

Weekly Current Affairs 4th Week August 2022



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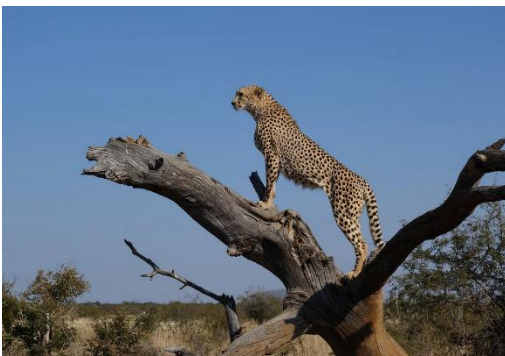
4th Week August 2022

Important News: State

Uttar Pradesh CM Yogi's government will set up the country's first night safari in Lucknow

Why in News:

- In the cabinet meeting chaired by Chief Minister Yogi Adityanath, approval has been given to the proposal of the Uttar Pradesh Tourism Department to start the country's first night safari in the capital Lucknow.



key points:

- On the lines of the world's first night safari located in Singapore, this night safari in Lucknow will be set up on 350 acres in the Kukrail forest area spread over an area of 2027.46 hectares.
- Under this project, a Zoological Park will also be constructed in an area of 150 acres along the lines of Singapore.
- This is the first night safari in the country, currently, there are 13 open day safaris in the country, but none of them are night safaris.
- Under this scheme, the entrance of Night Safari will be grand and attractive, in which Interpretation Center and Butterfly Interpretation Center will also be built.
- Under this project, plans to build Leopard Safari on 75 acres, Bear Safari on 60 acres and Tiger Safari on 75 acres have also been included.
- The world-class facilities include night safaris along with train rides and jeep rides with local guides.
- The government has also included the development of facilities like canopy walks, camping activities, mountain bike tracks, wall climbing, tree top restaurant, a nature trail, and a food court to make the park more attractive.

Source: Indian Express

PM Modi inaugurates Homi Bhabha Cancer Hospital in Mohali

Why in News:

- The 300-bed Homi Bhabha Cancer Hospital and Research Center have been inaugurated by Prime Minister Narendra Modi at Mullanpur, Mohali, Chandigarh.



key points:

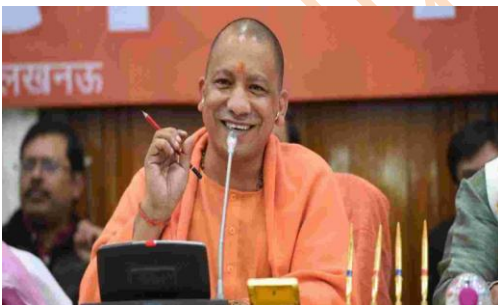
- The Homi Bhabha Cancer Hospital and Research Center has been built at a cost of over Rs 660 crore by the Tata Memorial Center which is an aided institution under the Department of Atomic Energy.
- The hospital is equipped with state-of-the-art facilities which include Magnetic Resonance Imaging (MRI), Mammography, Digital Radiography, and Brachytherapy to ensure a cure for all types of cancer in India.
- Government of India has planned to open 1.50 lakh health and wellness centers in the country, and at present, 1.25 lakh centers out of 1.50 lakh have started functioning.
- The Government of India has worked to ensure a medical college in each city to increase the number of paramedics and doctors in the country.

Source: Indian Express

UP government to build India's first education township

Why in News:

- The Uttar Pradesh government is planning to build an education township in the state.



key points:

- According to the Uttar Pradesh government, the education township will be developed on the idea of 'Single Entry, Multiple Exit'.

- Education township aims at providing high-quality education to the youth as well as equipping them with a variety of professional skills in one place.
- Under the Education Township, accommodation for both students and teachers will be provided along with many other facilities.
- Built on the idea of 'Single Entry, Multiple Exit', the focus of this township will be on high-end education, covering students from India as well as Africa, Latin American, and Central Asian countries.
- In the township, prestigious government and private universities of the country and the world will be able to open their campuses.
- Skill development universities have also been included in the education township, where training will be provided to the youth in different types of skills.
- Along with this, many other coaching institutes like Abhyudaya will also be started in these education cities so that more and more students can be successful in competitive examinations like NEET, IIT, Union Public Service Commission, etc. to be held in the country and the state.
- With the introduction of the 'Single Entry, Multiple Exit' system in the state, students can also avail affordable education loans.

Source: Times of India

Amrita Hospital in Faridabad, Haryana

Why in News:

- The 2,600-bed Amrita Hospital has been inaugurated by Prime Minister Narendra Modi in Faridabad, Haryana.



key points:

- Amrita Hospital, with 2,600 beds, is Asia's largest hospital with state-of-the-art technology, which also houses a centrally located, fully automated laboratory.
- The state-of-the-art Amrita Hospital was built over the course of six years on a sprawling 130-acre campus with sustainability in mind.
- Amrita Hospital has a dedicated seven-story research building which was sponsored by Mata Amritanandamayi Math.
- The new super-specialty Amrita Hospital started operations with 500 beds and is expected to reach full capacity during the next five years.

