”.
- Article 66(3) says “No person shall be eligible for election as Vice-President unless he — (a) is a citizen of India; (b) has completed the age of thirty-five years; and (c) is qualified for election as a member of the Council of States”.

P.T. Usha, Ilayaraja Among Government's Four Nominees to Rajya Sabha

- Philanthropist and administrator of the Dharmasthala temple Veerendra Heggade and noted screen writer V Vijayendra Prasad were also nominated to the Upper House of Parliament.
- The Rajya Sabha had vacancies in the nominated category.
- Twelve members are nominated to the Rajya Sabha by the President of India for six-years term for their contributions towards arts, literature, sciences, and social services. This right has been bestowed upon the President according to the Fourth Schedule (Articles 4(1) and 80(2)) of the Constitution of India.

Restoring the Sun temple's exquisite carvings

- The pilot project started in 2019 with a study of the stones at the temple and an analysis of the historic drawings and photos from the 19th century onwards.

- Starting in 1901, the British government had placed plain stones across the site and filled the jagmohan with sand to preserve the structure of the 13th century temple. The Archaeological Survey of India (ASI) carried out conservation works after the site was handed over to it in 1936.
- According to the National Conservation Policy (2014), Restoration may be undertaken on monuments with high architectural value and only in parts of a monument wherein there are missing geometric or floral patterns, or structural members of a monument which have been damaged recently.
- Konark Sun Temple is a 13th-century CE Sun temple at Konark about 35 kilometres (22 mi) northeast from Puri city on the coastline in Puri district, Odisha. The temple is attributed to king Narasimhadeva I of the Eastern Ganga dynasty about 1250 CE.

PM inaugurates Akhil Bhartiya Shiksha Samagam on implementation of NEP

- The Samagam is being organized by the Education Ministry in association with University Grants Commission and Banaras Hindu University.
- The three-day event will bring together over 300 Vice-Chancellors and Directors from public and private universities, educationists, policymakers, as also industry representatives.
- The summit will provide a platform for leading Indian Higher Educational Institutions to discuss, deliberate, and share insights on strategies, success stories, and best practices in implementing the National Education Policy-2020.
- The key highlight of the Akhil Bharatiya Shiksha Samagam will be the adoption of the Varanasi Declaration on Higher Education which will showcase India's extended vision and a renewed commitment to help achieve the goals of higher education system.

July 8

Chhattisgarh gets Centre's nod for World Bank funded school project

- If it goes through, the initiative will allow the Chhattisgarh government to borrow \$300 million over a period of five years at significantly lower than market rates, and repay it over a period of 20 years.
- An in-principle nod means that the Centre has no objection to the State borrowing money from an external financial institution such as the World Bank. This is not the final approval but it paves the way for the State to proceed with subsequent discussions.
- The World Bank has been associated with India's school education system since 1994, according to its website. One of its more recent projects, inked in 2021, is the \$500 million Strengthening Teaching-Learning and Results for States Program to improve the quality and governance of school education in six Indian States. That list, however, does not include Chhattisgarh.

Odisha wants to finish implementing Forest Rights Act by 2024

- Scheduled Tribes And Other Traditional Forest Dwellers (Recognition Of Forest Rights) Act, 2006 is also known as the Forest Rights Act (FRA), 2006.
- The Act recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs.
- The Act further enjoins upon the Gram Sabha and rights holders the responsibility of conservation and protection of bio-diversity, wildlife, forests, adjoining catchment areas, water sources and other ecologically sensitive areas as well as to stop any destructive practices affecting these resources or cultural and natural heritage of the tribals.

Ex-NITI Aayog CEO Amitabh Kant is new G-20 Sherpa

- **Who are they?** 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.
- **Task:** 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.
- **Who are appointed Sherpas?** Sherpas are career diplomats or senior government officials appointed by the leaders of their countries.
- **Etymology:** The term is derived from the Nepalese Sherpa people, who serve as guides for mountaineers in the Himalayas.

Colombo Security Conclave agrees to tackle common threats

- A road map for cooperation was discussed at the meeting attended by India, the Maldives, Mauritius, and Sri Lanka. Representatives of Bangladesh and the Seychelles — the two observer nations in the conclave — also shared their views on the occasion.
- The five broad areas of cooperation to strengthen regional security are –
 - maritime safety and security,
 - countering terrorism and radicalisation,
 - combating trafficking and transnational organised crime,
 - cyber security and protection of critical infrastructure and technology, and
 - humanitarian assistance and disaster relief.

Monsoon temperatures now higher than in summer, says CSE report

- At an all-India level, average temperatures during the season are 0.3 degrees Celsius higher than the average summer temperatures (March to May) when compared from 1951 to 1980. In the past decade, 2012-2021, this anomaly has risen to 0.4 degrees Celsius.
- India's average temperature has risen 0.62 degrees Celsius from 1901 to 2020, according to India Meteorological Department records.
- However, in a breakdown of this rise, the CSE analysis shows it has translated to summer temperatures rising slower than not only monsoon

but even post-monsoon (October-December) and winter (January and February) temperatures.

- The increase in these two seasons are 0.79 degrees and 0.58 degrees, respectively, whereas summer temperatures has risen only 0.49 degrees. This year, India saw record pre-monsoon temperatures in northern and western regions, in the absence of rain.
- These numbers had a bearing on heatwave deaths. From 2015 to 2020, 2,137 people had reportedly died of heat stroke in the States in northwest but the southern peninsula region had reported 2,444 deaths due to excess environmental heat, with Andhra Pradesh alone accounting for over half the reported casualties.

Derecho, a storm that turned the sky green in the US

- As the storm hit, it turned the skies green, with even many experienced storm chasers claiming to have never witnessed such atmospheric optics.
- A derecho, according to the US's National Weather Service is "a widespread, long-lived, straight-line windstorm" that is associated with a "band of rapidly moving showers or thunderstorms". The name comes from the Spanish word 'la derecha' which means 'straight'. Straight-line storms are those in which thunderstorm winds have no rotation unlike a tornado. These storms travel hundreds of miles and cover a vast area.
- Being a warm-weather phenomenon, a derecho generally – not always – occurs during summertime beginning May, with most hitting in June and July.
- For a storm to be classified as a derecho it must have wind gusts of at least 93 km per hour; wind damage swath extending more than 400 km. The time gap between successive wind damage events should not be more than three hours.

Understanding sub-categorisation of OBCs and Justice G Rohini Commission

- The Commission, constituted nearly five years ago, has got 10 extensions so far, and now has until January 31 next year to submit its report.
- The idea of sub-categorisation of OBCs is to create sub-categories within the larger group of OBCs for the purpose of reservation. OBCs are

granted 27% reservation in jobs and education under the central government.

- For OBCs, the debate arises out of the perception that only a few affluent communities among the over 2,600 included in the Central List of OBCs have secured a major part of the 27% reservation.
- The argument for creating sub-categories within OBCs is that it would ensure “equitable distribution” of representation among all OBC communities.

India has been elected to the Intergovernmental Committee of UNESCO's 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (ICH)

- India has served as a member of the ICH Committee twice — from 2006 to 2010 and from 2014 to 2018. India will now be a part of two prominent Committees of UNESCO — Intangible Cultural Heritage (2022-2026) and World Heritage (2021-2025).
- According to UNESCO, the core functions of the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage are to promote the objectives of the convention, provide guidance on best practices and make recommendations on measures for the safeguarding of the intangible cultural heritage.
- The Intergovernmental Committee of the 2003 Convention comprises 24 members and is elected in the General Assembly of the Convention according to the principles of equitable geographical representation and rotation.
- States Members to the Committee are elected for a term of four years.

July 9

NMA recommends 2 sites connected to Ambedkar to be declared as monuments of national importance

- Culture Ministry said, Sankalp Bhumi Banyan tree campus in Vadodara, where Dr. Ambedkar had taken a resolve to eradicate untouchability on 23th September, 1917 be declared as Monument of National Importance.
- This place is more than hundred years old and a witness to the beginning of social respect revolution heralded by Dr. Ambedkar.
- The National Monuments Authority has also recommended a place in Satara in Maharashtra where Dr Ambedkar received his primary education in Pratap Rao Bhosle High School to be declared as monument of National importance.

Reach out to deprived and weaker sections among minorities as well

- A Persian word, 'Pasmanda', means the 'ones left behind', and is used to describe depressed classes among the Muslims, while underlining their deliberate or conscious exclusion.
- Pasmanda has become an umbrella identity used by backward, Dalit, and tribal Muslims to push back against caste-based discrimination against them within the community.
- The term 'Pasmanda Muslims' was first used in 1998 by Ali Anwar Ansari when he founded the Pasmanda Muslim Mahaz. The Sachar Committee in its report put the number of OBC and SC/ST Muslims at 40% (all India 2004-05).

Are Muslims divided along caste lines?

- 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 Ajlafas (backward Muslims), and the Arzals (Dalit Muslims).
- While Islam does not mandate the creation of such groups, these caste categories are a lived reality for Muslims across the country.

Govt. exempts excise on ATF for overseas flights

- In a clarification, the Ministry said the special additional duty on exports for ATF would not apply "when such goods are cleared for exports or supplied as fuel to foreign-going aircraft".

- Domestic airlines had demanded the rollback of the duty after Indian Oil Corp. started levying 11% basic excise duty on ATF used to fuel aircraft operating international flights following the government notification imposing the special additional duty on the export of petroleum products, including ATF, starting July 1.

Meghalaya tribal council to revisit Instrument of Accession

- Meghalaya is divided into three regions dominated by as many matrilineal communities — the Khasis, Garos and Jaintias. The Khasi hills straddle 25 Himas or States that formed the Federation of Khasi States.
- Titosstarwell Chyne, the chief executive member of the Khasi Hills Autonomous District Council (KHADC) agreed that the Instrument of Accession and Annexed Agreement signed with the Dominion of India between December 15, 1947 and March 19, 1948, should be studied.
- The treaty was signed by Governor General of India, Chakravarti Rajagopalachari, on August 17, 1948.

India defence exports at record ₹ 13,000 crore

- The U.S. was a major buyer, as also nations in Southeast Asia, West Asia and Africa.
- The private sector accounted for 70% of the exports, while public sector firms accounted for the rest. Earlier, the private sector used to account for 90% but now the share of defence public sector units had gone up.
- While India's defence imports from the U.S. have gone up significantly in recent years, Indian companies have been increasingly becoming part of the supply chains of U.S. defence companies.
- In January, India signed a \$374.96-million deal with the Philippines, its single biggest defence export order, for the supply of three batteries of shore-based anti-ship variant of the BrahMos supersonic cruise missile.

July 10

In death of Chandigarh student, concern over city's 'heritage trees'

- The peepal (sacred fig) had been declared a “heritage property” by the Chandigarh administration. In Chandigarh, a tree with an estimated age of 100 years, or more, is declared a ‘heritage property’.
- Though the age of the tree can be calculated using a carbon dating technique, the age of Chandigarh’s heritage trees are based on other proof, such as old maps and records. The process to declare trees as heritage was completed after a three-year exercise in December 2017.
- Declaring a tree as heritage property accords it special status. Heritage trees are guarded. A board is installed near each tree with information on their age, life history and importance.

The Singalila National Park in West Bengal, will soon get new red pandas.

- A zoo in the picturesque Darjeeling Hills has started an ambitious programme to augment the wild red panda population.
- In the first rewilding programme of red pandas (*Ailurus fulgens*) in India, the Padmaja Naidu Himalayan Zoological Park will release 20 of these furry endangered mammals in about five years to the forests.
- The number of red pandas has been declining in the wild, even in the Singalila and Neora Valley National Parks, the two protected areas where the mammal is found in the wild in West Bengal.
- Recent studies estimate that there are 38 of them in Singalila and 32 in Neora.
- The Padmaja Naidu park, at a height of about 2,000 metres above the sea level, is one of the high-altitude zoos in the country and has been quite successful in captive breeding of the furry mammals.

NIXI's 2 new Internet Exchanges to boost internet connectivity in West Bengal

- NIXI is a not for profit Organization under section 8 of the Companies Act 2013 and was registered on 19th June 2003.

- NIXI was set up for peering of ISPs among themselves for the purpose of routing the domestic traffic within the country, instead of taking it all the way to US/Abroad, thereby resulting in better quality of service (reduced latency) and reduced bandwidth charges for ISPs by saving on International Bandwidth.
- NIXI is managed and operated on a Neutral basis, in line with the best practices for such initiatives globally.

Ministry of Environment, Forest and Climate Change, put out a note, proposing amendments in the Environment (Protection) Act, 1986.

- The EPA establishes the “framework for studying, planning, and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment.”
- With a set of amendments, the Environment Ministry proposes to modify provisions of the Environment Protection Act (EPA), by replacing clauses that provides for imprisonment with ones that only requires violators to pay a fine. These, however, don't apply to violations that cause grave injury or loss of life.
- The changes proposed include the appointment of an ‘adjudication officer’ who will decide on the penalty in cases of environmental violations such as reports not being submitted or information not provided when demanded.
- Funds collected as penalties would be accrued in an “Environmental Protection Fund.” In case of contraventions of the Act, the penalties could extend to anywhere from five lakh to five crore, the proposal notes, but the clause on provision of a jail term for the first default has been sought to be removed.

Floods, landslides wreak havoc in India's NE

- Almost half of them — 49 confirmed and 12 others missing with little chance of survival — died working on a railway project at the Tupul substation in Makhum village of Manipur's Noney district on June 30.
- The Railways have reportedly blamed jhum or shifting or slash-and-burn cultivation on hill slopes for the tragedy, sparking debates on the

tendency to overlook geological challenges and not factor in climate change while executing major developmental projects.

Jiribam-Imphal railway

- Sanctioned in February 2005 as a national project, the 110.625 km Jiribam-Imphal line is considered a vital segment of the Trans-Asian Railway envisaged as an integrated freight railway network across Europe and Asia.
- The broad-gauge project entails connecting Manipur's Jiribam, a town on the border with Assam, and State capital Imphal mostly across the fragile hills of Noney district, is expected to reduce the travel time from the existing 10-12 hours to three hours.

Ladakh's glaciers threatened by growing vehicular emissions

- A recent study attributes this to the growing vehicular traffic in the region, which has been witnessing a massive military build-up on both the sides of Line of Actual Control (LAC) since 2020.
- The study is based on satellite images of 77 glaciers observed over two decades, from 2000 to 2020, in the Drass basin of the western Himalayas.
- The study reports that the glacier area decreased from 176.77 [sq.km](#) in 2000 to 171.46 [sq.km](#) in 2020, which is about 3% of the total glacier area.
- The study found that heavy vehicular movement is the main cause for the rapid pace at which glaciers are receding in the region. Debris cover had a significant impact on glacier melting, with clean glaciers losing 5% more than debris-covered glaciers.
- The study points out that 17 glaciers situated close to the highway showed higher glacier shrinkage (4.11%) and snout retreat (209 m) than the glaciers situated further away from the national highway, with glacier shrinkage (2.82%) and snout retreat (148 m).

Artificial diet, feeding device for mosquitoes

- The two products allow efficient and cost-effective mass-rearing of mosquitoes in laboratory as it is important to keep these mosquitoes healthy to investigate basic facets of their biology and to study vector-borne disease and measures to control it.
- Mosquito females require animal or human blood diet to produce eggs. For this, blood has to be obtained from blood banks or live animals. Regular supply of blood from blood banks is not easy.
- Considering these challenges and huge potential demand, we have zeroed in on four artificial diets for feeding.”
- These four diets prepared for female mosquitoes are like a baby formula food and have all the essential nutrients, which are present in the blood.

Impact of diabetes medicine sitagliptin going out of patent

- Sitagliptin is a blood sugar-lowering drug. It was first in the category called gliptins, where a protein called DPP-4 is restrained by it, and this impacts the metabolic system so that the pancreas is prompted to increase insulin secretion and regulate sugar in the blood.
- It was the drug of choice for treating type-2 diabetes where the body cannot regulate the blood sugar levels because it either does not produce enough insulin or resists its impact.
- It was toppled by a new class of drugs called SGLT-2 inhibitors, also known as gliflozins, which prevent the re-absorption of glucose from the blood when it is filtered by the kidneys, thereby reducing the blood glucose levels.

EU, US urge North Macedonia to move forward on EU bid

- North Macedonia is a country in Southeast Europe. It gained independence in 1991 as one of the successor states of Yugoslavia. It is a landlocked country bordering Kosovo to the northwest, Serbia to the north, Bulgaria to the east, Greece to the south, and Albania to the west.
- North Macedonia has been an EU candidate for 17 years. The country emerged from the breakup of Yugoslavia in the 1990s and sought to forge a strong national identity.
- The most recent obstacle is a veto by EU member Bulgaria.

- Bulgaria blocked the renamed nation's attempts to join the EU, accusing Skopje of disrespecting shared cultural and historic ties.
- Among Bulgaria's key demands were acknowledgment that the language of North Macedonia derived from Bulgarian, and the recognition of a Bulgarian minority.

Sudden, "highly-localised rains" in Amarnath, Jammu and Kashmir caused flooding

- A cloudburst refers to an extreme amount of rain that happens in a short period, sometimes accompanied by hail and thunder, and this has a precise definition.
- The India Meteorological Department (IMD) defines it as unexpected precipitation exceeding 100mm (or 10 cm) per hour over a geographical region of approximately 20 to 30 square km.
- Significant amounts of rainfall such as this can result in floods.

July 11

Start-ups in India brace for 'long and bitter winter'

- In the April-June quarter, start-up funding fell by about 40% to about \$6-7 billion. Prior to this, start-ups were seeing investments of about \$10-11 billion per quarter.
- As start-ups look to extend the runway with existing funds, estimates peg the job losses in them at over 10,000 this year.
- Some of the key factors include the Russia-Ukraine conflict, supply chain disruptions, consequent inflationary pressures, and rising cost of capital, amongst others.
- Over the past years, India's strong digital boom, along with the relative ease of obtaining funding, fuelled the rise of Indian start-ups, and with an intent to ramp-up growth through new offerings – including products

and solutions, they went on a rapid expansion of their product and tech teams.