- A medical college will be located on the premises of the new Mega Amrita Hospital in Sector 88, Faridabad, which has a built-up size of 10 million square feet.
- The hospital has hi-tech, fully automated central laboratories as well as wards and OPDs which are patient-centric.

Source: Economic Times

Chhattisgarh government to set up 300 rural industrial parks in the state

Why in News:

- The Chhattisgarh government has announced to set up 300 rural industrial parks in the state.



key points:

- The Rural Industrial Park project aims to strengthen the rural economy and make "Gauthan" (cattle shed) a livelihood hub.
- The Rural Industrial Park project will be launched in the state on October 2 on the occasion of Gandhi Jayanti.
- Under this project, the first such park in the state will be set up at Kulgaon in the Kanker district, which has been named Gandhi Gram.
- A residential training center has been started by the forest department on the basis of the value addition of minor forest produce.
- For the purpose of making vermicompost, cow dung is being procured by the state government at the rate of Rs.2 per kg.
- Infrastructure is also being developed under this project by the state government, such as interlocking, cement/concrete roads, dormitories, residential rooms, kitchen halls, sheds for women's self-help groups, and underground irrigation pipelines.
- The government plans to use District Mineral Foundation (DMF) funds for this project.

Source: Economic Times

“Vidya Rath - School on Wheels”

Why in News:

- Himanta Biswa Sarma, the Chief Minister of Assam, has launched the 'Vidya Rath-School on Wheels' project.



Key Points:

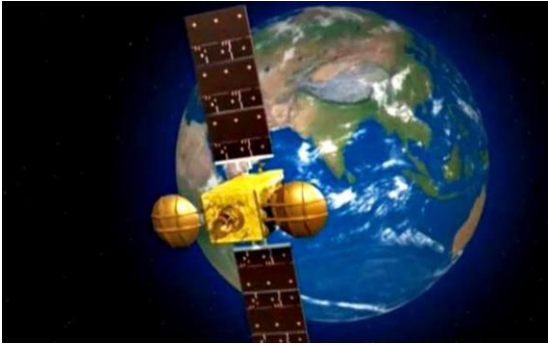
- The Vidya Rath - School on Wheels program was launched in Assam at a ceremony held at the Gauhati High Court.
- The Vidya Rath - School on Wheels project aims to educate economically disadvantaged impoverished children with 10 months of elementary education.
- Underprivileged children will be given access to elementary education for 10 months as part of the Vidya Rath-School on Wheels program, following which they will be integrated into the traditional education system.
- The Vidya Rath - School on Wheels project will also offer children uniforms and textbooks, as well as free mid-day lunches.
- Assam State Transport Corporation, Assam Sarba Education Mission, Guwahati High Court Legal Services Committee, District Legal Services Authority Kamrup (Metro), and many other non-governmental organizations are among the participants in the School on Wheels program.

Source: Livemint

India's first observatory to monitor space activity in Uttarakhand

Why in News:

- Diganta, a startup in the space industry, will build India's first commercial space situational awareness observatory in the Garhwal region of Uttarakhand, with the ability to track objects as small as 10 cm in size orbiting the Earth.



Key Points:

- The Space Situational Awareness (SSA) observatory would help India monitor all astronomical activity, including the movement of military satellites and space debris.
- The United States is currently a key player in the space debris monitoring field, with observatories spread around the country and commercial enterprises around the world contributing additional data.
- In particular, in geostationary, medium-Earth, and high-Earth orbits, the ability to monitor deep-space phenomena will be enhanced by high-quality observations with its partner ground-based sensor networks.
- By more precisely forecasting satellites' location, speed, and trajectory, cutting-edge technology can lower the possibility of collisions with another spacecraft.
- Multi-object Tracking Radar, which the SSA observatory is currently utilizing to track space objects for India, would significantly advance this sector.

Source: Times of India

GI tag to Mithila Makhana of Bihar

Why in News:

- The Central Government has designated Mithila Makhana as a Geographical Indication (GI).



Key Points:

- The addition of a Geographical Indication (GI) tag to Mithila Makhana will allow growers to maximize the value of their quality supply.
- No one or corporation may sell anything identical to a product that has gotten this tag.
- The Geographical Indication (GI) label is valid for ten years and can be renewed.
- Other advantages of GI registration include legal protection for the commodity, restriction of unauthorized use by others, and export promotion.
- A Geographical Indication, sometimes known as a GI, is a term or indication given to particular items that are associated with a certain geographical location or origin of a region, city, or country.
- The use of geographical indications is seen as proof that a specific product is manufactured using traditional methods, has certain distinguishing characteristics, or has a special reputation due to its geographical origin.
- Wine and spirit drinks, cuisine, agricultural products, handicrafts, and industrial products are all examples of geographical indicators.
- The GI tag ensures that no one can use a popular product name after those who have been registered as approved users.