Transition from fossil fuels to renewable energy can pose fiscal challenges for India

- Though India is a net importer of petroleum products, it earns substantial revenues — via cesses and taxes — from the consumption of petrol, diesel and oil.
- The study finds that by 2050, overall fossil fuel revenues in Brazil, Russia, Indonesia, India and China could be as much as \$570 billion, lower than a business-as-usual scenario where governments fail to phase down fossil fuels enough to avoid the worst climate impacts.
- The widest gaps are expected to occur in India (\$178 billion), China (\$140 billion), and Russia (\$134 billion).
- Public revenues from fossil fuel production and consumption currently account for 34% of general government revenue in Russia, 18% in India, and 16% in Indonesia. This includes only direct, first-order, government financial revenues. By comparison, such revenues form a smaller fraction of Gross Domestic Product (GDP) in developed countries.
- However, Fossil fuel revenue streams were “unreliable and erratic” and undermined by the negative economic impacts of fossil fuel use, such as health costs due to air pollution and damage from climate change.

IIT-Kanpur to establish network of air-quality sensors to measure pollution in rural India

- The three-year project is expected to be a pilot that, going ahead, could pave the way for a national network of air quality sensors in rural India.
- Air pollution in India is largely framed as an urban blight though causes of pollution, such as biomass burning and reliance on diesel generators for electricity, are worsening air quality in villages too.
- In 2019, the government launched the National Clean Air Programme (NCAP) to reduce particulate matter air pollution by 20-30% by 2024. This, however, is primarily aimed at 122 cities that have been categorised as India's most polluted cities.

- Cities, because of their population density and industrial establishments, continue to be the overwhelming source of emissions. The country's current annual safe limits for PM 2.5 and PM 10 are 40 micrograms/per cubic metre (ug/m³) and 60 micrograms/per cubic metre.
- Under NCAP, ₹ 375.44 crore was provided to 114 cities from 2018-19 to 2020-21 and ₹ 290 crore was allocated to 82 cities for the financial year 2021-22. The programme has an allocation of ₹ 700 crore envisaged for 2021-26.

Twitter's petition on Section 69A of the IT Act

- According to Twitter, the blocking orders were “procedurally and substantially” non-compliant with Section 69A of the Information Technology Act (IT Act).
- Section 69A of the IT Act empowers the government to restrict access to any content in the interest of sovereignty and integrity of the country.
- Twitter holds that the government has allegedly not shown why the restrictions were necessary in the interest of public order or for any other reason.
- The disparity in assessment of what constitutes ‘free expression’ and harm to public order among the two entities is the premise of the entire contestation.

Villagers' stir against solar plants protects khejri trees

- Khejri trees, which is the State tree of Rajasthan, plays an important role in maintaining the ecosystem of Thar region because of its ability to survive in dry weather.
- The tree is used in different ways, such as a source of fodder and firewood, and it helps in sustaining the soil's nutrient value and ensuring a good yield of desert crops and food plants. Its fruit is used to make the popular dish 'Sangri'.

Centre directs leading Edible Oil Associations to reduce prices by Rs. 15 with immediate effect

- India annually consumes around 23 million tonnes (mt) of edible oils, out of which 13.5-14.5 mt is imported and 8.5-9.5 mt domestically produced.
- The imported oils mainly comprise palm (8-9 mt), soyabean (3-3.5 mt) and sunflower (2-2.5 mt), while those sourced indigenously include mustard (2.5-2.8 mt), soyabean and cottonseed (1.2-1.3 mt each), rice bran (1-1.1 mt) and groundnut (0.5-0.8 mt).
- the current global food inflation began with edible oils. The initial trigger was the 2020-21 drought in Ukraine (the world's biggest sunflower oil producer) and Covid-induced migrant labour shortages in Malaysia's oil palm plantations.

Palm oil

- Being a 'hard' oil that is semi-solid (as opposed to liquid) at room temperature, palm oil isn't used much in home kitchens for direct cooking or frying.
- Most of it goes to make hydrogenated fats (vanaspati, margarine and bakery shortening) or as key ingredient in bread, biscuits, cookies, cakes, noodles, mithai, namkeen, frozen dessert, soap, and cosmetics.

Impact of green technology on marine biodiversity

- With increased public pressure against marine plastic pollution, there has been an attempt to replace fossil fuel-based plastic with biodegradable polymers, such the 'biodegradable plastic bags' made of plant starches.
- However, the researchers claim that these materials do not biodegrade under natural conditions in the ocean and their widespread adoption can cause marine litter as well. Since their long term impact on the environment remains unknown, they can lead to a fresh set of problems.
- The researchers argue that the growing demand for renewable energy technology, such as lithium batteries for electric cars, also pose a potential threat to marine ecology.
- Deep sea 'brine pools' of more saline water, contain higher concentrations of lithium and could become future sites for extraction.

July 12

Understanding bird strikes and aviation safety

- An analysis of 62,416 verified records by the International Civil Aviation Organization's (ICAO) Bird Strike Information System showed that most bird hits were in or near airports during the take-off and approach phases of flight.
- About 60% occurred at or below 30 metres or around 100 feet.
- A report says that in India in 2021, DGCA data has recorded over 1,400 suspected and confirmed wildlife incidents (for 20.5 lakh aircraft movements), up from nearly 840 cases in 2016 (for 22.9 lakh aircraft movements). Most of the incidents were reported from Delhi and Mumbai airports.
- In India's National Aviation Safety Plan (2018-2022), one of the key safety priorities is looking at "wildlife and bird strikes".
- Under Safety Performance Indicators of "Number of reported bird strikes at all Indian airports per 10,000 movements", it lists a Safety Performance Target of 4.26 for the year 2022.

MeitY declares HDFC, ICICI, NPCI's IT resources as critical information

- The Information Technology Act of 2000 defines "Critical Information Infrastructure" as a "computer resource, the incapacitation or destruction of which shall have debilitating impact on national security, economy, public health or safety".
- The government, under the Act, has the power to declare any data, database, IT network or communications infrastructure as CII to protect that digital asset.
- Any person who secures access or attempts to secure access to a protected system in violation of the law can be punished with a jail term of up to 10 years.

- Created in January 2014, the National Critical Information Infrastructure Protection Centre (NCIIPC) is the nodal agency for taking all measures to protect the nation's critical information infrastructure.

Rare dragonfly spotted in Kerala for the first time

- They spotted the Spiny Horntail, *Burmagomphus chaukulensis* Joshi, Ogale & Sawant, 2022 (or *B. chaukulensis*), during a recent expedition to the Kottiyoor forests of Kannur.
- The species that is known to be endemic to the Western Ghats was discovered in Maharashtra earlier this year.
- Prior to their finding, the dragonfly genus *Burmagomphus* was represented by three species – *B. cauvericus*, *B. pyramidalis* and *B. laidlawi*.
- While *B. laidlawi* is found throughout the Western Ghats, *B. cauvericus* is more restricted in its distribution. *B. pyramidalis* is found in the Western Ghats as well as in Peninsular India.
- All other species of the genus are found in the Western and Eastern Himalayas.
- The new species can be separated from its congeners by the markings on the lateral thorax and peculiar shape of anal appendages, said Mr. Nair.

The judicial validity of the Talaq-e-Hasan mode of divorce

- In instant triple talaq a man pronounces multiple divorce in one go. It has no scope for reconciliation and often ends a marriage instantly. Unlike instant triple talaq, Talaq-e-Hasan is pronounced with a gap of at least one month or one menstrual cycle.
- Talaq-e-Hasan enjoys legal validity in almost all Muslim countries while instant triple talaq has been banned in many Muslim countries, including Egypt, Syria, Jordan, Kuwait, Iraq, Malaysia etc.
- A petition filed by Benazir Hina, a Ghaziabad-based woman, seeks to make the prescribed Islamic way of divorce Talaq-e-Hasan unconstitutional as it is violative of Articles 14, 15 21 and 25 of the Constitution.

India reports FY22 CAD of 1.2% as trade deficit widens

- Net Foreign Direct Investment (FDI) inflows at \$38.6 billion in 2021-22 were lower than \$44 billion in 2020-21. Net Foreign Portfolio Investment (FPI) recorded an outflow of \$16.8 billion in 2021-22 as against an inflow of \$36.1 billion a year earlier.
- For the January-March 2022 quarter, the CAD narrowed on a sequential basis to \$13.4 billion, or 1.5% of GDP, against \$22.2 billion, or 2.6% of GDP, in the December 2021 quarter.
- On a year-on-year basis, although gold imports halved, and the services trade surplus rose, this improvement was dwarfed by the widening of the merchandise trade deficit led by imports of commodity inputs such as crude oil, coal and fertilisers, as well as electronic goods.

Four new corals recorded from Indian waters

- All the four groups of corals are from the same family, Flabellidae.
- *Truncatoflabellum crassum* (Milne Edwards and Haime, 1848), *T. incrustatum* (Cairns, 1989), *T. aculeatum* (Milne Edwards and Haime, 1848), and *T. irregulare* (Semper, 1872) under the family Flabellidae were previously found in Japan, the Philippines and Australian waters, while only *T. crassum* was reported with the range of Indo-West Pacific distribution.

Azooxanthellate Corals

- The azooxanthellate corals are a group of corals that do not contain zooxanthellae and derive nourishment not from the sun but from capturing different forms of planktons.
- They are deep-sea representatives with the majority of species being reported from depths between 200 metres and 1,000 metres. They are also reported from shallow waters unlike zooxanthellate corals that are restricted to shallow waters.
- Azooxanthellate corals are a group of hard corals. Hard corals are the prime and intrinsic part of the coral reef ecosystem.

Major economies forum on energy and climate

- The Major Economies Forum on Energy and Climate (MEF) was launched on March 28, 2009.
- The MEF meeting was aimed at galvanising actions that are to strengthen energy security and tackle the climate crisis thereby building momentum for COP27.
- The meeting was attended by twenty three major economies across the world and the Secretary General of United Nations.

Initiatives by India on climate change

- Shri Bhupender Yadav emphasised that India's initiatives go beyond its borders, including the International Solar Alliance, and the Coalition for Disaster Resilience Infrastructure.
- He mentioned that India has already installed 159 GW of non-fossil fuel based electricity generation capacity. And during the last 7.5 years, India's installed solar energy capacity has increased over 18 times.
- Shri Yadav highlighted that India's annual per capita emissions are only a third of the global average and its cumulative GHG emissions are less than 4 percent.
- He called upon the members of MEF to launch a global movement on LIFE i.e. Lifestyle for Environment as espoused by the Prime Minister Shri Narendra Modi at the COP26 in Glasgow.

July 13

Inflation impact on India's poor negligible, says FM citing UNDP report

- While soaring food and energy prices could push up to 71 million people around the world into poverty, the UNDP said in the report that the chances of those in India earning \$1.9 a day slipping into poverty due to this upturn would be zero, while the impact would be a mere 0.02% and 0.04% if a poverty line of \$3.30 or \$5.50 a day was assumed, respectively.

- A recent comparative assessment of price and income support measures shows that targeted transfers helps poorer households cope with price spikes.

Government Initiatives

- India's 'well-tailored' programmes carried out over the past two years to support people and ensure they don't run the risk of slipping into poverty seemed to have made an impact.
- The Centre has allocated more than 1,000 lakh tonnes of foodgrains from April 2020 till September this year, over and above the food security quota and had provided support of ₹ 1,500 to 20 crore women Jan Dhan account holders in the first three months of the pandemic.

India to surpass China as most populous country in 2023

- The world's population, estimated to reach 8 billion by November 15 this year, could grow to 8.5 billion in 2030, and 10.4 billion in 2100, as the pace of mortality slows, said the report released on World Population Day.
- India's population was 1.21 billion in 2011, according to the domestic census, which is conducted once a decade. The government had deferred the 2021 census due to the pandemic.
- The world's population was growing at its slowest pace since 1950, having fallen below 1% in 2020, UN estimates showed.
- In 2021, the average fertility of the world's population stood at 2.3 births per woman over a lifetime, having fallen from about 5 births in 1950.
- The UN said more than half of the projected increase in the global population up to 2050 will be concentrated in eight countries — Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and the United Republic of Tanzania.

PM Modi unveils 6.5m high National Emblem cast on new Parliament building

- The National emblem of India is an adaptation of the Lion Capital of Ashoka at Sarnath, an ancient sculpture dating back to 280 BCE during the reign of the Maurya Empire.
- The statue is a three dimensional emblem showing four lions.
- Following the end of British rule on 15 August 1947, the newly independent Dominion of India adopted an official state emblem on 30 December 1947. It later became the emblem of the Republic of India.
- On 26 January 1950, a representation of the Lion Capital of Ashoka placed above the motto, Satyameva Jayate, was adopted as the State Emblem of India.

Soon AI-based Mandarin translation devices for troops on LAC

- This will be possible with the help of a 600gm Artificial Intelligence (AI) based device developed by an Indian start-up and currently under advanced trials with feedback from the Army.
- This was one of the 75 AI-enabled products and applications unveiled by Defence Minister Rajnath Singh at the 'AI in defence' symposium.
- It is an offline hand-held language translation system which works based on AI. It has been tested in the forward areas and Army has given lot of assistance. Its performance will improve as more and more data comes from the field.
- It is bidirectional with a range of 5-10 feet and gives converts Mandarin to English.

As of today, the most sensitive dark matter detector experiment in the world is LUX-ZEPLIN (LZ) in South Dakota in the U.S.

- Many physicists strongly believe that the entire visible part of the universe forms only 5% of all matter in it. They believe the rest is made up of dark matter and dark energy.
- Dark matter is made up of particles that do not have a charge. So, these particles are "dark", namely because they do not emit light, which is an electromagnetic phenomenon, and "matter" because they possess mass like normal matter and interact through gravity.

- There is strong indirect evidence for dark matter, and this evidence is reflected at various levels (or distance scales, as physicists would explain)

NASA Unveils James Webb Space Telescope's First Full-Colour Images

- The pictures, designed to peer farther than before with greater clarity to the dawn of the universe, were hailed by NASA as milestone marking a new era of astronomical exploration.
- Nearly two decades in the making, the \$9 billion infrared telescope was launched on December 25, 2021. It reached its destination in solar orbit nearly 1 million miles from Earth a month later.
- The crowning debut image was a “deep field” photo of a distant galaxy cluster, SMACS 0723, revealing the most detailed glimpse of the early universe recorded to date.
- Among the other Webb subjects were two enormous clouds of gas and dust blasted into space by stellar explosions to form incubators for new stars — the Carina Nebula and the Southern Ring Nebula, each thousands of light years away from Earth.
- The collection also included fresh images of another galaxy cluster known as Stephan's Quintet, first discovered in 1877.

Serum Institute to launch indigenously made vaccine for cervical cancer

- The Drugs Controller General of India (DCGI) granted market authorisation to Serum Institute of India (SII) to manufacture the indigenously developed India's first Quadrivalent Human Papillomavirus vaccine (qHPV) against cervical cancer.
- The approval by the drug regulator of SII's anti-cancer vaccine follows recommendation by the Subject Expert Committee (SEC) of the Central Drugs Standard Control Organization on COVID-19 vaccine on June 15, 2021.
- Cervical cancer in India ranks as the second-most frequent cancer among women between 15 and 44 years of age.

Centre has no new data on child labour

- Since the NCLP was merged with the Samagra Shiksha Abhiyan in 2016, the labour Ministry has no records of child labour. The currently available data is of the 2011 Census, which says the country has more than a million child labourers.
- Education Ministry also does not have a mechanism to find out the number of children engaged in child labour.
- Though India has a legislation, the Child Labour (Prohibition and Regulation) Act, since 1986 the menace of child labour is continue unchecked.

July 14

India ranks 135 out of 146 in Global Gender Gap Index

- The country is the worst performer in the world in the “health and survival” sub-index in which it is ranked 146. The Global Gender Report, 2022, which includes the index, says it will now take 132 years to reach gender parity, with the gap reducing only by four years since 2021 and the gender gap closed by 68.1%.
- India ranks 146 in health and survival, 143 in economic participation and opportunity, 107 in educational attainment and 48 in political empowerment. The report notes that India’s score of 0.629 was its seventh-highest score in the past 16 years.
- India ranks poorly among its neighbours and is behind Bangladesh (71), Nepal (96), Sri Lanka (110), Maldives (117) and Bhutan (126). Only the performance of Iran (143), Pakistan (145) and Afghanistan (146) was worse than India in South Asia.
- The Global Gender Gap Index benchmarks gender parity across four key dimensions or sub-indices — economic participation and opportunity, educational attainment, health and survival, and political empowerment.

- It measures scores on a 0-to-100 scale, which can be interpreted as the distance covered towards parity or the percentage of the gender gap that has been closed.

Scientists Develop New Mechanism To Inactivate COVID-19 Virus, Block Entry Into Cells

- Indian scientists have developed a new class of synthetic peptides that can not only block the entry of the SARS-CoV-2 virus into cells but also clump the virus particles together, reducing their ability to infect the living cell.
- This novel mechanism provides an alternative to make viruses like SARS-CoV-2 inactive, promising a new class of peptides as antivirals.
- Scientists at the Indian Institute of Science in collaboration with researchers from the CSIR-Institute of Microbial Technology have exploited this approach to design these peptides.

WHO's Science Council launches report calling for equitable expansion of genomics

- The report argues that it is not justifiable ethically or scientifically for countries with lesser resources to gain access to such technologies long after the rich countries do.
- The field of genomics tries to use human genetic material to study and research cures and treatments for medical conditions, and is used in a wide range of applications in animal sciences, and agriculture.
- After the WHO constituted the Science Council of experts in April 2021 to provide guidance on the science and research strategy of the organisation, it identified genomics as the focus of its first report.
- The report calls for expanding access to genomic technologies, particularly in low- and middle-income nations, by addressing shortfalls in financing, laboratory infrastructure, materials, and highly trained personnel.

India has achieved clean energy targets before deadline, says R. K. Singh

- India has installed 162 GW (1 GW is 1,000 MW) of renewable energy capacity, which is 41% of the 402 GW of electricity installed.
- “We reached this target on November 2021 and what our Prime Minister did was ask us to raise our ambition and so in Glasgow (at the UN COP-21) our Prime Minister committed to installing 500 GW of renewable energy by 2030, which would then be 50% of the installed capacity.” Mr. Singh said.
- In 2015, India committed to ensuring that 40% of its energy would be from renewable sources by 2030 as part of its Nationally Determined Contributions (NDC).

Sydney Energy Forum

- Ministers from the United States, Japan, India, Indonesia, and the Pacific Island nation of Samoa are attending the forum along with leaders of major companies that are committed to low emissions technologies.
- The forum will “foster connections between investors, business and government with a focus on innovations in key clean energy technologies such as solar, hydrogen, critical minerals and batteries”.