Source: Livemint

Jharkhand: Block Chain Based Seed Distribution

Why in News:

- With an aim to revolutionize agriculture in the country, the Government of Jharkhand and global blockchain technology company, Settlement jointly launched seed distribution to farmers based on blockchain technology.



key points:

- The objective of implementing this scheme is to reduce theft and make farmers free from spurious seeds received under various government schemes including Seed Exchange Scheme.
- At present more than 3 lakh farmers are registered on the Block Chain Portal, out of which 30 thousand quintal seeds have been distributed so far.
- Through this scheme, more than 300 seed varieties of more than 30 crops have been distributed at subsidized rates during both Kharif and Rabi seasons by the government.

- Under this scheme, each farmer is registered on a blockchain-based platform with their Aadhar number and mobile number, and seed distribution information is updated on the system after the farmers enter the OTP received.
- An online entry is made when the seed company sends seeds to farmers in the state through a blockchain-based platform, which is easily tracked.
- Through the blockchain system implemented by the government, the complete information of the farmer who has taken the benefit is collected with the department, through which the department can know that if the farmer has been given the benefit of the scheme, then what kind of seed he has to get.
- The government aims to monitor the distribution of seeds through blockchain-based technology.

Source: Times of India

India's first electric double-decker bus 'Switch EIV 22'

Why in News:

- Union Transport Minister Nitin Gadkari unveiled India's first electric double-decker bus at the YB Center in South Mumbai.



Key Points:

- The Mumbai civic transport authority will operate India's first electric double-decker bus, the 'Switch EIV 22,' beginning in September.
- According to government data, diesel and gasoline are responsible for 35% of the country's pollution; however, pollution can be minimized with the use of electric buses.
- Brihanmumbai Electric Supply and Transport has added two new electric buses to its fleet, including the country's first air-conditioned double-decker bus (BEST).
- The Switch EIV 22 was created with the goal of revolutionizing public transportation and setting new standards in the intra-city bus segment in India.
- The Switch EIV 22 bus will be powered by a twin gun charging system with a 231 kWh 2-string liquid-cooled battery pack, allowing it to deliver a range of up to 250 km for intra-city applications.
- Switch Mobility, an Ashok Leyland electric bus, and light commercial vehicle firm, has produced India's first electric double-decker air-conditioned bus, the Switch EIV22.

- Ashok Leyland is a pioneer in the Indian commercial vehicle sector, having introduced the double-decker bus in Mumbai in 1967.

Source: Economic Times

Important News: India

India to have 1.8 lakh km of highways and 1.2 lakh km of rail lines by 2025

Why in News:

- According to a report by Bank of America Securities India, India is estimated to have 1.8 lakh km of highways and 1.2 lakh km of rail lines by the year 2025.



key points:

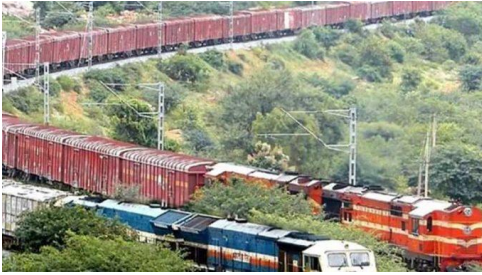
- According to the new report presented by Bank of America Securities India, the length of all national highways in India is estimated to reach about 1.8 lakh km, with the target of laying 1.2 lakh km of railway lines by 2025 if India continues to work at the same pace.
- Between 1950 and 2015, 4000 km of new national highways were constructed in India, up from 77,000 km in 2015.
- According to a new report presented by Bank of America Securities India, the target of reaching 1.8 lakh km of highways by the year 2025 is more than double the current length.
- In the year 1950, the railway network in India was only 10,000 km of rail lines which had grown to 63,000 km by the year 2015.
- According to the latest report submitted by Bank of America Securities India, the length of the railway line is to reach 1.2 lakh kilometers by the year 2025.

Source: Livemint

Super Vasuki: Longest Freight Train of Indian Railways

Why in News:

- Indian Railways has tested its latest train named Super Vasuki.



key points:

- Super Vasuki is operated by the Southeast Central Railway (SECR) zone of Indian Railways.
- The Southeast Central Railway had run a record long-distance goods train last year in Vasuki and Trisula and before that the 2.8 km long Sheshnag train.
- Super Vasuki has been established by merging five rakes of goods trains into a single unit which is 3.5 km in length.
- During the test run, the train carried six locos, 295 wagons, and a gross weight of 25,962 tons, making it the longest and heaviest freight train run by the Railways.
- The Super Vasuki is three times the capacity of the existing railway rakes (90 cars of 100 tons each), which can carry around 9,000 tons of coal in a single journey.
- During testing, the Super Vasuki train has taken 11.20 hours to cover a distance of 267 km.