Tamil Nadu sets up climate change missions in all 38 districts

- The missions will be headed by the Collectors as Mission Directors.
- The District Forest Officers will function as Climate Officers. The missions will help strengthen the government’s climate response at the grassroots, said Supriya Sahu, Additional Chief Secretary, Department of Environment, Climate Change and Forest.
- The missions will create strong policy support across all sectors of governance, devise strategies to reduce greenhouse gas emissions and bench-mark industries to move towards green manufacturing. They will also promote eco-friendly technologies, such as solar and wind energy technologies, biodegradable packaging and e-vehicles.
- The Collectors will have to prepare district-level climate change mitigation and adaptation plans, build capacity and provide inputs for low-carbon, climate-resilient development plans.
- Another key deliverable is strengthening the 'Meendum Manjappai' campaign against the use of single-use plastics. The Collectors will also

work towards strengthening Climate Smart Villages and creating bio-shields in coastal areas.

- The government has initially sanctioned ₹ 3.80 crore for 38 district missions which will function under the supervision of the Tamil Nadu Climate Change Mission.

First I2U2 (India-Israel-UAE-USA) Leaders' Virtual Summit

- The Leaders will discuss the possible joint projects within the framework of I2U2 as well as the other common areas of mutual interest to strengthen the economic partnership in trade and investment in the respective regions and beyond.
- The I2U2 Grouping was conceptualized during the meeting of the Foreign Ministers of the four countries held on 18th October last year. Each country also has Sherpa-level interactions regularly to discuss the possible areas of cooperation.
- I2U2 is aimed to encourage joint investments in six mutually identified areas such as water, energy, transportation, space, health, and food security.
- It intends to mobilize private sector capital and expertise to help modernize the infrastructure, and low carbon development pathways for the industries, improve public health, and promote the development of critical emerging and green technologies.

RBI sets up mechanism to settle trade payments in Indian rupee

- The central bank has put in place this additional arrangement for invoicing, payment, and settlement of exports and imports in rupee. The move is aimed at promoting growth of global trade with emphasis on exports from India and to support the increasing interest of global trading community in Indian rupee.
- Before putting in place this mechanism, authorized dealer banks were required to take prior approval from the Foreign Exchange Department of RBI.
- Under the framework, all exports and imports may be denominated and invoiced in rupee.

- Authorized Dealer (AD) banks in India have been permitted to open rupee Vostro accounts. Accordingly, for settlement of trade transactions with any country, AD bank in India may open special rupee Vostro accounts of correspondent banks of the partner trading country.

Cabinet approves Taranga Hill-Ambaji-Abu Road new rail line project

- The total length of the new rail line will be 116 kms. The project will be completed by 2026-27.
- Ambaji is a famous important pilgrimage destination and is one of the 51 Shaktipeeths in India and attracts millions of devotees from Gujarat as well as other parts of the country and abroad every year. The construction of this line will facilitate easy travel for these millions of devotees.
- Further, the devotees visiting the Ajitnath Jain temple (one of the 24 holy Jain Tirthankaras) at Taranga Hill would also be greatly benefitted by this connectivity.
- This railway new line between Taranga Hill-Ambaji- Abu Road will connect these two important religious sports with railway's main network.
- The alignment of the proposed doubling will traverse through Sirohi district of Rajasthan and Banaskantha and Mahesana districts of Gujarat. This project will also provide alternative route for existing Ahmedabad-Abu Road railway line.

International child sexual exploitation (icse) initiative

- Interpol is the world's largest international police organisation with 195 member countries, and is headquartered in Lyon, France.
- Each member country hosts an Interpol National Central Bureau that connects their national law enforcement to it and in India, the CBI is that nodal agency.
- The ICSE database uses video and image comparison to analyse Child Sex Exploitation Material (CSEM) and make connections between victims, abusers and places.

- As of July 2022, over 30,000 victims of child abuse and over 13,000 criminals have been identified by the Interpol using this database and software.
- India is the 68th country to have access to this database and software. Interpol's website said that on average, the database helps identify seven child victims everyday globally.

'Lavender Scare', and its linkage to NASA's James Webb

- The telescope has been named after James Webb, who ran the US space agency from 1961 to 1968, and allegedly had a role to play in the “Lavender Scare” at NASA.
- The Lavender Scare was the marginalisation of LGBTQ employees working in the US government's offices during the 1950s and 1960s. It is often described as a “witch-hunt”, where those suspected of being from the LGBTQ community were fired from their jobs.
- One such case was of NASA's Clifford Norton. Norton was fired in 1963 for “immoral, indecent, and disgraceful conduct” after being interrogated for allegedly being a homosexual man.
- James Webb, as the head of NASA during that period, is alleged to have played a role in the dismissal of LGBTQ employees for their identity. In 2021, four astronomers in the US wrote about the demand for renaming the telescope in ‘Scientific American’.

July 15

Fiscal deficit reined in, CAD a concern: Finance Ministry

- Identifying elevated inflation and a widening trade deficit as ‘twin challenges’ for the economy, the Ministry, however, emphasised that economic activity in the country remained resilient almost five months into the Russian-Ukraine conflict.

- Data released recently showed the trade deficit widened in June to an all-time high of \$26.2 billion as imports surged past \$66 billion.
- Retail inflation eased slightly to 7.01% in June, and the Ministry attributed it to measures taken by the government and the central bank as well as fears of a global recession that had dragged oil prices lower.

India's 1st Monkeypox case reported in Kerala

- Monkeypox initially presents like any tropical disease with fever, headache, joint ache and possible swelling of the lymph glands. The incubation period for the disease — the time from exposure to the virus to the manifestation of symptoms — ranges from five to 21 days.
- Rashes appear on the face, inside palms and the body one to four days after fever.
- The course of the disease could last two to four weeks, during which time the rashes progress into pustules, vesicular lesions and scabs.
- Transmission happens only through close contact and by touching or sharing the clothes or bedding used by the patient, because the lesions usually have a high viral load. Transmission also extends throughout the course of the illness, till the lesions heal.

Spike in production of vegetables, fruits

- Last year, the total horticulture cultivation was on 27.48 million hectares and according to the second advanced estimates, in 2021-22, it could be 27.74 million hectares.
- The Centre said that while there could be an increase in the production of fruits, vegetables and honey, the cultivation of spices, flowers, medicinal plants and plantation crops could decrease over previous year.
- The fruit production is estimated at 107.1 MT compared to 102.48 MT in 2020-21. The production of vegetables is estimated to be 204.61 MT, compared to 200.45 MT in 2020-21.
- In the case of onion, the production is estimated to be 31.7 MT against 26.64 MT in 2020-21. Potato production is likely to be 53.58 MT, from 56.17 MT in 2020-21. Tomato yield is expected to be 20.34 MT, from 21.18 MT in 2020-21. Farmers of the three crops had agitated against the drop in prices last year.

Debut edition of India's second largest entrance exam 'CUET-UG' to begin on July 15

- With 14.9 lakh registrations, the CUET, the common gateway for undergraduate admission in all Central universities, is now the second biggest entrance exam surpassing the average registration of nine lakh of the Joint Entrance Examination (Main).
- The National Eligibility-cum-Entrance Test-Undergraduate is the biggest entrance test in India with an average of 18 lakh registrations.
- The CUET (UG)-2022 has been scheduled for approximately 14,90,000 candidates, with around 8.1 lakh candidates in the first slot and 6.8 lakh candidates in the second, University Grants Commission (UGC) said.
- The exam will be conducted in two phases. The first phase will be held in July and the second in August. Candidates who have opted for physics, chemistry or biology have been assigned for Phase 2, as the NEET(UG) will be held on July 17.
- The exam will be conducted from July 15 to August 20 at exam centres located in over 500 cities across India and 10 cities abroad. The UGC chief announced in March that a CUET score, and not Class 12 marks, would be mandatory for admission to 45 Central universities.

India to give land for I2U2-backed food parks

- The plan for the “integrated food parks” was announced in a joint statement after the leaders of the I2U2 grouping — India, Israel, the UAE and the U.S. — held a summit recently.
- The leaders said they would bring in private capital for specific projects in the fields of water, energy, transportation, health, space and food security.
- S. and Israeli private sectors will be invited to lend their expertise and offer innovative solutions that contribute to the overall sustainability of the project. These investments will help maximise crop yields which, in turn, will help tackle food insecurity in South Asia and the Middle East. India will “facilitate farmers’ integration into the food parks.
- The food parks aimed at cutting down “food waste and spoilage” are a few of the collaborations that the four countries declared after the summit.
- The UAE will invest \$2 billion in India to create the food parks.

Platform of Platforms (PoP) Under The National Agriculture Market (e-NAM)

- Equity grant of over Rs 37 crore was also released to 1,018 Farmer Producer Organizations (FPOs) that will benefit about 3.5 lakh farmers.
- With the introduction of POP, farmers will be facilitated to sell the produce outside their state borders. This will increase farmers' digital access to multiple markets, buyers and service providers and bring transparency in business transactions with the aim of improving price search mechanism and quality commensurate price realisation.
- e-NAM integrates the platform of Service Providers as "Platform of Platforms" which includes Composite Service Providers, Logistics Service Provider, Quality Assurance Service Provider, Cleaning, Grading, Sorting & Packaging Service Provider etc.

CCPA issues Advisory to e-commerce platforms on sale of Ayurvedic, Siddha and Unani drugs

- E-commerce platforms have been advised that the sale or facilitating the sale of such drugs shall be done only after a valid prescription of a registered Ayurveda, Siddha or Unani practitioner respectively is uploaded by the user on the platform.
- Consuming such drugs without medical supervision can lead to severe health complications.
- As per Rule 161(2) of the Drugs and Cosmetics Rules, 1945, the container of a medicine for internal use for the treatment of human ailments shall, if it is made up of a substance specified in Schedule E (1), be labelled conspicuously with the words "Caution: To be taken under medical supervision" both in English and Hindi language.
- Under Section 18 of the Consumer Protection Act, 2019, CCPA is empowered to protect, promote and enforce the rights of consumers as a class, and prevent violation of consumers' rights. Further, CCPA is empowered to prevent unfair trade practices and ensure that no person engages himself in unfair trade practices.

Department of Consumer Affairs sets up committee to develop comprehensive framework on the Right to Repair

- The committee includes Anupam Mishra, Joint Secretary DoCA; Justice Paramjeet Singh Dhaliwal; G.S. Bajpai, Chancellor, Rajiv Gandhi National University of Law, Patiala; Ashok Patil, Chair of Consumer Law and Practice; and representatives from stakeholders including ICEA, SIAM, consumer activists and consumer organisations as members.
- The key sectors identified for this framework include Farming Equipment, Mobile Phones/ Tablets, Consumer Durables and Automobiles & Automobile Equipment.
- The committee also believes that manufacturers encourage a culture of 'planned obsolescence'. "This is a system whereby the design of any gadget is such that it lasts a particular time only and after that particular period it has to be mandatorily replaced.
- The right to repair has been recognised in many countries, including the US, the UK and the European Union.

Project 17A frigate 'Dunagiri' to be launched

- Christened after a mountain range in the state of Uttarakhand, 'Dunagiri' is the fourth ship of P17A Frigates.
- These are follow-on of the P17 Frigates (Shivalik Class) with improved stealth features, advanced weapons and sensors and platform management systems.
- The first two ships of P17A Project, were launched in 2019 and 2020 at MDL and GRSE respectively. The third ship (Udaygiri) was launched at MDL on 17 May 2022 earlier this year.
- P17A ships have been designed in-house by Indian Navy's Directorate of Naval Design (DND), which has successfully spear-headed design of numerous class of indigenous warships in the past.

Ahmedabad, Kerala In TIME Magazine's List of World's Greatest Places of 2022

- These are two major tourist destinations in India. Besides Ahmedabad and Kerala, other cities which made to the list of top 50 include Seoul, Buahan in Bali, the Great Barrier Reef in Australia, and many more.
- TIME described Kerala as 'one of India's most beautiful states.

- It described Ahmedabad as India's first UNESCO World Heritage City, and a city which "boasts both ancient landmarks and contemporary innovations.

July 16

IIT-M again tops NIRF rankings, IISc second

- Among the universities, IISc, Jawaharlal Nehru University, Jamia Millia Islamia, Jadavpur University and Amrita Vishwa Vidyapeetham were among the top five.
- And among the top five colleges in the country are Miranda House, Hindu College, Presidency College, Loyola College and Lady Shri Ram College for Women.
- The top five medical institutes are All India Institute of Medical Sciences, Post Graduate Institute of Medical Education and Research, Chandigarh, Christian Medical College, Vellore, National Institute of Mental Health & Neuro Sciences, Bengaluru, and Banaras Hindu University.
- The top five management institutes are Indian Institute of Management (IIM) Ahmedabad, IIM Bengaluru, IIM Kolkata, IIT Delhi and IIM Kozhikode.
- This is the seventh consecutive edition of NIRF.
- It ranks colleges, universities and research institutions and also provides an overall ranking of all of them combined. Institutes are also ranked across seven subject domains, namely engineering, management, pharmacy, law, medical, architecture and dental.
- A total of 4,786 institutions were evaluated on five parameters — teaching, learning and resources (TLR); research and professional practice; graduation outcome; outreach; and inclusivity and perception.

SCO to admit Iran as a full member; Belarus applied for membership

- Expanding the group is among the issues that leaders of the grouping are likely to discuss at the SCO summit in Samarkand, Uzbekistan, in September.
- China, Russia and four Central Asian states — Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan — were the founding members of the SCO, while India and Pakistan joined the grouping in 2017 in its first round of expansion.
- Last year's summit in Dushanbe agreed for Iran to join, while Belarus has also begun the membership process. China and Russia are looking to frame the grouping as a counter to the West — particularly after Russia's invasion of Ukraine.
- India will host the SCO summit next year, and Varanasi has been selected as the SCO region's first "Tourism and Cultural Capital", a title it will hold next year coinciding with India chairing the grouping.

France has delivered all 36 Rafale jets to India

- However, while 35 jets have arrived in India, one jet still remains in France, official sources said.
- One Rafale jet, which is the instrumented aircraft on which the 13 India specific enhancements (ISE) are being tested, is still in France.
- The last batch of three Rafale jets had arrived in India in February, taking the total Rafale jets in inventory of the Indian Air Force to 35. Work on upgrading all the Rafale jets in service to the Indian standard configuration with the 13 ISE is currently underway in India.
- The naval variant of the French jet, Rafale-M, is in the race along with Boeing F-18 Super Hornet for the Indian Navy's tender for jets to operate from its aircraft carriers.
- In January, the Rafale-M had demonstrated its compatibility by operating from the Navy's shore-based test facility in Goa, while the F-18 carried out demonstration in May.
- India and France had signed a €7.87 billion inter-governmental agreement (IGA) in September 2016 for 36 Rafale multi-role fighter jets in fly-away condition, following the announcement by Prime Minister Narendra Modi in April 2015 citing "critical operational necessity" of the IAF.

Assam, Arunachal Pradesh Ink 'Namsai Declaration' To Resolve Long-Standing Border Dispute

- Assam Chief Minister Himanta Biswa Sarma and his Arunachal Pradesh counterpart Pema Khandu recently signed the Namsai Declaration for minimising the inter-State boundary dispute involving 123 villages.
- A list of these villages had been placed before a local commission by Arunachal Pradesh on December 26, 2007.
- According to the declaration, all border issues between Assam and Arunachal Pradesh will be confined to those raised before the local commission in 2007.
- Namsai is the headquarters of Namsai district in southern Arunachal Pradesh.
- Present-day Arunachal Pradesh, which attained Statehood in February 1987, used to be the North East Frontier Tract, administered by the Governor of Assam as an agent of the President of India.
- It was renamed North East Frontier Agency and brought under the Central government's control in 1954.

Young people face higher health risks from alcohol than older

- The analysis found males between ages 15-39 at the greatest risk of harmful alcohol consumption. Among people who consumed unsafe amounts in 2020, 59.1% were in the 15-39 age group, and 76.7% of these were male.
- In India, 1.85% females and 25.7% males in the 15-39 age group consumed unsafe amounts of alcohol in 2020. This was lower than 1.79% females and 23% males in the 40-64 age group who consumed unsafe amounts.
- However, the authors note that consuming a small amount of alcohol (for example, between one and two 3.4-ounce glasses of red wine) can provide some health benefits for people in this age group, such as reducing the risk of cardiovascular disease, stroke, and diabetes.

Pradhan Mantri Fasal Bima Yojana: Andhra rejoins

- Andhra Pradesh was one of six states that have stopped implementation of the scheme over the last four years. The other five, which remain out, are Bihar, Jharkhand, West Bengal, Jharkhand, and Telangana.
- The government had launched PMFBY from kharif 2016. Under the scheme, all farmers including sharecroppers and tenant farmers growing “notified crops” in the “notified areas” are eligible for coverage.
- Initially, the scheme was compulsory for loanee farmers; in February 2020, the Centre revised it to make it optional for all farmers.
- In February 2020, the Centre decided to restrict its premium subsidy to 30% for unirrigated areas and 25% for irrigated areas (from the existing unlimited). Earlier, there was no upper limit for the central subsidy.
- Food crops (cereals, millets and pulses); oilseeds; and annual commercial / annual horticultural crops are covered under the scheme.
- In addition, pilots for coverage can be taken for those perennial horticultural/commercial crops for which standard methodology for yield estimation is available, state the scheme guidelines.

What are 'unparliamentary words'?

- With opposition terming the unparliamentary words list a “gag order” meant to shield the Narendra Modi government against “criticism”, Lok Sabha Speaker Om Birla clarified that “no words had been banned”. He said that the decision to expunge words is the prerogative of the Chair.
- The new list has words and phrases disallowed not only in the Indian Parliament, but also in various state assemblies, as well as some parliaments of other countries.
- While Article 105(2) of the Constitution lays down that “no Member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof”, MPs do not enjoy the freedom to say whatever they want inside the House.
- Rule 380 (“Expunction”) of the Rules of Procedure and Conduct of Business in Lok Sabha says: “If the Speaker is of opinion that words have been used in debate which are defamatory or indecent or unparliamentary or undignified, the Speaker may, while exercising

discretion order that such words be expunged from the proceedings of the House.”