Source: Indian Express

Navy unfurls flag in 6 time zones across 6 continents

Why in News:

- In a first-of-its-kind effort, Indian Naval Ships (INS) (Warships) traveled across 6 continents - North America, South America, Europe, Africa, Asia, and Australia as a part of the celebration of 75 years of Amrit Mahotsav of Independence. travel has been done.



key points:

- The tricolor national flag of India was flown by Indian warships in 6 continents, 3 oceans, and 6 different time zones during this campaign.
- As a part of the celebration of India's independence, a coordinated effort of this magnitude is being undertaken for the first time with friendly nations and maritime allies.

- During this campaign, the United States (USA) (North America), Rio de Janeiro (South America) in Brazil, Mombasa in Kenya (Africa), Muscat in Oman and Singapore (Asia), United Kingdom (UK) (Europe) The tricolor has been hoisted in London, and in Perth in Western Australia (Australia).
- The countries where the tricolor was hoisted under this campaign include-
- Australia:
 - INS Sumedha participated in Maritime Partnership Exercise (MPX) with Australian Naval Ship HMAS Anzac, an Anzac class warship of the Royal Australian Navy, on 17 August 2022.
- Asia:
 - INS Saryu entered Changi Naval Base in Singapore as part of the Indian Navy's initiative to hoist the tricolor across 6 continents.
- Africa:
 - Talwar-class frigate INS Tabar (F44) arrived in Mombasa, Kenya on 14 August 2022 and participated in several activities including flag hoisting ceremony.
- South America:
 - INS Tarkash docked at Rio de Janeiro, Brazil on 15 August 2022.
- North America:
 - INS Satpura docked at San Diego Harbor in the US on 13 August 2022.
- Europe:
 - Made-in-India by naval ship INS Tarangini, docked at Thames Quay in East London, UK.

Source: The Hindu

India's first portal NIDAAN on arrested Narcos criminals

Why in News:

- NIDAAN Portal, a first-of-its-kind database of detained drug offenders, has been developed for use by various national and state prosecution authorities tasked with enforcing the country's drug laws.



Key Points:

- Narcotics Control Bureau created the National Integrated Database Portal-NIDAAN (NCB).
- The Narcotics Coordination Mechanism webpage was launched by Union Home Minister Amit Shah on July 30, 2022, during the National Conference on 'Drug Trafficking and National Security' in Chandigarh.

- The NIDAAN platform gets its data from the interoperable Criminal Justice System and e-Prison Application Repository, and it eventually hopes to interface with the Crime and Criminal Tracking Network System, or CCTNS.
- The Inter-operable Criminal Justice System, a Supreme Court e-Committee effort, is intended to permit the seamless movement of data and information between several pillars of the criminal justice system, such as courts, police, prisons, and forensic science laboratories, using a single platform. was designed to accomplish
- Diagnostics is a one-stop shop for all drug offender data and can be utilized as a useful tool by investigative organizations to connect the connections while examining drug cases.

Source: The Hindu

Government launches Aqua Bazaar feature of Matsya Setu App

Why in News:

- Online Market Place feature "Aqua Bazaar" has been launched in "Matsyasetu" mobile app by Union Minister of Fisheries, Animal Husbandry and Dairying Shri Purushottam Rupala with an aim to protect the interest of fish farmers and make them benefit from new technologies.



key points:

- The app has been developed by ICAR-Central Institute of Freshwater Aquaculture Bhubaneswar, with funding support from National Fisheries Development Board (NFDB), Hyderabad through Pradhan Mantri Matsya Sampada Yojana.
- This online marketplace will help fish farmers and stakeholders source inputs like fish seeds, feed, medicines, etc. Along with the services required for fish, farmers can also list fish for sale.
- The Aqua Bazaar feature aims to connect all the stakeholders in the aquaculture sector.
- Through the MatsyaSetu platform, any registered seller can list his/her input material, each listing includes the seller's contact details along with detailed information about the product, price, available quantity, supply area, etc.
- Matsya Setu App was developed by ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar.
- Species-wise or subject-wise self-learning online course modules are also included in the Matsya App.

Source: PIB

Important News: World

For the first time, India will assume the presidency of G20 till December 2022

Why in News:

- India will serve as the G20 grouping's chair in 2023, and the Union Cabinet has approved the establishment of the G20 Secretariat and accompanying entities.