The Recent Amendment of Flag Code of India

- Now, the National Flag shall be made of hand-spun, hand-woven or machine-made cotton/polyester/wool/silk/khadi bunting, as per the amended flag code.
- The amended flag code will facilitate the availability of flags on such a large scale and also make them affordable for the general public.
- The government will soon launch ‘Har Ghar Tiranga’- a nationwide campaign to encourage people to hoist the Tricolour at their homes to mark the 75th Independence Day.
- The use, display and hoisting of the National Flag in the country is guided by an overarching set of instructions called the ‘Flag Code of India 2002’. It brings together all laws, conventions, practices, and instructions for the display of the National Flag.
- It governs the display of the National Flag by private, public, and government institutions.
- The Flag Code of India took effect on January 26, 2002.
- As per Clause 2.1 of the Flag Code of India, there shall be no restriction on the display of the National Flag by members of the general public, private organizations, educational institutions etc. consistent with the dignity and honour of the National Flag.

The political tussle over podu cultivation and forest lands in Telangana

- The Telangana government last year moved against the encroachment of forest lands by non-tribals, who it said were indulging in the practice of shifting agriculture (podu).
- Several political leaders have expressed concern over shifting agriculture — in which a portion of land is cleared to raise crops in a particular season before the cultivators move to another location the next season, and to a third area after that, thus progressively degrading large areas of the forest.

- To stop this deforestation, the government wants to move out cultivators from deep inside forests to the periphery by allotting them land for cultivation.
- Tribal farmers who have been traditionally cultivating for decades would not be affected by this drive against illegal encroachers. Non-tribal farmers can apply to the state government to allocate them land outside the forests.

July 17

PM Modi inaugurates Bundelkhand Expressway in Uttar Pradesh

- The 296-kilometre long, four-lane Bundelkhand Expressway passes through seven districts, Chitrakoot, Banda, Mahoba, Hamirpur, Jalaun, Auraiya and Etawah.
- The 296-Km, four-lane expressway has been constructed at a cost of around 14,850 crore rupees. It can later be expanded upto six lanes as well.
- It extends from NH-35 at Gonda village near Bharatkoop in Chitrakoot district to near Kudrail village in Etawah district, where it merges with the Agra-Lucknow expressway.
- Work on the creation of industrial corridor in Banda and Jalaun districts, next to the Expressway, has already been started.
- Chief Minister Yogi Adityanath said that this expressway will help in establishing Jhansi and Chitrakoot node of Defence corridor. He said that Jalaun district is also on number one in completing Ghaarauni of the villages in Bundelkhand region.

PM Modi says 'revri culture' of freebies for votes is 'very dangerous'

- Speaking at the inauguration of Bundelkhand Expressway in Jalaun in Uttar Pradesh, Mr. Modi said the "revri culture" would take the new India towards darkness.

- “There are some governments which are indulging in revri culture to secure votes, while the double engine government is working towards creating new expressways and rail routes,” Mr. Modi said.
- Responding to the revri culture jibe, Delhi Chief Minister Arvind Kejriwal said that providing a free education and healthcare system doesn't amount to distributing freebies.
- Kejriwal took on Mr. Modi following his comments equating State-sponsored free schemes to citizens as part of 'revri culture' which, the PM said, was “very dangerous” for the country.

Anti-venom for big four ineffective in treating other snakebites

- The monocled cobra, the banded krait, the lesser black krait, the great black krait, the mountain pit viper and the redneck keelback are among 15 venomous snakes out of 64 recorded so far across Northeast India.
- Most of the snakebite cases in the region involve different species of the green pit viper, making up the other venomous snakes.
- The antivenom derived from the “Big Four” snakes are ineffective on the toxin injected by the green pit viper, or for that matter, most other venomous snakes found in the region.
- Neurotoxin is a poison that acts on the nervous system. Cytotoxins kill the cells in a body.
- World Snake Day is celebrated every July 16 to raise awareness about snakes and their importance in our ecosystem.
- There are more than 1.4 million cases resulting in 1,25,000 fatalities annually.
- More than 46,000 people — the highest on earth — die and thrice the number are disabled due to snakebites every year with 77% of the victims dying outside healthcare facilities, indicating that people go for alternative treatment.
- Most snakebite cases in India are reported between June and September and 58% of the victims are farmers and labourers.

Govt extends RoSCTL scheme till March 2024 for exports

- The Ministry of Textiles stated that the rates of exports of apparel and garments will continue the same as earlier notified by the Ministry.

- The RoSCTL Scheme helped in improving cost efficiency and export competitiveness in the international market. The scheme has provided a stable and predictable policy regime, helping boost exports and employment.
- The scheme has also promoted the incubation of start-ups and entrepreneurs in the domain. The scheme also led to a large number of MSMEs joining the apparel export business.

Women and Child Development Ministry issues guidelines for Mission Shakti Scheme

- This scheme has been launched for the safety, security and empowerment of women.
- It seeks to realize the government's commitment to women-led development by making them equal partners in nation-building.
- The key objectives of the mission are to provide care, support and assistance to women and to put in place quality mechanisms for the rescue, protection and rehabilitation of women who are victims of crime and violence.
- The scheme is also aimed at improving accessibility to various government services available for women at various levels.
- Mission Shakti has two sub-schemes - Sambal and Samarthya. While the Sambal stresses on safety and security of women, the Samarthya focuses on the empowerment of women.
- The components of the Sambal sub-scheme consist of schemes including One Stop Centre, Women Helpline, Beti Bachao, Beti Padhao and Nari Adalats.
- The components of the Samarthya sub-scheme consist of schemes of Ujjwala, Swadhar Greh and Working Women Hostel.
- In addition, the existing schemes of the National Creche Scheme for children of working mothers and Pradhan Mantri Matru Vandana Yojana have now been included in Samarthya.

Govt issues standard SOP for e-commerce exports of jewellery via courier.

- The framework keeps in view the need for uniformity of action by Customs that brings certainty for the trade. It also addresses a unique

requirement of the e-commerce Eco-system for re-import of rejects in certain cases to the prescribed extent.

- The Ministry said, the Central Board of Indirect Taxes and Customs has issued the simplified regulatory framework in the form of a Standard Operating Procedure (SOP).
- The SOP details the handling, movement, and procedural aspects of exports, based on electronic declarations, through International Courier Terminals.
- The Ministry said, a period of one month has been provided for transition. The first phase begins with exports through Bengaluru, Delhi and Mumbai locations.

Defence ministry sets up apex committee to carry out performance & efficiency audit

- This kind of audit is expected to provide valuable inputs to the top management of the Ministry in planning and execution of projects, and suggest systemic improvements in internal controls, soundness of financial procedures and identification of risk factors.
- It is a major shift from the existing transaction-based compliance audit to carry out an outcome-based Performance and Efficiency Audit aimed at enhancing overall efficiency.
- The members of the committee include Vice Chiefs of the three Services, Secretary Defence (Finance), Chief of Integrated Staff Committee, Controller General of Defence Accounts, Director General (Acquisition) and other senior officials of Ministry of Defence and Defence Research and Development Organisation.
- The committee chaired by Defence Secretary will identify specific areas for the conduct of performance and audit by Controller General of Defence Accounts and monitor performance audit reports and action taken thereon.

Department of Consumer Affairs launches 'Jagruti', a mascot to empower consumers and generate awareness towards consumer rights

- Jagriti will be projected as an empowered consumer who is spreading awareness about consumer rights and addressing solutions to the problems faced by the consumers.
- The “Jagriti” mascot will be used to generate consumer awareness about various themes of the Department.
- The Themes include provisions of Consumer Protection Act 2019, Hallmarking, National Consumer Helpline toll-free number 1915, provisions of weights and measures Act, decisions of the Central Consumer Protection Authority and testimonials by consumers on grievance redressal.
- Jagriti mascot shall be shown along with tagline “Jago Grahak Jago” in all its media campaigns.

MHA portal ranks No. 1 in service delivery assessment

- Digital Police portal of National Crime Records Bureau (NCRB) placed at two in the assessment under the Central Ministries Services Portal.
- All Government portals that were evaluated were divided into two main categories, states and Union Territories and Central Ministry service portals.
- There were four main parameters of assessment, Accessibility, Content Availability, Ease of Use and Information Security and Privacy for Central Ministry Portals.
- An additional three parameters were also used for the Central Ministry Services Portals - End Service Delivery, Integrated Service Delivery and Status and Request Tracking.

Information and Broadcasting Minister Anurag Singh Thakur has stressed upon the Mantra for effective communication to guide government communication for India at 2047.

- Addressing the opening ceremony of the 3rd Annual Indian Information Service Officers Conference in Vigyan Bhawan in New Delhi today, the Minister gave the Mantra of effective communication in the form of five Cs.
- These are –
 - Citizen Centric and Compassionate,

- Co-creation with target audience,
- Collaboration,
- Contemplation and
- Continuous capacity enhancements.
- He said that these would be very important for future communication campaign.

July 18

Only 50% farmers benefited from farm loan waivers, finds study

- As of March 2022, the poorest implementation of farm loan waiver schemes in terms of proportion of eligible farmers who had received the announced benefits was in Telangana (5%), Madhya Pradesh (12%), Jharkhand (13%), Punjab (24%), Karnataka (38%) and Uttar Pradesh (52%).
- By contrast, farm loan waivers implemented by Chhattisgarh in 2018 and Maharashtra in 2020 were received by 100% and 91% of the eligible farmers, respectively.
- A similar waiver announced by Maharashtra in 2017 worth ₹ 34,000 crore for 67 lakh farmers has been implemented for 68% of beneficiaries, SBI researchers reckoned.
- The SBI study was based on the outcomes of 10 farm loan write-offs worth about ₹ 2.53 lakh crore announced by nine States, starting with Andhra Pradesh and Telangana in 2014.
- The report identified rejection of farmers' claims by State governments, limited or low fiscal space to meet promises, and change in governments in subsequent years, as the possible reasons for the low implementation rate of these loan waivers.

Kilo class submarine INS Sindhudhvaj decommissioned

- She had many a firsts to her credit, including operationalisation of the indigenised sonar USHUS, indigenised satellite communication system Rukmani and MSS, inertial navigation system and indigenised torpedo fire control system, the Navy said.
- Commissioned into the Navy in June 1987, Sindhudhvaj, was one of the 10 Kilo class submarines India acquired from Russia between 1986 and 2000. Of these, Sindhurakshak was lost in an accident in Mumbai harbour in August 2013, while Sindhuvir was transferred to Myanmar in 2020, making it the Southeast Asian nation's first underwater platform.
- The Navy's sub-surface fleet now includes seven Russian Kilo class submarines, four German HDW submarines, four French Scorpene submarines and the indigenous nuclear ballistic missile submarine Arihant. The last two of the Scorpene class submarines are in various stages of trials and outfitting.

British govt launches "Aviation Passenger Charter"

- Long queues and cancelled flights caused by staff shortages have caused chaos at times, prompting airlines to cut back their schedules as the industry struggles to keep up with a surge in demand after the COVID-19 pandemic.
- The new charter will help passengers know what to do if they are confronted by cancellations, delays or missing baggage.

Wildfires intensifying in Europe

- Wildfires require right climatic conditions, burnable fuel and a spark.
- Rising temperatures suck moisture out of plants, creating an abundance of dry fuel.
- Drought and high heat can kill plants and dry out dead grass, and other material on the forest floor that fuel the fire once it starts sweeping through a patch.
- While dry vegetation is the burnable fuel that serves as kindling for fires, the spark is sometimes caused by lightning, at other times by accident or recklessness of the local population.

- As for Europe, the region has been hit by an early fire season due to an unusually dry, hot spring that left the soil parched. Authorities attribute this to climate change.

Women tend to live longer than men

- Now, research from University of Georgia (UGA) suggests these higher rates of illness can be improved by a better diet — one that is high in pigmented carotenoids such as yams, kale, spinach, watermelon, bell peppers, tomatoes, oranges and carrots.
- These bright-coloured fruits and vegetables are particularly important in preventing visual and cognitive loss.
- Women have, on average, more body fat than men. Body fat serves as a significant sink for many dietary vitamins and minerals, which creates a useful reservoir for women during pregnancy.
- This availability, however, means less is available for the retina and the brain, putting women at more risk for degenerative problems.
- Dietary intake of pigmented carotenoids act as antioxidants. Two specific carotenoids, lutein and zeaxanthin, are found in specific tissues of the eye and brain and have been shown to directly improve central nervous system degeneration.

Cases of 'kala azar' or black fever reported in Bengal

- Kala-azar or Visceral Leishmaniasis is a protozoan parasitic disease, spread by sandfly bites. Sandflies are brown in colour and have hairs on their bodies.
- The flies are infected with the parasite called 'leishmania donovani'.
- The vector sandfly is known to live in cracks and crevices of muddy houses, especially in dark and humid corners. According to the WHO, there are 3 main forms of leishmaniases of which kala-azar is the most serious form.
- The disease affects some of the poorest people and is linked to malnutrition, population displacement, poor housing, a weak immune system and a lack of financial resources.
- Leishmaniasis is also linked to environmental changes such as deforestation, and urbanisation, according to WHO.

- In 2020, more than 90 per cent of new cases reported to WHO occurred in 10 countries: Brazil, China, Ethiopia, Eritrea, India, Kenya, Somalia, South Sudan, Sudan and Yemen.
- In India, the disease is endemic in Bihar, Jharkhand, Uttar Pradesh and West Bengal.

Playing wind instruments can spread respiratory particles

- Brass instruments, on average, produced 191 per cent more aerosols than woodwinds, the release said.
- Being male was associated with a 70 per cent increase in emissions from instrument-playing, probably due to lung size and capacity, the researchers think.
- Louder playing of brass instruments was associated with higher particle counts, but louder playing of woodwinds didn't increase emissions.

July 19

Minority status of religious, linguistic communities is State-dependent: SC

- A Marathi can be a minority outside his home State e.g. Maharashtra. Similarly, a Kannada-speaking person may be in minority in States other than Karnataka.
- The court was hearing a petition complaining that followers of Judaism, Bahaism and Hinduism, who are the real minorities in Ladakh, Mizoram, Lakshadweep, Kashmir, Nagaland, Meghalaya, Arunachal Pradesh, Punjab and Manipur, cannot establish and administer educational institutions of their choice because of non-identification of 'minority' at the State level.
- But the court indicated that a religious or linguistic community which is a minority in a particular State, can inherently claim protection and the

right to administer and run its own educational institutions under Articles 29 and 30 of the Constitution.

- The petition has argued that the recognition of Muslims, Christians, Sikhs, Buddhists and Parsis nationally by the Centre as 'minorities' ignored the fact that religious communities such as Hindus were "socially, economically, politically non-dominant and numerically inferior" in several States.

220 children admitted in Kendriya Vidyalayas under PM Cares for Children Scheme in the country

- The PM Cares for Children Scheme provides comprehensive care and protection of children who have lost their parent(s) to the Covid pandemic.
- In a written reply in Lok Sabha today, Minister of Education Dharmendra Pradhan said under this scheme, such children have been provided support in a sustained manner to empower them through education and equip them for self-sufficient existence with financial support on reaching 23 years of age.

812 Pradhan Mantri Kaushal Kendras allocated in 707 districts across the country

- In a written reply in Lok Sabha, Minister of State for Skill Development and Entrepreneurship Rajeev Chandrasekhar said out of total 818 allocated PMKKs, 722 PMKKs have been established covering 707 districts in 36 States and Union Territories.
- He said over 71 lakh candidates have been trained during the last three years under Pradhan Mantri Kaushal Vikas Yojana in the country.

NAMASTE scheme for cleaning of sewers and septic tank.

- The scheme is a joint venture of Department of Drinking Water and Sanitation, Ministry of Social Justice and Empowerment and the Ministry of Housing and Urban Affairs.
- It aims to achieve outcomes like zero fatalities in sanitation work in India, no sanitation workers come in direct contact with human faecal

matter and all Sewer and Septic tank sanitation workers have access to alternative livelihoods.

- The Ministry has shortlisted type of machineries and core equipments required for maintenance works, safety gear for Safai Mitras. The same is also available on the Government e-Marketplace (GeM) portal for ease of their procurement by States and Urban Local Bodies.
- Mr Kaushal Kishore said that Skill Development and trainings of Safai Mitras is being taken up with the support of the Ministry of Social Justice and Empowerment through the National Safai Karamchari Finance Development Corporation.

RBI wants govt to prohibit cryptocurrencies

- This was informed by the Finance Minister Nirmala Sitharaman in a written reply in Lok Sabha.
- She said that according to the RBI, Crypto currencies are not a currency because every modern currency needs to be issued by the Central Bank or government.
- The Finance Minister said that in view of the concerns expressed by RBI on the destabilising effect of cryptocurrencies on the monetary and fiscal stability of the country, RBI has recommended framing of legislation on this sector. She said that the RBI is of the view that cryptocurrencies should be prohibited.
- The Finance Minister said that RBI has been cautioning users, holders and traders of virtual currencies that dealing in these currencies is associated with potential economic, financial and operational, legal, customer protection and security-related risks.

Govt informs around 60 lakh beneficiaries benefited through one lakh 50 thousand establishments under Aatmanirbhar Bharat Rojgar Yojana

- In a written reply in Lok Sabha the Minister of State for Labour and Employment Rameshwar Teli said Aatmanirbhar Bharat Yojana has been launched with effect from 1st October 2020 to incentivize employers for creation of new employment and restoration of loss of employment during Covid-19 pandemic.
- 31st March of this year was the last date for registration of beneficiaries.

- He said under this package, the government is providing fiscal stimulus of more than twenty-seven lakh crore rupees.
- This package comprises of various long term schemes, programmes, policies for making the country self-reliant and to create employment opportunities.

MARBURG VIRUS DISEASE (MVD)

- Marburg virus disease (MVD), earlier known as Marburg haemorrhagic fever, is a severe, often fatal hemorrhagic fever.
- Marburg, like Ebola, is a filovirus; and both diseases are clinically similar.
- Rousettus fruit-bats are considered the natural hosts for Marburg virus. However, African green monkeys imported from Uganda were the source of the first human infection.
- It was first detected in 1967 after simultaneous outbreaks in Marburg and Frankfurt in Germany; and in Belgrade, Serbia.
- After the onset of symptoms, which can begin anytime between 2 to 21 days, MVD can manifest itself in the form of high fever, muscle aches and severe headache. The disease has an average fatality rate of around 50%.
- There is no approved antiviral treatment or vaccine for MVD as of now.
- It can be managed with supportive care. According to the WHO, rehydration with oral or intravenous fluids, and treatment of specific symptoms can help prevent death.

Niti Aayog, WFP to launch initiative on mainstreaming millets in Asia and Africa

- NITI and WFP will prepare a compendium of good practices for scaling up the production and consumption of millets in India and abroad.
- Representatives from ICAR, Central and state government departments, Krishi Vigyan Kendras, industry, Central and state agriculture universities, FPOs, NGOs, start-ups, academic and research institutions, and international organizations such as the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Food Agriculture

Organization (FAO), International Commission on Irrigation and Drainage (ICID), etc., will also participate in the event.

PM Modi unveils 'SPRINT challenges' for Indian Navy

- In a bid to achieve 'Aatmanirbharta' in defence and as part of 'Azadi ka Amrit Mahotsav', NIIO, in conjunction with the Defence Innovation Organisation (DIO), aims to induct at least 75 new indigenous technologies/products into the Indian Navy.
- This collaborative project is named SPRINT {Supporting Pole-Vaulting in R&D through Innovations for Defence Excellence (iDEX), NIIO and Technology Development Acceleration Cell (TDAC)}.

The government said around 28 crore unorganised workers have been registered on e-Shram Portal.

- In a written reply in Lok Sabha, Minister of State for Labour and Employment Rameswar Teli said the government had launched e-Shram portal in August last year with an objective to create a national Database of unorganised workers.
- It also facilitates delivery of Social Security Schemes and Welfare schemes to the unorganised workers.
- He said the Centre is also implementing Prime Minister Street Vendor's Atmanirbhar Nidhi (PM SVANidhi Scheme) since 1st June 2020 to facilitate collateral-free working capital loan to street vendors to restart their businesses, which were adversely impacted during the Covid-19 pandemic.
- Mr Teli said over 33 lakh loans amounting to above three thousand six hundred crore rupees have been disbursed to over 30 lakh beneficiaries under the scheme till 11th of this month.

July 20

National Culture Fund has completed 52 projects with various donors since its inception

- Government of India has set up National Culture Fund (NCF) as a Trust on 28th November, 1996 under the Charitable Endowment Act, 1890.
- NCF is managed by a (Governing) Council and an Executive Committee.
- The Council is chaired by the Union Minister of Culture and has a strength of 21 including 15 non-official members representing various fields including corporate sector, private foundations and not-for-profit voluntary organizations.
- The aim of National Culture Fund (NCF) is to establish and nurture partnerships in the field of Culture and Heritage with private and public sectors, government, non-government agencies, private institutions and foundations and mobilize resources for the restoration, conservation, protection and development of India's rich, natural, tangible and intangible heritage.

'Tribal' status for Himachal's Trans-Giri region on cards

- The demand to declare Trans-Giri a tribal area is old — and is tied up with the demand for Scheduled Tribe (ST) status for the Hatti community which lives in the area.
- 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.
- The two Hatti clans, in Trans-Giri and Jaunsar Bawar, have similar traditions, and inter-marriages are common.

1.63 lakh Indians relinquish Indian citizenship in 2021

- The number of Indians who relinquished Indian Citizenship in 2019 and 2020 are 1,44,017; 85,256 respectively. A maximum of 78,284 Indians relinquished Indian Citizenship and received citizenship of the USA followed by 23,533 who took citizenship in Australia; 21,597 in Canada; and 14,637 in the UK in 2021.
- Union Minister of State for Home Nityanand Rai on Tuesday shared the data with the Lok Sabha that mentions "the number of Indians who relinquished Indian Citizenship in 2019, 2020, 2021 are 1,44,017; 85,256; and 1,63,370 respectively".
- Asked about the reasons given by these persons for renouncing Indian citizenship, Rai said "individuals renounced Indian citizenship for reasons personal to them".
- The data provided by the Minister mentions that there are 103 countries where Indians relinquished Indian citizenship.

Nasha Mukht Bharat Abhiyaan

- The Minister of State for Social Justice and Empowerment said, there has been a change in the pattern of substance abuse as reflected in the National survey of Extent, Pattern and Trends of Substance Use done in 2004 and in the Comprehensive National Survey on Extent and Pattern of Substance Use in India conducted in 2018.
- He said, under 'Nasha Mukht Bharat Abhiyaan', special emphasis is laid on the participation of stakeholders such as women, children, educational institutions and civil society organizations.

Jawaharlal Nehru Port becomes first 100 per cent Landlord Major Port of India having all berths being operated on PPP model

- Ports, Shipping and Waterways Minister Sarbananda Sonowal said, this project will improve the utilization in crane and berth productivity of the terminal.
- The total handling of JNPT will increase to 1.8 million Twenty-foot Equivalent Units (TEUs) from the present handling capacity of 1.5 million TEUs in 2020-21.
- The Minister said terminal will also be handling Ro-Ro vessels which will not only lower the logistics cost and reduce transit time but will also

contribute in reducing congestion on roads and promoting towards clean environment.

Govt not contemplating legislative measures for population control

- This was stated by Minister of State for Health and Family Welfare Dr. Bharati Praveen Pawar in a written reply in the Rajya Sabha today.
- The Minister said, the government accords top priority to the National Family Planning Programme with the objective of attaining Population Stabilization by the year 2045.
- She said, the government's efforts have been successful in reining in the growth of population and the Total Fertility Rate has declined to 2.0 in 2019-21.
- Pawar said, contraceptive usage has also increased to 56.5 percent in the country and The Crude Birth Rate has declined to 19.7 in 2019.

EAM S Jaishankar moves Weapons of Mass Destruction Amendment Bill

- The bill seeks to amend the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005.
- The 2005 Act prohibits unlawful activities such as manufacturing, transport, or transfer related to weapons of mass destruction and their means of delivery.
- Weapons of mass destruction are biological, chemical, or nuclear weapons. The bill bars persons from financing any prohibited activity related to weapons of mass destruction and their delivery systems.
- The house could not take up discussion on the bill due to the opposition's protest over the inflation and GST hike.

Weekly Iron Folic Acid Supplementation (WIFS)

- The government has provided four crore 14 lakh Iron Folic Acid Supplementation to Adolescents under the Weekly Iron and Folic Acid Supplementation (WIFS) Programme in the last financial year.
- The Union Minister of State for Health and Family Welfare, Dr. Bharati Pravin Pawar stated this in a written reply in the Rajya Sabha today.

- Pawar highlighted that over seven thousand Adolescent Friendly Health Clinics have been established in the country and fifty-two lakh Adolescent clients received counseling and clinical services during 2021-22.
- The Minister stressed that the Scheme for Promotion of Menstrual Hygiene is implemented to promote menstrual hygiene among adolescent girls in the age group of 10-19 years. He said, nearly thirty-five lakh adolescent girls have been covered every month under this scheme.

**Work from home allowed for maximum one year in special economic zone:
Commerce Ministry**

- The notification was issued on demand from the industry for making a provision for a country-wide uniform Work From Home policy across all Special Economic Zones.
- As per the new notification, Work from Home may be extended to maximum 50 percent of total employees including contractual employees of the unit.
- There is flexibility granted to Development Commissioner of Special Economic Zones to approve a higher number of employees for any bona-fide reason to be recorded in writing. Work From Home is now allowed for a maximum period of one year.
- However, it may be further extended for a period of one year at a time by the Development Commissioner at the request of units.

July 21

‘SWAVLAMBAN’ – Indian Navy’s Maiden Naval Innovation and Indigenisation Seminar

- The two day seminar saw enthusiastic participation by the academia, industry, policy makers, think tanks, students and senior government officials, in addition to the naval personnel.

- Personnel at Command Headquarters and outlying units of the Navy also assembled at designated auditoriums spread across the country to participate online.
- Hon'ble Prime Minister was shown a demo of 'Varuna' Personal Air vehicle – an autonomous multi-copter drone capable of carrying a passenger.
- The highlight of the seminar was the release of the iDEX DISC7 (SPRINT) challenges by the Prime Minister. SPRINT (Supporting Pole-vaulting in R&D through iDEX, NIIO and TDAC) is a collaborative project between the Defence Innovation Organisation (DIO) and NIIO aimed at developing atleast 75 indigenous technologies / products as a part of Azadi Ka Amrit Mahotsav.
- The maiden seminar is 'historic' both in scope and ambition and will foster a new chapter in the naval thrust towards self-reliance in defence and an AatmaNirbhar Bharat.

Government of India informed that Unit 3 of Kakrapar atomic plant is expected to commence commercial operation by December 2022,

- Unit-4 of Kakrapar Atomic Power Project (KAPP-4) has achieved a physical progress of 93.65% as of June-2022. Kakrapar Atomic Power Station is a nuclear power station in India, which lies in the proximity of Surat and Tapi river in the state of Gujarat.
- Among the other 700 MW PHWRs under construction, RAPP 7&8 at Rawatbhata, Rajasthan have achieved physical progress of 95% and 80.8% respectively. In respect of GHAVP 1&2 at Gorakhpur, Haryana, various buildings and structures are under construction.
- In the ten PHWRs viz., Kaiga 5&6 at Kaiga in Karnataka, GHAVP 3&4 at Gorakhpur in Haryana, Mahi Banswara 1 to 4 at Mahi Banswara in Rajasthan and Chutka 1&2 at Chutka in Madhya Pradesh, pre-project activities at sites and procurement of long delivery equipment have been undertaken. Excavation has also commenced at Kaiga-5&6.

Single window created for private participants in space sector

- Communication satellites viz. GSAT-8, GSAT-10, GSAT-12R (CMS-01), GSAT-14, GSAT-15, GSAT-16, GSAT-17, GSAT-18, GSAT-30 and GSAT-

31 have been transferred at a written down value of Rs 4697.60 crores against issue of equity to Government of India, with 01.04.2021 as the effective date of transfer.

- The Board of NSIL is authorized to price the transponder capacity as per the global trends. NSIL shall carry out the activities related to offering and allocation of capacity, as per the guidelines to be adopted by its Board.
- The transfer of operational satellites is part of the Space Sector reforms, aimed at strengthening the role of NSIL in order to enhance the nation's share in global space economy.
- The Minister also informed that the Government has taken several steps to increase India's share in global space market, through the reforms undertaken in 2020, which seek to augment the space sector in the country with greater participation of Non-Governmental Entities (NGEs).
- The Indian National Space Promotion & Authorization Centre [IN-SPACe] has been created as a single window agency to promote, handhold and authorize the activities of NGEs in the sector, thus providing them with a level playing field.

Phased implementation of digital currency for wholesale, retail segments in the works

- The introduction of CBDC was announced in the Union Budget 2022-23, by Finance Minister Nirmala Sitharaman and necessary amendments to the relevant section of the RBI Act, 1934 have been made with the passage of the Finance Bill 2022.
- The passage of the bill has enabled the RBI to conduct a pilot and subsequent issuance of CBDC.
- The RBI is also working on phased implementation of a central bank digital currency (CBDC) in both wholesale and retail segment.
- CBDC is a digital or virtual currency but it is not comparable with private virtual currencies or cryptocurrency that have mushroomed over the last decade. Private virtual currencies do not represent any person's debt or liabilities as there is no issuer.

Sri Lanka gets new president in six-time PM Wickremesinghe

- Wickremesinghe won 134 votes in the 225-member Parliament in a three-way contest.
- This is the third unlikely elevation this year for Mr. Wickremesinghe, 73, who is the United National Party's sole MP — entering not with an election win, but through the national list, based on the party's vote share in the 2020 general elections.
- In the past three months, coinciding with Sri Lanka's escalating economic crisis, he has risen from lone MP to PM, before clinching Presidency.
- Meanwhile, protesters from the 'Janatha Aragalaya' ('People's Struggle') have said they would agitate until Mr. Wickremesinghe, too, steps down.
- On May 12, recently ousted President Gotabaya appointed him as Prime Minister, replacing Mahinda, who had resigned days earlier, in the wake of violence triggered by his [Mahinda] supporters.

India, Namibia ink pact on Cheetah relocation

- First batch of eight cheetahs comprising four male and as many female cheetahs are expected to arrive in India before Independence Day.
- The cheetahs will be released in Kuno National Park, Madhya Pradesh.
- India plans to introduce 8-10 cheetahs every year with a total 50 from Namibia, South Africa and other African countries over the next five years.
- Under the MoU, both the countries will also collaborate in areas of climate change, environmental governance, environmental impact assessments, pollution and waste management.

Cabinet approves signing of MoU on judicial cooperation between India, Maldives

- This is the eighth MoU signed between India and other countries in the field of Judicial Cooperation.
- This MoU will provide a platform to tap the benefits of Information Technology for court digitization and can be a potential growth area for the IT companies and start-ups in both countries. In recent years, the close relationship between India and Maldives has intensified multi-dimensionally.

- With the signing of this agreement on cooperation in the field of law and justice, the good relations between the two countries will receive further impetus.

NITI Aayog Releases Report on Digital Banks

- NITI Aayog's report makes a case and offers a template and roadmap for a licensing and regulatory regime for digital banks. It focuses on avoiding any regulatory or policy arbitrage and offers a level playing field to incumbents as well as competitors.
- Recommendations: The report recommends a carefully calibrated approach, comprising the following steps -
 - Issue of a restricted digital bank licence (to a given applicant) (the license would be restricted in terms of volume/value of customers serviced and the like).
 - Enlistment (of the licensee) in a regulatory sandbox framework enacted by the Reserve Bank of India.
 - Issue of a 'full-scale' digital bank licence (contingent on satisfactory performance of the licensee in the regulatory sandbox, including salient, prudential and technological risk management).

Terrorist attacks have declined substantially in J&K: MoS Nityanand Rai

- The number of terrorist attacks has substantially declined to 229 in 2021 as compared to 417 in 2018 in J&K.
- Similarly, the attacks on civilians have also decreased from 33 in 2018 to 12 in 2021. This was informed by Minister of State for Home Nityanand Rai in a written reply in the Rajya Sabha.
- On the attacks on Kashmiri Pandits in recent months, Mr. Rai said, the government has taken several measures for the safety of minorities in the valley.
- These include a robust security and intelligence grid, day and night area domination, patrolling and proactive operations against the terrorists, and round-the-clock checking at nakas.

SC accepts Banthia Commission report paving way for reservation for OBCs in Local Body Elections in Maharashtra

- With this, the way for political reservation for candidates belonging to Other Backward Classes in the Local Bodies' Elections in the state has been cleared.
- Apart from this, the top court has also asked to take steps to hold the stalled elections in the state urgently. It has been ordered to announce the Election Schedule in the next two weeks.
- The Jayantkumar Banthia Commission, in its report, recommended that OBCs should be given up to 27 percent reservation in local bodies. As the court accepted this report, OBCs will get 27 percent political reservation in local self-government elections in the state.

July 22

Karnataka tops NITI Aayog innovation list

- In the Index released, Manipur secured the lead in the Northeast and Hill States category, while Chandigarh was the top performer in the Union Territories and City States category.
- Karnataka was followed by Telangana, Haryana, Maharashtra and Tamil Nadu. Chhattisgarh, Odisha, Bihar and Gujarat were at the bottom of the index.
- Given the country's ambitious targets to be named among the top 25 nations in the Global Innovation Index, the report has recommended measures, such as increasing Gross Domestic Expenditure on R&D (GDERD), promoting private sector participation in R&D and closing the gap between industry demand and what the country produces through its education systems.
- The report went on to state that countries that spend less on GDERD fail to retain their human capital in the long run and the ability to innovate is dependent on the quality of human capital; India's GDERD as a percentage of GDP stood at about 0.7%.

With Opposition absent, Lok Sabha defers debate on Antarctic Bill

- The Indian Antarctic Bill, 2022 was introduced in Lok Sabha on April 1, 2022.
- The Bill seeks to give effect to the Antarctic Treaty, the Convention on the Conservation of Antarctic Marine Living Resources, and the Protocol on Environmental Protection to the Antarctic Treaty.
- Applicability: The provisions of the Bill will apply to any person, vessel or aircraft that is a part of an Indian expedition to Antarctica under a permit issued under the Bill.
- Central committee: The central government will establish a Committee on Antarctic Governance and Environmental Protection. The Committee will be chaired by the Secretary of the Ministry of Earth Sciences.
- Need for permit: A permit by the Committee or written authorisation from another party to the Protocol (other than India) will be required for various activities.
- Prohibited activities: The Bill prohibits certain activities in Antarctica including: (i) nuclear explosion or disposal of radioactive wastes, (ii) introduction of non-sterile soil, and (iii) discharge of garbage, plastic or other substance into the sea which is harmful to the marine environment.

Unwed woman cannot be denied right to abortion, says Supreme Court

- A Bench led by Justice D.Y. Chandrachud was hearing the appeal of a woman who wanted to abort her 24-week pregnancy after her relationship failed and her partner left her.
- The lower court had taken an “unduly restrictive view” that her plea for a safe abortion was not covered under the Medical Termination of Pregnancy Act as the pregnancy arose from a consensual relationship outside wedlock.
- Chastising the lower court, the Bench said live-in relationships had already been recognised by the Supreme Court. There were a significant number of people in social mainstream who see no wrong in engaging in pre-marital sex.
- The law could not be used to quench “notions of social morality” and unduly interfere in their personal autonomy and bodily integrity.

- The court noted that an amendment to the Act in 2021 had substituted the term 'husband' with 'partner', a clear signal that the law covered unmarried women within its ambit.
- A woman's right to reproductive choice is an inseparable part of her personal liberty under Article 21 of the Constitution. She has a sacrosanct right to bodily integrity.

19th century painting of Raja Serfoji, son stolen from Thanjavur Saraswathi Mahal traced to U.S. museum

- For long, the rulers of Thanjavur had been devoid of absolute power. Serfoji, placed by the British on the throne over his stepbrother Amar Singh, died in 1832.
- His only son Sivaji ruled until 1855. However, he had no male successor.
- Thanjavur became a casualty of Lord Dalhousie's infamous 'Doctrine of Lapse', and it got absorbed into British-ruled Indian provinces.
- The painting, which has Raja Serfoji and his young son, according to some historians, was probably painted between 1822 and 1827 and kept in the Saraswathi Mahal.

India – UK mou on mutual recognition of academic qualification

- In May 2021, during the Virtual Summit between Prime Ministers of India and UK, a comprehensive Roadmap to 2030 was adopted for an enhanced bilateral cooperation between the two countries. Both sides also agreed to a new Enhanced Trade Partnership.
- Education forms an important pillar of this roadmap. In light of India's National Education Policy 2020 (NEP 2020), the two sides agreed to expand educational by agreeing to a mutual recognition of academic qualifications.
- This is a landmark moment in our bilateral educational relations as signing of this MoU would enable smoother student mobility between the two countries and help in developing stronger institutional collaboration and widen the scope of academic and research collaboration between the Higher Education Institutions of both countries.