Key Points:

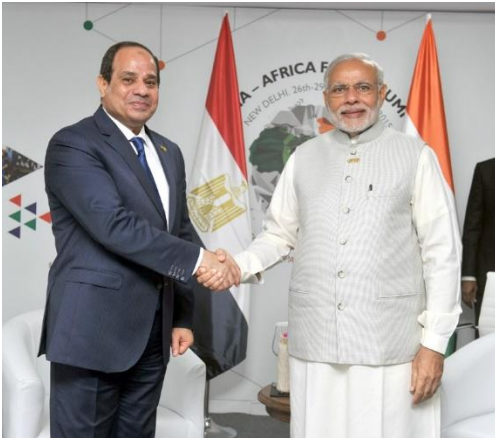
- From December 1, 2022, through November 30, 2023, India will serve as the G20's chair. The G20 summit will take place in India the following year.
- The G20 is a loose alliance of 19 nations, including the European Union, as well as the World Bank, and the International Monetary Fund.
- G20 countries account for more than 80% of global GDP, 75% of global trade, and 60% of the global population.
- A ministerial forum, the G20 was created by the G7 with the help of both developed and developing economies.
- Since 1999, the G20 has gathered finance ministers and governors of central banks annually.
- The decision to host a meeting of the leaders of the G20 nations once a year came about as a result of the globe realizing the need for a new political consensus during the 2008 financial crisis.
- Twice a year, representatives of the World Bank and the International Monetary Fund attend meetings of the central bank governors and finance ministers of the G20 countries.
- Argentina, Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States are all members of the G20.

Source: The Hindu

75th anniversary of India-Egypt diplomatic relations

Why in News:

- A postage stamp has been issued by Egypt to commemorate the 75th anniversary of diplomatic relations with India.



key points:

- India's independence was recognized by Egypt on 18 August 1947, three days after its independence, which marked the beginning of diplomatic relations between India and Egypt.
- Relations between the two countries deepened in the 1950s, resulting in a historic friendship treaty in 1955.
- Egypt is one of the largest investment destinations for India in the region with a current Indian investment of USD 3.15 billion.
- India-Egypt bilateral trade stood at a historic record high of US\$ 7.26 billion in FY 2021-22, an increase of 75% from FY 2020-21.
- Currently, under the 5th India-Egypt Joint Business Council meeting, the annual bilateral trade target of USD 12 billion over 5 years has been set by both sides.
- The bilateral military exercise Desert Warrior is also organized jointly by India and Egypt.
- The exercise, organized by India and Egypt, is organized to enhance mutual understanding between the Indian Air Force and the Egyptian Air Force.

Source: Navbharat Times

Greece's exit from the EU's advanced surveillance framework

Why in News:

- Greece's exit from the EU's enhanced surveillance framework for Greece's economy is meant to end 12 years of suffering and give it more flexibility to formulate its policies.



key points:

- Greece's economic performance and policies have been closely monitored since 2018 under the framework to ensure that the reforms were undertaken during the three multilateral bailouts from the European Union (EU) and the IMF between 2010 and 2015 to be completed, totaling more than EUR 260 billion.
- It was announced by EU officials that "Athens had largely fulfilled its obligations."
- After being forced to take its first bailout in 2010, Greece was the victim of pension cuts, spending restrictions, tax hikes, and bank regulations that caused the economy to shrink by 25%.
- The monitoring system was designed to ensure that ongoing structural reforms support sustainable economic growth and steps are taken to address potential sources of economic distress.
- The country's objective of achieving an "investment grade" credit rating is also closed to being achieved if Greece emerges from increased supervision.

Source: The Hindu

Paraguay: Mahatma Gandhi's statue unveiled

Why in News:

- A statue of Mahatma Gandhi has been unveiled in Paraguay by External Affairs Minister S Jaishankar during his first official visit to South America.



key points:

- The decision of Asuncion Municipality to put up a statue of Mahatma Gandhi on the main bank of the city was also praised by External Affairs Minister S Jaishankar.
- External Affairs Minister S Jaishankar is on an official visit to Brazil, Paraguay, and Argentina from 22-27 August.
- The newly opened Indian Embassy complex was inaugurated by S Jaishankar during his visit, which started functioning in January 2022 in Paraguay.
- During his visit to Paraguay, S Jaishankar also visited the historic Casa de la Independencies, from where the South American country's independence movement began more than two centuries ago.
- Mr. Jaishankar arrived in Brazil on the first leg of his six-day visit to South America, aimed at boosting overall bilateral ties with the region.
- Shri Jaishankar met envoys from Latin America and the Caribbean in New Delhi, with a focus on promoting holistic bilateral relations.
- The purpose of the External Affairs Minister's visit is to explore new areas of cooperation in the post-pandemic era.

Source: The Hindu

HAL to set up its first overseas marketing office in Malaysia

Why in News:

- A Memorandum of Understanding (MoU) has been signed by Hindustan Aeronautics Limited (HAL) to set up its first international marketing and sales office in Kuala Lumpur in anticipation of a possible deal for Light Combat Aircraft (LCA) Tejas in Malaysia.



key points:

- The HAL's capacity to office in Kuala Lumpur by Hindustan Aeronautics Limited was signed to achieve the agreement, as well as to meet other requirements of the Royal Malaysian Air Force.
- Following a global tender issued by the Malaysian Defense Ministry in October 2021, the supply of 18 FLIT LCAs was proposed by Hindustan Aeronautics Limited.
- Hindustan Aeronautics Limited is also looking at offering RMAF Su-30 spare parts.
- The office will be the first in Malaysia to be focused entirely on marketing and commercial development.
- Egypt and HAL are in discussions on a possible sale of LCA Tejas, India has also promised to build a manufacturing plant in Egypt.