Crimes against SCs, STs went up in 2020

- Cases registered for crime against SCs rose from 42,793 in 2018 to over 50,000 in 2020, and of crime against STs from 6,528 to 8,272 in the same period.
- The figures also detailed how many cases had resulted in chargesheets being filed, and how many were pending investigation at the end of each of these year.

Game of Thrones fame Emilia Clarke reveals parts of her brain are 'missing' after surviving two aneurysms

- Aneurysm is a swelling of the arteries and veins in any part of the body, and is caused by weakening of the walls. It occurs most commonly in the aorta, back of the knees, brain or intestines. If the aneurysm gets ruptured, it can even cause internal bleeding and stroke.
- Blood vessels of the brain and the heart are the most common locations to get seriously affected. The swelling can be of two types. Either the complete blood vessel is swollen or a specific side of the blood vessel can bulge out from the sides.
- Potential risk factors for aneurysm include smoking, age, high cholesterol, obesity, hypertension or tissue disorders. Pregnancy can also increase risk of aneurysm of the spleen.
- A device called flow diversion stent is a new innovative intervention for treatment of aneurysm for the initial stages, when it has not ruptured.

Days after drinking water from Kali Bein, Punjab CM Bhagwant Mann in hospital

- Kali Bein, the 165-km rivulet starts from Hoshiarpur, runs across four districts and meets the confluence of the rivers Beas and Sutlej in Kapurthala.
- Along its banks are around 80 villages and half a dozen small and big towns.
- Waste water from there as well as industrial waste used to flow into the rivulet via a drain, turning its waters black, hence the name Kali Bein (black rivulet). Dense grass and weeds grew on the water until a cleaning project started.

- The Kali Bein is of great significance to Sikh religion and history, because the first Guru, Nanak Dev, is said to have got enlightenment here.
- When Guru Nanak Dev was staying at Sultanpur Lodhi with his sister Bebe Nanki, he would bathe in the Kali Bein.
- He is said to have disappeared into the waters one day, before emerging on the third day. The first thing he recited was the “Mool Mantra” of the Sikh religion.

Russia Restores "Unstable" Gas Supplies To Europe Via Nord Stream

- Germany, which is heavily dependent on Russian gas, had feared that Moscow would not reopen the pipeline after the scheduled work and accused Moscow of using energy as a “weapon”.
- The showdown came amid the worst tensions in several years over Russia’s invasion of Ukraine. Germany believes Russia is squeezing supplies in retaliation for Western sanctions over the war.
- Enduring German reliance on Russian gas coupled with alarming signals from Moscow has turned up the pressure on Europe’s top economy.
- A total shutdown of imports or a sharp reduction in the flow from east to west could have a catastrophic effect, shutting factories and forcing households to turn down the heat.
- The International Monetary Fund (IMF) said that a halt in supplies could slash Germany’s gross domestic product this year by 1.5%.

July 23

'Har ghar Tiranga' campaign to begin from July 22

- Prime Minister Narendra Modi took to Twitter to ask Indians to hoist or display the National Flag at their homes from August 13 to August 15 as part of the Har Ghar Tiranga initiative of the government.
- In a series of tweets, which marked the anniversary of the adoption of the National Flag in 1947, Mr. Modi said, 22 July has a special relevance in

our history. It was on this day in 1947 that our National Flag was adopted.

Shri Goyal With collective efforts, GeM can become the largest public procurement platform in the world

- Government e Marketplace (GeM) is an online platform for public procurement in India which was envisaged by the Hon'ble Prime Minister.
- The initiative was launched on August 9, 2016 by Ministry of Commerce and Industry, with an objective to create an open and transparent procurement platform for government buyers.
- The portal has transformed public procurement in India by driving its three pillars viz. inclusivity, transparency, and efficiency.
- GeM has about 61,440 Government Buyer Organizations and about 47.99 Lakh Sellers & Service Providers with a rich listing of over 41.44 lakh Product Offerings and 1.9 lakh Service offerings.
- All states (except Sikkim) have already signed MoUs with GeM. As many as 239 CPSUs are also registered on GeM and making significant procurement through GeM Portal.

Medical support to Pregnant Women

- Janani Suraksha Yojana (JSY), a demand promotion and conditional cash transfer scheme for promoting institutional delivery.
- Janani Shishu Suraksha Karyakaram (JSSK) entitles every pregnant woman to free delivery, including for caesarean section, in public health institutions along with the provision of free transport, diagnostics, medicines, other consumables, diet and blood.
- Over 25,000 'Delivery Points' across the country have been strengthened in terms of infrastructure, equipment, and trained manpower for provision of comprehensive RMNCAH+A services.
- Surakshit Matratva Ashwasan (SUMAN) for providing assured, dignified, respectful and quality healthcare at no cost and zero tolerance for denial of services for every woman and newborn visiting the public health facility to end all preventable maternal and newborn deaths.

- Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) provides pregnant women a fixed day, free of cost assured and quality Antenatal Care on the 9th day of every month.
- LaQshya (Labour room Quality improvement Initiative) to improve the quality of care in Labour room and Maternity operation theatres to ensure that pregnant women receive respectful and quality care during delivery and immediate post-partum.

Ukraine and Russia sign UN-backed deal to restart grain exports

- The deal makes provisions for the safe passage of ships. It foresees the establishment of a control center in Istanbul, to be staffed by U.N., Turkish, Russian and Ukrainian officials, to run and coordinate the process.
- Ships would undergo inspections to ensure they are not carrying weapons.
- No Russian ship would escort vessels and that there would be no Russian representative present at Ukrainian ports.
- The agreement potentially averted the threat of a catastrophic global food crisis.
- Ukraine is one of the world's largest exporters of wheat, corn and sunflower oil, but Russia's invasion of the country and naval blockade of its ports have halted shipments.
- Some grain is being transported through Europe by rail, road and river, but the prices of vital commodities like wheat and barley have soared during the nearly five-month war.

Centre says, Setting up of regional benches of SC under examination of the Constitutional Bench

- The Eighteenth Law Commission in its 229th Report suggested that a Constitutional Bench be set up at Delhi and four Cassation Benches be set up in the Northern region at Delhi, the Southern region at Chennai/Hyderabad, the Eastern region at Kolkata and the Western region at Mumbai.
- The Chief Justice of India in 2010, found that there is no justification for setting up benches of the Supreme Court outside Delhi. However, the

Apex Court, in another writ petition has found it proper to refer the matter to Constitutional Bench for authoritative pronouncement.

- The matter is sub-judice.
- Article 130 of the Constitution of India provides that the Supreme Court shall sit in Delhi or in such other place or places as the Chief Justice of India may, with the approval of the President, from time to time, appoint.

India's doctor-population ratio better than WHO

- In a written reply to the Lok Sabha, Minister of State for Health and Family Welfare, Dr Bharati Pravin Pawar said the doctor-population ratio in the country is 1:834 whereas WHO standard is 1:1000.
- The Minister said as per the National Medical Commission, there are 138009 registered allopathic doctors besides 565000 AYUSH doctors. The Minister said there are over 34 lakh registered nursing personnel and 13 lakh allied and healthcare professionals in the country.
- The Minister further said the government is taking all possible measures for increasing the availability of doctors in the country, which include increasing UG and PG medical seats.

The Rajya Sabha was adjourned for the day after completing the special mentions

- Special Mentions are made by Members of Parliament on matters of public importance with the permission of Honorable Chairman Rajya Sabha, under Rule 180B.
- The Minister concerned with the subject matter is required to respond in writing by intimating the Member within 30 days of the factual position or the action taken/proposed to be taken.
- This instrument evolved later on. There was no specific provision in the Rules of Procedure and Conduct of Business in the Rajya Sabha in regard to the mentioning of matters of urgent public importance in the House by members till 1 July 2000.

Burhanpur In Madhya Pradesh Is 1st Har Ghar Jal Certified District

- Burhanpur is the only district in the country where all people from each of 254 villages have access to safe drinking water through taps.
- Only 36.54 percent of over one lakh households in Burhanpur had potable drinking water through tap connections at the time of the launch of Jal Jeevan Mission on 15th August 2019.
- Despite various disruptions and challenges in face of the COVID-19 pandemic, the consistent efforts by Panchayat representatives, Pani Samitis and district officials of Burhanpur have led to the provision of functional tap water connections to all its 1 lakh 1 thousand 905 rural households within a span of 34 months.

July 24

World Health Organization (WHO) has declared monkeypox a global health emergency.

- It came at the end of the second meeting of the WHO's emergency committee on the virus.
- The classification is the highest alert that the WHO can issue and follows a worldwide upsurge in cases.
- WHO Director-General Dr. Tedros Adhanom Ghebreyesus said more than 16,000 cases have now been reported from 75 countries. There have been five deaths so far as a result of the outbreak.
- There are only two other such health emergencies at present - the coronavirus pandemic and the continuing effort to eradicate polio.

New 'industry' status buoys up Rajasthan's tourism units

- The power tariff and other taxes levied on tourism operators have now been brought on a par with other industries, against the much-higher commercial rates levied earlier.

- Chief Minister Ashok Gehlot had announced in his 2022-23 Budget speech in the State Assembly in February this year that the tourism and hospitality sector would be granted industry status.
- The concessions to the tourism sector as an 'industry' would bring a financial burden of ₹ 700 crore a year on the State exchequer.

National Broadcasting Day was observed on July 23, 2022.

- On this day in 1927, the first-ever radio broadcast in the country went on the air from the Bombay Station under a private company, the Indian Broadcasting Company.
- On the 8th of June, 1936, the Indian State Broadcasting Service became All India Radio.
- Since 1927, Radio has been an important part of people's life in India. All India Radio has been serving to inform, educate and entertain the masses truly living up to its motto - 'Bahujan Hitaya, Bahujana Sukhaya'.

Tricolour can now stay hoisted day & night

- The provision earlier allowed the flag, when displayed in the open, to be flown from sunrise to sunset as far as possible.
- Now, a member of the public, a private organisation or an educational institution is allowed to hoist the flag on all days and occasions, ceremonial or otherwise, consistent with dignity and honour of the national flag. The move comes ahead of 75th anniversary of Indian Independence.
- The Flag Code of India was earlier amended on December 30, 2021, allowing the use of polyester, apart from cotton, wool, silk and khadi for making hand-spun, hand-woven and machine-made flags.
- Prime Minister Narendra Modi has called upon people to hoist the Tricolour or display it in their homes between 13th and 15th August. Mr Modi said, this Har Ghar Tiranga movement will deepen our connect with the national flag as the nation is marking Azadi Ka Amrit Mahotsav this year.

Rules for boarding specially-abled people on aircraft

- The DGCA said it has amended its regulations to improve accessibility of boarding and flying for the specially abled.
- In its new Civil Aviation Requirement (CAR), the DGCA has said that if an airline decides to deny boarding after getting medical opinion, it will have to immediately inform the passenger in writing and mention the reasons.
- According to the earlier rules, airlines could deny boarding to any person on the basis of disability if it opined that “transportation of such persons would or might be inimical to the safety of flight”.
- The airlines, however, were bound to specify in writing the basis of such refusal.

Scientists worry as GST exemption removed for science equipment

- On July 18, the 47th GST Council meeting in Chandigarh approved changes to rates on a host of goods and services.
- This included a decision to do away with concessional GST rate of 5% applicable to scientific equipment and increasing it to “applicable rates” meaning anywhere between 12% and 18%.
- This would mean a 6%-12% hit on research funds available to laboratories for their expenditure.
- The Union Ministry of Science and Technology was earmarked ₹ 14,217 crore in the 2022-23 Union Budget — a drop of 3.9% from last year.
- In April 2021, scientists from labs all over the country had signed a petition and written to Prime Minister Narendra Modi, pointing out that the “Atmanirbhar Bharat” policy had made import of scientific equipment and reagents an “extremely tedious and time-consuming process” requiring approval at the level of the Secretaries of Ministries or departments.

Bat habitats in South Western Ghats lie predominantly outside protected areas

- The authors based their study area around 1,600 km of the Southern Western Ghats, encompassing biodiverse regions in Kerala, Karnataka and Tamil Nadu.

- Six major biodiversity hotspots — Agastyamalai, Periyar Tiger Reserve, Anamalai, the Nilgiris, the Wayanad-Mudumalai complex and Brahmagiri — were part of the study area.
- The Southern Western Ghats was home to rare and endangered bat species such as Salim Ali's fruit bat (*Latidens salimalii*) and the Pomona roundleaf bat (*Hipposideros pomona*).
- Seven of the 37 bat species studied in the region had broad distribution ranges, exceeding 20,000 sq km, 19 species had intermediate distribution ranges between 10,000 and 20,000 sq km, and 11 species were restricted to ranges less than 10,000 sq km.
- Worryingly, only two species of bats had a distribution range that was significantly located in protected areas. Meanwhile, the distribution ranges of 35 other species lay primarily outside protected areas.

BAL RAKSHA MOBILE APP

- Union Minister of Ayush Shri Sarbananda Sonowal inaugurated Vaccination Centre for children at the All India Institute of Ayurveda (AIIA).
- He also launched the Bal Raksha mobile app, which is aimed at creating awareness of paediatric preventive healthcare through Ayurveda intervention amongst parents.
- The app will also collect feedback from parents regarding the impact of the kit on their children's health and immunity.
- The All India Institute of Ayurveda, an autonomous organisation under Ministry of Ayush, aims at bringing synergy between the traditional wisdom of Ayurveda and modern tools and technology.

July 25

China launches second Tiangong space station module

- The 23-tonne Wentian (“Quest for the Heavens”) laboratory module was launched on the back of China’s most powerful rocket, the Long March 5B from the Wenchang Space Launch Centre on the southern island of Hainan. The launch was "a complete success".
- China began constructing the space station in April 2021 with the launch of the Tianhe module, the main living quarters, in the first of 11 crewed and uncrewed missions in the undertaking.
- The Wentian lab module, 17.9 m long, will provide space for experiments, along with the other lab module yet to be launched — Mengtian (“Dreaming of the Heavens”).
- Mengtian is expected to be launched in October and, like Wentian, is to dock with Tianhe, forming a T-shaped structure.

Men on 'marriage strike' against marital rape laws

- Heteropessimism can be defined as public declarations of dissatisfaction with heterosexual relationships, by people who continue to be in those relationships.
- Heteropessimism has been caused and shaped by larger social, economic and political currents.
- the realisation for heterosexual people that dating is really hard (and in many cases, violent or even fatal), and the hard-won prize of marriage is not what it was touted to be, can lead to disillusionment from romantic relationships.

Study sheds light on prey-predator relationship in Himachal

- According to the study carried out in Spiti Valley of Himachal Pradesh, the snow leopard detection probability was high if the site was used by its prey species — Siberian ibex and blue sheep. Whereas, in the case of the prey species, the probability of detection was low when the predator was present and detected.
- Snow leopards use rugged mountainous areas or non-forested areas covering an altitude between 3,200 metres to 5,200 metres.
- Habitat covariates such as barren area, grassland, aspect, slope and distance to water were important drivers of habitat use for the snow leopard as well as its prey species.

- Classified as 'Vulnerable' by the International Union for Conservation of Nature Red list and listed in Schedule-I species of the Indian Wildlife (Protection) Act, 1972, snow leopards are elusive mountain cats.

Challenges of fiberisation ahead of India's 5G deployment?

- The process of connecting radio towers with each other via optical fibre cables is called fiberisation.
- It helps provide full utilisation of network capacity, and carry large amounts of data once 5G services are rolled out. It will also aid in providing additional bandwidth and stronger backhaul support.
- The backhaul is a component of the larger transport that is responsible for carrying data across the network.
- It represents the part of the network that connects the core of the network to the edge. As a result, fibre backhaul remains an important part of transport across all telecoms.
- Fibre-based media, commonly called optical media, provides almost infinite bandwidth and coverage, low latency and high insulation from interference.

Wind power rates may bottom out

- However, wind industry experts say this alone will not necessarily improve the sector's fortunes.
- India has committed to installing 60,000 MW of wind power projects by 2022, but has met only two-thirds of the target.
- While reverse auctions were the norm for all renewable energy projects, including solar and wind projects since 2015, the government's change of stance signals that the rock-bottom prices associated with clean energy projects — per unit solar power costs have fallen to ₹ 2.40 a unit — do not reflect the true costs of renewable energy.
- The cost of large tracts of land required to install wind turbines is among the reasons cited for the dwindling health of the sector.

Dharmendra Pradhan calls for including info about Anusilan Samity in NCF

- Anusilan Samity was a prominent secret revolutionary society operating from Bengal in the 20th century with a mission to overthrow colonial rule and give momentum to India's struggle for freedom.
- Founded by Satish Chandra Pramatha Mitra, Aurobindo Ghose and Sarala Devi, Anusilan Samity was one among the many illustrious institutions from the land of Bengal.
- Legends like, Deshabandhu Chittaranjan Das, Surendranath Tagore, Jatindranath Banerjee, Bagha Jatin were associated with Anusilan Samity. Hedgewar was also an alumnus of the Samity.

No port, vessel related charges on coastal shipping for six months

- The decision has been taken to provide some quick respite to Port sector from the impact of Global increase in price of fuel.
- The cost of Marine fuel - Low Sulphur High Flash High Speed Diesel has increased from 76 thousand rupees per Kiloliter to one lakh 21 thousand rupees per Kiloleter.
- The rising fuel cost at international level is now making the local Ro-Pax and Passenger Ferry operations unviable. Exemption of vessel and port related charges will provide the necessary breather to this sector for the next six months.

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A year on, only four States adopt Model Tenancy Law

- As per information available with MoHUA, the States of Andhra Pradesh, Tamil Nadu, Uttar Pradesh and Assam have revised Tenancy Acts on the lines of Model Tenancy Act (MTA).
- The Model Tenancy Act aimed to balance the rights of tenants and landlords, and to "create an accountable and transparent ecosystem for renting of premises in a disciplined and efficient manner".

latest guidelines on arrests and bail orders

- These guidelines are in addition to the earlier ones which the apex court had already laid down in the case of Armesh Kumar vs State of Bihar (2014).
- The Court in the present case has also emphasised upon separate legislation on the law relating to bail and has also issued specific directions in this regard.
- On July 16, even the Chief Justice of India (CJI) cautioned against “hasty and indiscriminate arrests”. He further commented on the delay in bails and the plight of undertrial prisoners.

Sections 41 and 41A of the Code of Criminal Procedure.

- Section 41 of the Code provides for the circumstances in which arrest can be made by the police without a warrant and mandates for reasons to be recorded in writing for every arrest and non-arrest.
- Section 41A of the Code provides for the requirement of a notice to be sent by the investigating agencies before making an arrest in certain conditions prescribed by the Code.

Centre dumps draft law to stop attack on health workers

- This was revealed in the Ministry's reply to a query filed under the Right to Information Act, seeking the status of the Healthcare Service Personnel & Clinical Establishments (Prohibition of Violence and Damage to Property) Bill, 2019.
- During a debate on an Ordinance in the Rajya Sabha to amend the Epidemic Diseases Act, 1897, the then Health Minister Harsh Vardhan had said that there was a dramatic decline in the number of incidents of violence against health workers ever since the Ordinance was brought in.
- The Ordinance had proposed to make incidents of violence on health workers treating COVID-19 patients a non-bailable offence.

IIT Bombay to help BMC in treatment of sewage from drains

- To prevent sludge and sewage from 25 storm water drains between Bandra and Dahisar from flowing into the sea, Brihanmumbai Municipal

Corporation (BMC) has planned in-situ treatment of sewage from the drains.

- This will be done with the help of Indian Institute of Technology-Bombay's (IIT-B) N-Treat Technology.
- N-Treat is a seven-stage process for waste treatment that uses screens, gates, silt traps, curtains of coconut fibres for filtration, and disinfection using sodium hypochlorite.
- It is a natural and environment friendly way for sewage treatment. Its set up takes place within the nullah channels, that is through the in-situ or on-site method of treatment, and does not require additional space.

Four tribal revolts President Murmu invoked in her inaugural speech

Addressing the nation after being sworn-in, she invoked four tribal revolutions that she said had strengthened tribal contribution to the freedom struggle.

1. **Santhal revolution:** On June 30, 1855, over 10,000 Santhals were mobilised by their leaders — Kanho Murmu, Chand Murmu, Bhairab Murmu and Sidho Murmu – to revolt against the East India Company over oppression by revenue officials, zamindars, and corrupt moneylenders.
2. **Paika rebellion:** In several recent descriptions, the 1817 Paika Rebellion in Odisha's Khurda is referred to as the "original" first war of Indian Independence.
3. **Kol revolt:** The Kols, tribal people from the Chhota Nagpur area, rose in revolt against the British in 1831.
4. **Bhil uprising:** After the British intruded into the Bhil territory in Maharashtra's Khandesh region, the tribals pushed back fearing exploitation under the new regime in 1818. The revolt was led by their leader, Sewaram and was brutally crushed using the British military might.

Minister of Environment tabled data in Lok Sabha on human-animal conflict.

- Between 2018-19 and 2020-21, 222 elephants were killed by electrocution across the country, 45 by trains, 29 by poachers and 11 by poisoning.
- Among tigers, too, 29 were killed by poaching between 2019 and 2021, while 197 tiger deaths are under scrutiny.
- Among human casualties of conflict with animals, elephants killed 1,579 humans in three years — 585 in 2019-20, 461 in 2020-21, and 533 in 2021-22. Odisha accounted for the highest number of these deaths at 322.
- Tigers killed 125 humans in reserves between 2019 and 2021. Maharashtra accounted for nearly half these deaths, at 61.

India to set up joint theatre commands of tri-services

- He was speaking during a programme organised by the Jammu Kashmir People's Forum here to pay tributes to the martyrs of the Indian Armed Forces.
- Referring to the defence production, Singh said, "India was the world's largest importer (of defence products). Today, India is not the world's largest importer but is among the top 25 nations engaged in defence exports," he pointed out.
- Singh said the country has started defence exports worth Rs 13,000 crore and it has fixed a target to increase it to Rs 35,000 to Rs 40,000 crore by 2025-26.
- This is Singh's second visit to Jammu in a little over a month. He visited the region on June 17 on the occasion of the 200th year of coronation of Maharaja Gulab Singh.

The Government of India clarified that fresh milk and pasteurised milk are fully exempted from Goods and Service Tax (GST).

- Further, milk products like curd, lassi, butter milk and paneer are also exempted from GST if sold in forms other than those pre-packaged and labelled.
- In a written reply in the Lok Sabha, Finance Minister Nirmala Sitharaman said a nominal GST of 5 per cent applies to curd, lassi,

butter milk and paneer when sold in pre-packaged and labelled form, and Ultra High-Temperature Milk.

- Further, a GST of 12 per cent applies to condensed milk, butter, ghee and cheese. GST exemptions and rates apply uniformly across States.
- She said GST rates are prescribed on the recommendation of the GST Council, which is a constitutional body comprising of representatives from both Centre and the States and Union Territories.

July 27

Defence Ministry approves arms procurement proposals worth ₹ 28,732 crore

- The procurement proposals were cleared by the Defence Acquisition Council (DAC) headed by Defence Minister Rajnath Singh.
- Among the proposals approved by DAC in the meeting are three proposals of the Indian Army, viz. Guided Extended Range Rocket Ammunition, Area Denial Munition Type I and Infantry Combat Vehicle – Command have been designed and developed by DRDO.
- The DAC also approved Navy's proposal to procure upgraded 1250KW capacity Marine Gas Turbine Generator for power generation application onboard Kolkata class of ships through Indian Industry.
- The approval to the new procurement proposals came amid India's over two-year-long border row with China in eastern Ladakh.

Russia to drop out of International Space Station after 2024

- Borisov's statement reaffirmed previous declarations by Russian space officials about Moscow's intention to leave the space station after 2024 when the current international arrangements for its operation end.
- NASA and other international partners hope to keep the space station running until 2030, while the Russians have been reluctant to make commitments beyond 2024.

- The space station is jointly run by the space agencies of Russia, the U.S., Europe, Japan and Canada. The first piece was put in orbit in 1998, and the outpost has been continuously inhabited for nearly 22 years.
- It is used to conduct scientific research in zero gravity and test out equipment for future space journeys. It typically has a crew of seven, who spend months at a time aboard the station as it orbits about 400 km from Earth.

India Designates 5 New Ramsar Sites.

- India has designated five (5) new wetlands of International importance, which include three wetlands (Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest & Pichavaram Mangrove) in Tamil Nadu, one (Pala wetland) in Mizoram and one wetland (Sakhya Sagar) in Madhya Pradesh, making a total of 54 Ramsar sites in the country.
- The Ramsar sites have been increased from 49 to 54 Ramsar sites.
- India's Ramsar wetlands are spread over 11,000 [sq.km](#) — around 10% of the total wetland area in the country — across 18 States. No other South Asian country has as many sites, though this has much to do with India's geographical breadth and tropical diversity.
- The U.K. (175) and Mexico (142) — smaller countries than India — have the most Ramsar sites, whereas Bolivia spans the largest area with 1,48,000 [sq.km](#) under the Convention protection.

Ministry of New and Renewable Energy implements Suryamitra Skill Development Programme

- Objective is to train youth of age above 18 years as solar PV technicians for installation, operation and maintenance of solar power projects.
- Up to June 2022, a total of 51331 number of candidates have benefited from the skill development training provided under Suryamitra programme, out of which 26967 number of candidates gained employment.
- This information was given by Shri Bhagwanth Khuba, Minister of State for New and Renewable Energy in a written reply in Rajya Sabha.

ONGC inks MoU with Greenko to manufacture green hydrogen

- This MoU is in line with the National Hydrogen Mission launched by Hon'ble Prime Minister in making India a global green hydrogen hub.
- The activities envisaged under this MoU will contribute towards India's target of producing of 5 million tonnes of Green hydrogen per annum by 2030.
- This MoU will also act as a stepping stone for ONGC to achieve renewable energy targets as per its Energy Strategy 2040.

The Lok Sabha passed the Family Courts' Amendment Bill, 2022 by voice vote.

- It validates the existence of the three family courts in Himachal Pradesh and Two in Nagaland with retrospective effect. The bill also seeks validation of the decisions taken by the two states and the family courts.
- The family courts located at Shimla, Dharmashala, and Mandi in Himachal Pradesh will come into force, with a retrospective effect of February 15th 2019.
- The Family Courts located at Dimapur and Kohima in Nagaland will come into force with retrospect effect from November 12th 2008 on enactment of the Bill.
- The enactment was necessitated as it came to light in connection with a case that the central Government notifications were not existing with respect to these five family courts.

Spending on 'Har Ghar Tiranga' campaign declared CSR activity under Companies Act.

- Corporate Affairs Ministry has said that companies can spend their Corporate Social Responsibility CSR funds for activities related to the Har Ghar Tiranga campaign.
- The Ministry said spending of CSR funds for the activities related to this campaign such as mass scale production and supply of the national flag, outreach and amplification efforts and other related activities are eligible CSR activities under Schedule VII of the Companies Act pertaining to promotion of education relating to culture.

- Under the Companies Act, 2013, certain class of profitable companies are required to shell out at least two per cent of their three-year annual average net profit towards CSR activities.
- Har Ghar Tiranga campaign is being organised by the Government as part of the Azadi Ka Amrit Mahotsav to encourage people to bring home the national flag and hoist it to mark the 75th year of India's independence.

Droupadi Murmu assumes office, with a johar greeting

- 'Johar', which essentially means 'salutation and welcome', is used within the tribal communities of Jharkhand, and in parts of Chhattisgarh and Odisha.
- According to several tribal leaders from Jharkhand, the word 'Johar' also means 'paying respect'.
- Tribal communities are nature worshippers and follow Sarna religion code, although it is not an official religion.
- There are 32 tribal communities in Jharkhand who speak different dialects. Almost all, including tribal Christians, use the word 'Johar' along with some other words for salutation.
- Johar, is predominantly used by Santhali, Munda and Ho communities that share some similarities. People belonging to the Oraon community use the word 'Jai Dharam', apart from Johar, as a salutation.

Protest over shortage of HIV drugs in capital

- The main shortage is of dolutegravir, used as part of the first-, second-, and third-line ART combinations.
- There is also a shortage of nevirapine syrup that is given to infants with HIV.
- While there is no cure for HIV infection, ART aims to reduce the replication of HIV and bring the viral load to undetectable levels.
- There has been a decline in mortality and illness resulting from HIV infection due to better availability of affordable and effective ART.

19 MPs sent out, Opp hits back: Suspension of democracy

- The general principle is that it is the role and duty of the Presiding Officer — Speaker of Lok Sabha and Chairman of Rajya Sabha — to maintain order so that the House can function smoothly. In order to ensure that proceedings are conducted in the proper manner, the Speaker/ Chairman is empowered to force a Member to withdraw from the House.

What are the Rules in Rajya Sabha under which the Presiding Officer acts?

- the Chairman of Rajya Sabha is empowered under Rule Number 255 of its Rule Book to “direct any Member whose conduct is in his opinion grossly disorderly to withdraw immediately” from the House.
- Under Rule 256, the Chairman may “name a Member who disregards the authority of the Chair or abuses the rules of the Council by persistently and wilfully obstructing” business.
- In such a situation, the House may adopt a motion suspending the Member from the service of the House for a period not exceeding the remainder of the session.
- The House may, by another motion, terminate the suspension.

July 28

Two BSF men part of UN Peacekeeping Mission in Democratic Republic of Congo killed

- India has a long history of service in UN Peacekeeping, having contributed more personnel than any other country. To date, more than 2,53,000 Indians have served in 49 of the 71 UN Peacekeeping missions established around the world since 1948.
- Currently, India is the fifth largest troop contributor (TCC) with 5,323 personnel deployed in 8 out of 13 active UN Peacekeeping Missions.
- India’s contribution to UN Peacekeeping began with its participation in the UN operation in Korea in the 1950s, where India’s mediatory role in

resolving the stalemate over prisoners of war in Korea led to the signing of the armistice that ended the Korean War.

- In 2007, India became the first country to deploy an all-women contingent to a UN Peacekeeping Mission.
- A total 175 Indian peacekeepers have so far died while serving with the United Nations. India has lost more peacekeepers than any other UN Member State.

BSNL gets Rs 1.64 lakh crore revival package

- Revival measures approved by the Cabinet focus on infusing fresh capital for upgrading BSNL services, allocating spectrum, de-stressing its balance sheet, and augmenting its fiber network by merging Bharat Broadband Nigam Limited (BBNL) with BSNL.
- To improve existing services and provide 4G services, BSNL will be allotted Spectrum in 900 and 1800 Mega Hertz band administratively at the cost of 44 thousand 993 crore rupees through equity infusion.
- It is expected that with the implementation of this revival plan, BSNL will turn-around and earn profit in FY 2026-27.

Supreme Court upholds powers of arrest, raids, seizure under PMLA

- The top court called the PMLA a law against the “scourge of money laundering” and not a hatchet wielded against rival politicians and dissenters.
- The verdict came on an extensive challenge raised against the amendments introduced to the 2002 Act by way of Finance Acts.
- “Money laundering is an offence against the sovereignty and integrity of the country, It is no less a heinous offence than the offence of terrorism” the court noted.

Cabinet approves signing of MoU between NIRD-PR, UK's University of Reading

- This MoU will help NIRDPR faculty in acquiring and widening their knowledge, and develop an international professional network in agriculture, nutrition and rural development.

- NIRD&PR, an autonomous organisation under the Union Ministry of Rural Development, is a premier national centre of excellence in rural development and Panchayati Raj.
- Recognized internationally as one of the UN-ESCAP Centres of Excellence, the Institute is located in Hyderabad, Telangana. In addition to the main campus at Hyderabad, this Institute has North-Eastern Regional Centre at Guwahati, Assam.

Govt Clears Rs 26,316 Crore Project To Provide 4G Mobile Services In Over 24,000 Uncovered Villages Across India

- The project will provide 4G mobile services in 24,680 uncovered villages in remote and difficult areas. The project has a provision to include 20% additional villages on account of rehabilitation, new-settlements, withdrawal of services by existing operators etc.
- In addition, 6,279 villages having only 2G/3G connectivity shall be upgraded to 4G.
- The project will be executed by BSNL using Atmanirbhar Bharat's 4G technology stack and will be funded through Universal Service Obligation Fund.
- The project cost of Rs. 26,316 Cr includes capex and 5 year opex.
- The project is a significant step towards the vision of the Government to provide mobile connectivity in rural areas.
- Last year Government approved a project for providing 4G mobile services in 7,287 uncovered villages in 44 aspirational districts across 5 states.
- In his Independence Day address in 2021, Prime Minister Shri Narendra Modi gave a call for saturation of government schemes.

CCEA approves BPCL's \$1.6 billion investment in Brazil

- The start of production from BM-SEAL-11 project is expected from 2026-27.
- BPRL has 40% Participating Interest (PI) in this Concession along with Petrobras, National oil company of Brazil, as the Operator with 60% Participating Interest.
- accessing to equity oil to strengthen India's energy security.

- diversifying India's crude oil supply and Indian oil companies have expressed interest in sourcing more crude oil from Brazil.
- Strengthening India's foothold in Brazil, which will further open business avenues in neighbouring Latin American countries.
- Further strengthening the bilateral ties between the countries.

Cabinet approves signing of guarantees for hosting FIFA under 17 Women's World Cup 2022 in India

- FIFA U-17 Women's World Cup 2022 is scheduled to be held in India between 11th and 30th October 2022. The seventh edition of the biennial youth tournament will be the first-ever FIFA women's competition to be hosted by India.
- The FIFA U-17 Women's World Cup is the world championship for female players under or upto the age of 17, organized by FIFA. The event started in 2008 and is traditionally held in even-numbered years. The 6th edition of the event was held in Uruguay from 13th November to 1st December, 2018. Spain is the current champion of FIFA Under-17 Women's World Cup.

Implement enhanced pay for judicial officers: Supreme Court

- A bench comprising Chief Justice NV Ramana, Justices Krishna Murari, and Hima Kohli also directed the Center and the States to pay the arrears to the officers in three instalments 25% in three months, another 25% in next three months, and the balance by June 30, 2023.
- Several states have been dragging their feet over implementation of the recommendations citing resource crunch.
- The second judicial pay panel was set up by the apex court in 2017 for reviewing the pay scale and other conditions of judicial officers in the country.

Target of 140 Million Ton Raw Coking Coal Production by 2030

- The Government has taken steps to explore new coking coal blocks, auction of new coking coal mines, enhancing raw coking coal production and enhancing coking coal washing capacity.

- CIL has also taken the following steps to increase the output/production of domestic raw coking coal:
 - CIL has undertaken constant efforts to enhance coking coal production by capacity addition of existing coking coal producing mines and by opening new coking coal blocks.
 - Mass Production Technology has been introduced in coking coal producing UG mines of CIL to enhance the raw coking coal production.
 - CIL has taken steps regarding offering of coking coal blocks for production to private sector (including some discontinued mines) on revenue sharing basis through MDO route.

The Lok Sabha has passed the National Anti-Doping Bill,2021 by voice vote.

- The bill provides for constitution of the National Anti-Doping Agency- NADA for regulating anti-doping activities in sports.
- Its functions include planning, implementing, and monitoring anti-doping activities as well as investigating anti-doping rule violations.
- It also seeks to give effect to the UNESCO International Convention against doping in sports and compliance of such other obligations and commitments.
- The legislation prohibits athletes, athlete support personnel, and other persons from engaging in doping in sports. Under the new legislation, violation of anti-doping rules may result in disqualification of results including forfeiture of medals, points, and prizes, ineligibility to participate in a competition or event for a prescribed period, and financial sanctions.
- The Bill also proposes to establish the National Board for Anti-Doping in Sports with a view to make recommendations to the government on anti-doping regulations and compliance with international commitments on anti-doping. The Board will oversee the activities of NADA and issue directions to it.

July 29

Navy takes delivery of India's 1st indigenous aircraft carrier 'Vikrant'

- Designed by Indian Navy's inhouse Directorate of Naval Design (DND) and built by CSL, a Public Sector Shipyard under Ministry of Shipping (MoS), the carrier is christened after her illustrious predecessor, India's first Aircraft Carrier which played a vital role in the 1971 war.
- The 262 mtr long carrier has a full displacement of close to 45,000 tonnes which is much larger and advanced than her predecessor. The ship is powered by four Gas Turbines totaling 88 MW power and has a maximum speed of 28 Knots.
- Built at an overall cost of close to Rs. 20,000 Crs, the project has been progressed in three Phases of contract between MoD and CSL, concluded in May 2007, Dec 2014 and Oct 2019 respectively. The ship's keel was laid in Feb 2009, followed by launching in Aug 2013.
- With an overall indigenous content of 76%, IAC is a perfect example of the nation's quest for "Aatma Nirbhar Bharat" and provides thrust to Government's 'Make in India' initiative.
- With the delivery of Vikrant, India has joined a select group of nations having the niche capability to indigenously design and build an Aircraft Carrier.
- The Indigenous Aircraft Carrier would soon be commissioned into the Indian Navy as Indian Naval Ship (INS) Vikrant which would bolster India's position in the Indian Ocean Region (IOR) and its quest for a blue water Navy.