Source: Indian Express

Important News: Defense

Successfully Fight-Test India VL-SRSAM at Chandipur

Why in News:

- Defense Research and Development Organization (DRDO) has conducted successful flight tests of the Vertical Launched Short-Range Surface to Air Missile (VL-SRSAM) for the Indian Navy and naval warships.



Key Points:

- Off the coast of Chandipur, in the state of Odisha, the VL-SRSAM flight test was conducted.
- To show the Indian Navy ship's capacity to launch vertically, it was successfully piloted against a fast unmanned aerial target.
- Sea-skimming targets are among the many airborne threats that the VL-SRSAM is designed and developed to defeat at close range.
- Flight data will be used to track the test launch of VL-SRSAM, including the flight route and vehicle performance statistics.
- Several ranges of equipment, including the radar, Electro-Optical Tracking System (EOTS), and Telemetry System placed by ITR, Chandipur, recorded the flight data during the test launch.
- The VL-SRSAM is built to strike high-speed air targets at a height of roughly 15 km and at distances between 40 and 50 km.
- The Astra missile, an air-to-air missile with a range beyond visual range, served as the inspiration for the weapon's design.
- The VL-thrust SRSAM's vectoring system will be crucial in improving its engine's capacity to alter thrust direction to regulate the missile's angular velocity and altitude.
- The VL-SRSAM is a canister system, allowing it to be stored and used from compartments that have been specifically created for that purpose.

Source: The Hindu

‘Ulchi Freedom Shield’ military exercise

Why in News:



- The largest joint military drill between South Korea and the United States in years has begun with the restart of field training.



Key Points:

- The annual summer exercise's name has been changed to "Ulchi Freedom Shield" this year, and it will continue through September 1, 2022.
- For the first time since the coronavirus outbreak, South Korea has begun a four-day Ulchi civil defense exercise that is specially intended to improve government preparation.
- With the aid of these civil and military exercises, the government seeks to increase the nation's readiness to accommodate the evolving nature of warfare.
- After South Korea and the US started the exercise's preliminary training, North Korea launched two missiles off its west coast.
- After South Korea and the US started the exercise's preliminary training, North Korea launched two missiles off its west coast.
- The Allies will conduct a total of 11 regional training programs, including one at the brigade level that will be attended by thousands of soldiers, according to the Seoul Ministry of Defense.

Source: Indian Express

Composite Indoor Shooting Range is inaugurated at INS Karna

Why in News:

- The first of its kind Composite Indoor Shooting Range (CISR) is inaugurated at INS Karna on the Eastern Seaboard by Vice Admiral Biswajit Dasgupta, Flag Officer Commanding-in-Chief, Eastern Naval Command.



key points:

- Presently the CISR Navy has a state-of-the-art, self-contained, 25 m, six-lane, live firing range for all primary and secondary weapons.
- The associated control software, as well as advanced aiming systems, will enable the range personnel to hone their firing skills, enabling them to challenge and face adversaries in challenging scenarios.
- The range has been established by an Indian firm in line with contemporary international standards and is touted as an example of the Atmanirbhar Bharat initiative in the year of 'Azadi Ka Amrit Mahotsav'.
- INS Karna is the first in the Navy and the only military unit in the country to have established and utilized such a facility.
- The government aims to significantly enhance the operational efficiency of the ENC naval personnel with this facility.

Source: The Hindu

India to buy six Tu-160 long-range bombers from Russia

Why in News:

- India will purchase Tu-160 bombers from Russia to strengthen its strategic forces.



Key Points:

- The Tupolev Tu-160 bomber has a top speed of 2220 kilometers per hour. During the flight, the aircraft can lift a maximum weight of 110,000 kg.

- The Tu-160 strategic bomber is manufactured by Russia.
- The Russian-made Tu-160 bomber flew for the first time on December 16, 1981 and is now being restored by Russia.
- Strategic bombers can launch both long-range cruise missiles and nuclear warheads from the Tu-160 bomber.
- The Tu-160 bomber also does not require aerial refueling to function; hence tanker aircraft are not required to fly missions with this aircraft.
- India is encircled by adversaries on both sides; if a fight breaks out on both fronts at the same time, India will be obliged to divide its military capability, which it must purchase from Russia. A commitment has been made.
- The bomber is capable of infiltrating Pakistan and China and attacking major airports, warships, and aircraft carriers patrolling the seas.
- The Tu-160 bomber, unlike other fighters, can carry big missiles.

Source: The Hindu

Science and Technology

IIT Guwahati develops technology to make sugar substitute "Xylitol"

Why in News:

- Researchers at IIT Guwahati have created a fermentation process that uses ultrasound to safely generate Xylitol from sugarcane bagasse, a byproduct of sugarcane crushing.



key points:

- This approach would eliminate the operational constraints of chemical synthesis and the time lag of conventional fermentation.
- The use of ultrasound during the fermentation process by IIT Guwahati researchers has not only reduced the fermentation time to 15 hours but also increased the product yield by about 20%.
- Innovative technology to manufacture xylitol has led to an increase in the use of safer alternative sweeteners as awareness of the negative effects of white sugar (sucrose) on individuals with diabetes and general health has increased.

- To make xylitol industrially, D-xylose, a valuable chemical derived from wood, is processed with a nickel catalyst at extremely high temperatures and pressures, which makes the process extremely energy-intensive.
- The process of fermentation used by researchers at IIT Guwahati is not innovative, with many Indian households using a fermentation process to convert milk into curd.
- In fermentation, several types of microbes, including bacteria and yeast, are used to convert one material into another.
- In this process, researchers at IIT Guwahati first employed sugarcane bagasse, which is the remaining fibrous waste product after extracting sugarcane juice.
- A new fermentation technique has been used by researchers at IIT Guwahati, which uses ultrasonic waves to accelerate the microbe-induced synthesis of xylitol.

Source: The Hindu

Images of Jupiter in the James Webb Space Telescope

Why in News:

- For the first time, clear pictures of the planet Jupiter have been captured by the James Webb Space Telescope (JWST).



key points:

- Images of Jupiter's stormy Great Red Spot, Ring, Aurora, and Aurora at the North and South Poles were not clearly visible in any of the photos taken yet.
- The image format obtained from the James Webb Space Telescope was infrared, in which infrared images were artificially tinted blue, white, green, yellow, and orange.
- The James Webb Space Telescope is a large infrared telescope designed to study every phase of the history of the universe.
- The James Webb Space Telescope is designed to be able to look into the past such as the first galaxies formed through their long wavelengths in the early universe.
- The James Webb Space Telescope is yet to travel about 1.5 million kilometers from Earth.
- The James Webb Space Telescope was launched from French Guiana in South America on an Ariane 5 ECA rocket.

Source: The Hindu

NASA's Artemis III Mission

Why in News:

- NASA has announced 13 potential landing sites for the Artemis III mission, which will send a woman and a person of color to the Moon for the first time.



Key Points:

- The following 13 places have been chosen by NASA as probable landing sites for NASA's Artemis III mission: Peak Near Shackleton, Connecting Ridge, Connecting Ridge Extension, Howarth, Malapert Massif, Leibnitz Beta Plateau, Nobel Rim 1, Nobel Rim 2, and the Amundsen rim.
- The lunar South Pole is within six degrees of each region's location, lending scientific significance to these regions.
- Sunlight is required for the Moon's long stay since it serves as a power source and regulates the temperature.
- NASA and large scientific and engineering organisations will negotiate over the 13 prospective landing locations.
- The United States initially attempted to send humans into space in 1961; eight years later, on July 20, 1969, Neil Armstrong became the first human to set foot on the Moon as part of the Apollo 11 mission.
- The astronauts of the Apollo 11 mission left an American flag and a sign on the Moon.
- Along with the goal of space exploration, NASA's mission to return Americans to the Moon aims to demonstrate American leadership in space and build a strategic presence on the Moon.

Source: The Hindu

Indigenous hydrogen fuel cell bus

Why in News:

- India's first indigenous Hydrogen Fuel Cell Bus developed by KPIT-CSIR has been launched by Union Minister Dr. Jitendra Singh in Pune.



key points:

- The construction of India's first fully indigenous hydrogen fuel cell bus is in line with Prime Minister Modi's National Green Hydrogen Mission.
- Green hydrogen is an excellent clean energy vector that enables deep decarbonization of even the most difficult emissions from the refining industry, fertilizer industry, steel industry, cement industry, and the heavy commercial transport sector.
- The high efficiency of fuel cell vehicles and the high energy density of hydrogen ensures that the operating cost per kilometer for fuel cell trucks and buses is lower than for diesel-powered vehicles.
- The uniqueness of the process developed by CSIR-NCL is an innovative downstream process technology, which makes this indigenous technology competitive with global benchmarks.
- The Bisphenol-A pilot plant at CSIR-NCL was also inaugurated by Union Minister Dr. Jitendra Singh during the event.
- Fuel cell vehicles emit zero greenhouse gas, which will prove to be important in tackling environmental pollution in India.