Government worried about teen pregnancies

- It added that participation of men will be encouraged in the family planning programme and that lack of access to contraceptives had been identified as a priority challenge area.
- While multiple factors have been identified that explain low contraceptive use among married adolescents and young women, two most important factors are child marriage and teenage pregnancy.

- Over 118 districts reported high percentage of teenage pregnancies and are mostly concentrated in Bihar (19), West Bengal (15), Assam (13), Maharashtra (13), Jharkhand (10), Andhra Pradesh (7), and Tripura (4).
- Additionally, over 44% of the districts in India reported high percentage of women marrying before they reach the age of 18. These districts were in Bihar (17), West Bengal (8), Jharkhand (7), Assam (4), two each in Uttar Pradesh, Rajasthan and Maharashtra.

Govt launches 11th agricultural census 2021-22

- Agriculture Census is conducted every 5 years, which is being undertaken now after delay due to corona pandemic. The field work of agricultural census will start in August 2022.
- Agricultural Census is the main source of information on a variety of agricultural parameters at a relatively minute level, such as the number and area of operational holdings, their size, class-wise distribution, land use, tenancy and cropping pattern, etc.
- This is the first time that data collection for agricultural census will be conducted on smart phones and tablets, so that data is available in time. Most of the States have digitized their land records and surveys, which will further accelerate the collection of agricultural census data.

Singapore, US, Mauritius top countries for FDI

- It may be noted that as per the UNCTAD World Investment Report (WIR) 2022, in its analysis of the global trends in FDI inflows, India has improved one position to 7th rank among the top 20 host economies for 2021.
- India is rapidly emerging as a preferred country for foreign investments in the manufacturing sector. FDI Equity inflow in Manufacturing Sectors have increased by 76% in FY 2021-22 (USD 21.34 billion) compared to previous FY 2020-21 (USD 12.09 billion).
- Despite the ongoing pandemic and global developments, India received the highest annual FDI inflows of USD 84,835 million in FY 21-22 overtaking last year's FDI by USD 2.87 billion. Earlier, FDI inflows increased from USD 74,391 million in FY 19-20 to USD 81,973 million in FY 20-21.

Centre to develop a capacity of 111.125 LMT of Hub and Spoke Model Silos at 249 locations across the country

- With a view to modernize storage of food grains and to ramp-up the storage capacity for food grains in India, a new model 'Hub & Spoke' Model for implementation in Public Private Partnership (PPP) Mode has been proposed.
- The proposed Silos will operate under Design, Build, Fund, Own & Transfer (DBFOT) (FCI's land) and Design, Build, Fund, Own & Operate (DBFOO) (Land of concessionaire/other agency) mode, through implementing agency i.e. Food Corporation of India (FCI).
- Hub and Spoke Model is a transportation system which consolidates the transportation assets from standalone locations referred to as "Spoke" to a central location named as "Hub" for long distance transportation.
- Hubs have a dedicated railway siding and container depot facility while the transportation from Spoke to Hub is undertaken through road and from Hub to Hub via rail.
- This model by harnessing the efficiency of railway siding, promotes cost efficiency through bulk storage & movement, reduces cost and time of handling and transportation and simplifies operational complexities in addition to economic development, infrastructure development & employment generation in the country.

After the referendum: The challenges of a power grab in Tunisia

- Tunisian voters have approved a new Constitution that would turn the country back into a presidential system, institutionalising the one-man reign of President Kais Saied, who suspended the elected Parliament and awarded more powers to himself last year.
- While Mr. Saied has welcomed the result, his critics have warned that the new Constitution would erase whatever democratic gains Tunisia has made since the 2011 Arab Spring (Jasmine) revolution and push the country back into an authoritarian slide.
- The Arab Spring protests began in Tunisia in December 2010, leading to the fall of the regime of Zine El Abidine Ben Ali, who had been in power since 1987. Ben Ali had to flee the country in the face of the mass uprising.

- Quickly, protests spread to other Arab countries such as Egypt, Libya, Bahrain, Yemen and Syria.
- While protesters brought down the 30-year-long dictatorship of Hosni Mubarak in Egypt, the revolution did not last long in that country.
- In Libya, the protests against Mohammar Gadhafi slipped into a civil war, which saw a military intervention by the North Atlantic Treaty Organisation (NATO).
- In Bahrain, the Shia majority country ruled by a Sunni monarchy, neighbouring Saudi Arabia sent troops to crush protests in Manama's Pearl Square.
- In Yemen, President Ali Abdullah Saleh had to relinquish power, but the country fell into a civil war, leading to the rise of the Shia Houthi rebels.
- In Syria, protests turned into a proxy civil war. President Assad seems to have won the civil war, for now.
- Tunisia was the only country that saw a peaceful transition to democracy, and with the new Constitution, it is witnessing another transition.

Google Street View comes to India, with data from local partners

- Google Street View is an immersive 360-degree view of a location captured using special cameras mounted on vehicles or on backpacks by data collectors moving around the city streets.
- The images are then patched together to create a 360-degree view which users can swipe through to get a detailed view of the location.
- It is available to view on Android and iOS using the app, or as a web view.
- In India, unlike in other markets, Google Street View is powered by images from third parties as per the National Geospatial Policy, 2021.
- Street View in India is not allowed for restricted areas like government properties, defence establishments and military areas. This means in a place like Delhi, the cantonment area will be out of bounds for Street View.

Why the govt plans to scrap the decades-old Coffee Act

- The Coffee Act, 1942 was first introduced during World War II, in order to protect the struggling Indian coffee industry from the economic downturn caused by the war.
- The government is now trying to scrap the law because the substantive portion of the Coffee Act, 1942, which deals with pooling and marketing of the commodity, have become redundant/inoperative.
- The new legislation is now primarily concerned with promoting the sale and consumption of Indian coffee, including through e-commerce platforms, with fewer government restrictions.
- It also aims at encouraging further economic, scientific and technical research in order to align the Indian coffee industry with “global best practices.”
- While the Coffee Board continues to have limited control over marketing, exporters will still require a certificate from the statutory body.

Chief Justice of India said that “rising number of media trials” are proving to be hurdles towards doing justice, and “kangaroo courts” run by the media are causing harm to the health of the democracy.

- Oxford Dictionary defines kangaroo court as “an unofficial court held by a group of people in order to try someone regarded, especially without good evidence, as guilty of a crime or misdemeanour”.
- In a less literal sense, it is used to refer to proceedings or activities where a judgement is made in a manner that is unfair, biased, and lacks legitimacy.
- The origin of the phrase is not clearly known, but it is believed to have been used from the 19th Century onwards. Why the word ‘kangaroo’ is used is also not clear, but there are several theories.
- The Collins Dictionary argues that it could be to evoke a sense that “justice progresses by leaps and bounds” in case of kangaroo court verdicts.

Congress leader Adhir Ranjan Chowdhury refers to President as 'Rashtrapatni'

- India has had a woman President earlier. The first time this happened, there was a minor debate on the proper way to address the Head of

State, apparently because “Rashtrapati”, according to some people, has a “male” connotation.

- That debate died down soon, after it was agreed that in India’s constitutional scheme, words like Rashtrapati and Sabhapati (Speaker) are understood to be gender-neutral.
- Activists and feminists objected to expressions like “Rashtrapatni” and “Rashtramata”, saying the use of such terms for a constitutional post was “patriarchal” and “gender-biased”.
- Constitutional experts argued that the word Rashtrapati, which was finalised after discussions in the Constituent Assembly, should not be changed only because India had a woman President — because the word has no gender connotations; it’s simply that ‘President’ translates into Hindi as ‘Rashtrapati’.

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PM Modi launches India's first international bullion exchange in Gujarat | Mint

- With the inauguration of IIBE, India can not only influence the gold pricing but also play a role in setting the gold prices.
- Prime Minister also launched NSE IFSC-SGX Connect and laid the foundation stone of the headquarters of the International Financial Services Centres Authority (IFSCA) at GIFT City.
- IFSCA also signed memorandums of understanding (MoUs) with regulatory authorities of Singapore, Luxembourg, Qatar, and Sweden in the presence of PM Narendra Modi.

Kerala tops in holding Assembly sittings in 2021

- The State’s showing was impressive as 2021 saw the more virulent second wave of the pandemic. In fact, between 2016 and 2019, it remained at the top with an average of 53 days.

- Despite enjoying the record of having the highest number of sittings in 2021, Kerala (where the Left Democratic Front is in power since May 2016) had promulgated 144 ordinances, also the highest in the country.
- Making the findings in its study on the functioning of State Assemblies for 2021, the PRS Legislative Research (PRS), a New Delhi-based think tank, states that for the year in question, Odisha followed Kerala with 43 sitting days; Karnataka 40, and Tamil Nadu 34 days.
- Of the 28 State Assemblies and one Union Territory's legislature, 17 met for less than 20 days. Of them, five — Andhra Pradesh, Nagaland, Sikkim, Tripura and Delhi — met for less than 10 days. The figures for Uttar Pradesh, Manipur and Punjab were 17, 16 and 11, respectively.

PM Modi to address inaugural session of first All India District Legal Services Authorities

- The first-ever national-level meet of District Legal Services Authorities (DLSAs) is being organized at Vigyan Bhawan by National Legal Services Authority. The meeting will deliberate on the creation of an integrated procedure to bring homogeneity and synchronization across DLSAs.
- There are a total of 676 District Legal Services Authorities in the country. They are headed by the District Judge who acts as Chairman of the authority.
- Through DLSAs and State Legal Services Authorities, various legal aid and awareness programs are implemented by National Legal Services Authority. The DLSAs also contribute towards reducing the burden on courts by regulating the Lok Adalats conducted by NALSA.

PM Modi to launch Rs 3.03 trillion scheme for power discoms

- The scheme, with an outlay of over Rs 3.03 trillion in five years to FY26, will enable discoms to modernise and strengthen the distribution infrastructure and improve the reliability and quality of supply of power to end consumers.
- It also aims to reduce the AT&C (aggregate technical and commercial) losses to pan-India levels of 12-15% and ACS-ARR (average cost of supply-average revenue realised) gap to zero by 2024-25. REC and PFC have been nominated as nodal agencies for the scheme.

- RDSS mandates compulsory installation of smart meters across the country. The Centre has set an ambitious target of installing 250 million smart meters by 2025.
- With this new scheme coming into force, all other previous schemes such as Integrated Power Development Scheme, Deendayal Upadhyaya Gram Jyoti Yojana and Ujjwal Discom Assurance Yojana (UDAY) would stand subsumed.

IAF releases names of pilots killed in Thursday night's MiG-21 crash

- There have been six MiG-21 Bison crashes in the last two 20 months, with five crashes in 2021 and one in 2022. Five pilots have lost their lives in these crashes. However, this is the first fatal trainer aircraft crash of the MiG-21 Bison in a long time.
- There are four squadrons of MiG-21 Bison aircraft currently in service in the IAF with each squadron comprising 16-18 aircraft, including two trainer versions. Out of these one squadron, Srinagar-based No 51 Squadron, is going to be retired from service or 'number plated' in IAF jargon on September 30 this year, leaving three squadrons in service.
- Out of these three squadrons, one will be number plated each year and, thus, MiG-21 Bison will be phased out of IAF by 2025. The IAF is looking towards reviving these squadrons back into service with the indigenous Light Combat Aircraft (LCA) Tejas.

Govt proposes amendments in Cantonments Act, 2006

- This information was given by Defence Minister Rajnath Singh in a written reply in the Lok Sabha. He said the draft bill is under finalization. The elections to Cantonment Boards are proposed to be held thereafter.
- Defence Minister said a framework for cutting out civil areas of certain Cantonments and to merge them with neighbouring State municipalities is under consultation with concerned States.
- He said this will provide uniformity in local governance and greater ease of living for citizens in the process.

Narendra Singh Tomar to give away Agriculture Infrastructure Fund Awards

- Agriculture Infrastructure Fund (AIF) was launched two years ago under the ambitious Aatmanirbhar Bharat Package as a dedicated Central Government scheme that provides medium-long term credit facility for investment in creation of post-harvest management infrastructure and community farming assets.
- This facility comes with financial support by way of three per cent Interest subvention from Government and credit guarantee by CGTMSE fee up to two crore rupees.
- This scheme can be converged with the existing Central Government and State Government schemes. This has immensely benefitted stakeholders in the agricultural ecosystem - Farmers, Agri-entrepreneur, FPO, SHG, JLG, PACS, APMC, Startup, Central, Marketing Cooperative Society, State Agencies etc.

Tadoba Tiger Reserve, Maharashtra plays host for National Global Tiger Day Celebrations 2022

- He said that the Government of India has demonstrated its commitment to tiger conservation by increasing number of tiger reserves from initial nine in 1973 to the current 52, the latest being Ramgarh Vishdhari in Rajasthan.
- The declaration to celebrate Global Tiger Day was taken on 29th July 2010 at St Petersburg in order to bring all tiger range countries together for increased thrust on tiger conservation.

New Norms for Mission Vatsalya

- Under it, a monthly grant of Rs. 4000/- per child is provided for family based non-institutional care including Sponsorship (kinship) or Foster Care or After Care.
- The Mission Vatsalya in partnership with States and Districts provides support to a 24x7 helpline service for children as defined under the JJ Act, 2015.
- The Mission Vatsalya Scheme envisages setting up Cradle Baby Reception Centres in at least one Specialized Adoption Agency (SAA), preferably government run, in each District, to save the abandoned

children and look after them with due care and affection till he/she is given in adoption.

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Why have Africa, Asia seen so many dangerous viruses emerge recently

- As per the World Health Organisation (WHO), from January 2021 to the present day, the majority of cases were reported in Asian and/or African countries.
- There was a 63 per cent increase in the number of zoonotic outbreaks in Africa between 2012 and 2022 compared to 2001 and 2011.
- It's not that these regions are innately bound to produce new diseases. Multiple factors are at work here.
- Humans in these continents have a greater chance of coming in contact with animals more often in their many densely populated regions, thus increasing the risk of the spread of diseases.
- The dramatic, transformative change that many countries are undergoing in these regions — countries like the UK, to an extent, went through a similar experience when they underwent industrialisation in the 18th and 19th centuries and faced diseases like cholera and typhoid.
- Factors like Increased frequency and reach of travel, changing patterns of land use, changing diets, wars and social upheaval and climate change increase interactions between humans and reservoir hosts, facilitating exposure to zoonotic viruses.

What type of vaccine will work against monkeypox

- There is yet no dedicated monkeypox vaccine, but vaccinations against smallpox was found to be 85% effective in preventing smallpox, a disease eradicated in 1980.
- In 2019, the United States Food and Drugs Administration (FDA), approved the JYNNEOS vaccine for the prevention of smallpox,

monkeypox and other diseases caused by orthopoxviruses, including vaccinia virus, in adults 18 years of age and older and categorised as having a “high risk of infection.”

- JYNNEOS, developed by Danish biotechnology company, Bavarian Nordic, contains a live vaccinia virus that does not replicate efficiently in human cells.

Invasive frog, snake cost world economy \$16 billion

- The brown-and-green frog, known as *lithobates catesbeianus* and weighs over two pounds (0.9 kg), had the greatest impact in Europe.
- The brown tree snake, known as *boiga irregularis*, has multiplied uncontrollably on Pacific islands including Guam and the Mariana Islands, where the species was introduced by the U.S. troops in World War II.
- The snakes have, at times, been so abundant that they caused power outages by crawling on electrical equipment. This signals the need for investment controlling global transport of invasive species to avoid paying for mitigation after the invasions occur.

States fail to give Environment Ministry details on elephant reserves

- Data uploaded on the Wildlife Institute of India's website say the elephant population across 16 States in the country ranged between 27,785 and 31,368 in 2012.
- While Karnataka had up to 7,458 elephants followed by Assam with 5,281, Maharashtra had only four.
- India has 30 notified elephant reserves, spread across 15 Elephant Range States.
- There are also 10 sites for the MIKE (Monitoring of Illegal Killing of Elephants) programme, mandated by the Conference of Parties to the Convention on International Trade in Endangered Species.
- The MIKE sites are Chirang-Ripu and Dihing-Patkai in Assam, Deomali in Arunachal Pradesh, Garo Hills in Meghalaya, Eastern Dooars in West Bengal, Mayurbhanj in Odisha, Shivalik in Uttarakhand, Mysore in Karnataka, Wayanad in Kerala and Nilgiri in Tamil Nadu.

Delhi's new excise policy and why LG is seeking CBI probe

- From August 1, liquor will be sold only through government outlets in the Capital. He said the number of liquor shops will not exceed 850 – as under the previous policy.
- The new excise policy was introduced in Delhi in November 2021.
- It made sweeping changes to the nature and functioning of liquor trade in the city. The government exited the customer-end of the trade entirely, shutting all government-run liquor vends, and sale of liquor was handed over exclusively to private players.

Prime Minister Narendra Modi launches floating solar power plant at NTPC-Kayamkulam

- Prime Minister said that so far, about 170 GW capacity has been installed from non-fossil sources in India. India is among the top four-five countries in terms of installed solar capacity.
- The Kayamkulam plant is the second-largest floating solar power project of the NTPC after the 100-MW plant at Ramagundam in Telangana.
- The floating solar system was built on a 450-acre lake area adjacent to the NTPC's Rajiv Gandhi Combined Cycle Power Project (RGCCPP). Implemented at a cost of ₹ 465 crores, the project consists of around three lakh Made in India solar PV panels floating on water.

Spanish PM tells public to stop wearing ties to save energy

- Mr Sanchez said, his government will adopt urgent energy-saving measures on as European countries strive to become less dependent on Russian gas in the wake of the war in Ukraine.
- Over the past few weeks, Europe has experienced record-high temperatures.
- Prime Minister Sanchez said, not wearing ties will ensure people stay cooler and therefore lower energy costs because air conditioners will be used less often.
- Spain is not the first to take this move. In 2011, Japan introduced its "Super Cool Biz" campaign, which encouraged office workers to wear cooler clothes in summer.

- And during sweltering temperatures in the UK recently, politicians were told they could ditch their suit jackets while in the House of Commons.