Source: PIB

Environment

BioAsia 2023

Why in News:

- The 20th edition of BioAsia 2023 will be hosted by the Government of Telangana on February 24-26, 2023, by BioAsia 2023 flagship event for life sciences and health technology.



key points:

- The logo and theme of BioAsia 2023 are "Moving for One: Shaping the Next Generation of Humanized Healthcare".
- Hyderabad has been an important center for the world over the past two decades, as well as the Center for Health Care and Life Sciences in India and BioAsia 2023 will be held there.
- The city of Hyderabad has enhanced its reputation by being instrumental in providing vaccines during the COVID-19 pandemic, which helped immunize the entire world, and is currently hosting the BioAsia 2023 event in Hyderabad.
- To discuss the interdisciplinary themes of One Health, disruptive technologies in healthcare, and access and affordability in healthcare for all, a key goal of BioAsia 2023.
- The BioAsia 2023 event also includes a start-up showcase, where more than 100 carefully selected health-tech entrepreneurs from around the world can present their groundbreaking solutions to urgent medical problems.
- BioAsia 2022 will be held with a virtual presence of around 37,500 attendees from around 70 countries.

Source: Economic Times

HPCL launches its first dung-based compressed biogas project

Why in News:

- The first compressed biogas project based on dung has been started by HPCL.



Key Points:

- In this HPCL project, biogas, which can be used as fuel for vehicles, will be produced using 100 tons of cow manure per day.
- The framework for the HPCL Compressed Biogas Project Initiative was the GOBAR-Dhan plan, which was unveiled by the Indian government in April 2018 as a part of the Swachh Bharat Mission (Gramin) Biodegradable Waste Management component.
- With the help of livestock and organic waste, the HPCL Compressed Biogas Project scheme hopes to enhance sanitation while producing money and energy.
- The foundation stone laying ceremony for this project run by HPCL was organized by Shree Godham Mahatirth Pathmeda Lok Punyarth Trust, located in the Rajasthani village of Pathmeda in the Tehsil of Sanchore and District of Jalore.

- Agricultural waste, manure, municipal trash, plant material, sewage, green waste, and food waste are all examples of natural materials that can be used to make biogas.
- Methane, carbon dioxide, and hydrogen sulfide are the three major gases found in biogas.
- Methane (CH₄), a gas found in natural gas, and carbon dioxide make up the majority of biogas, which is a renewable energy source (CO₂).

Source: Indian Express

Schemes

Rural Entrepreneur Project - Phase 2

Why in News:

- Phase II of the Rural Entrepreneurs Project at Ranchi (Jharkhand) by National Skill Development Corporation (NSDC) in collaboration with Sewa Bharti and Yuva Vikas Society, with an aim to promote skill development and entrepreneurship among tribal youth and to promote Skill India Mission, has been launched.



key points:

- Participants from rural and tribal areas of Maharashtra, Rajasthan, Chhattisgarh, Madhya Pradesh, and Gujarat were included in the first phase of the Rural Entrepreneurs Project.
- Under the first phase of the Rural Entrepreneur Project, training of 157 participants in seven groups was started in May 2022 at Bhopal, Madhya Pradesh in which about 133 participants successfully completed the training on June 27, 2022.
- The second phase of the Rural Entrepreneur Project has been started in Ranchi.
- The objective of this training program is to empower tribal youth for skill development and entrepreneurship.
- Under the Rural Entrepreneur Project, the government aims to make India self-reliant in rural areas as well.
- Another major component of this project is to provide quality education to the tribal communities.
- The main objective of the Rural Entrepreneur Project is to boost the rural/local economy, increase employment opportunities so as to reduce forced migration due to lack of local opportunities, and also conserve natural resources.

- Presently, the project is being implemented in six states- Maharashtra, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, and Gujarat.

Source: The Hindu

Awards and Honours

UNESCO Peace Prize 2022

Why in News:

- The UNESCO Peace Prize 2022 has been given to former German Chancellor Angela Merkel in recognition of "her efforts to welcome migrants."



Key Points:

- As refugees began to arrive in Europe in 2015, Merkel famously said that the Germans could "Wir schaffen Das," or "we can do this," and opened her country's borders.
- After receiving more public and conservative party support, former German Chancellor Angela Merkel was forced to return to her pro-immigration stance.
- Her bold choice to accept more than 1.2 million refugees from Syria, Iraq, Afghanistan, and Eritrea in 2015 won the admiration of every single member.
- The Felix Hauffouet-Bogen-UNESCO Peace Prize is the official name of the award, which honors the former leader of the Ivory Coast.
- Since 1989, it has been given out annually to people, groups, or institutions who have gone above and beyond to advance, investigate, or secure peace.
- A gold medal, a diploma for world peace, and a check for \$150,000 are given to the winner.

Source: Times of India

National Awards Portal

Why in News:

- The Central Government has created the National Prizes Portal, which welcomes nominations for a number of awards awarded by various Ministries, Departments, and Agencies, in an effort to promote transparency and public participation.



Key Points:

- The National Prizes Portal's goal is to make it simple for the general public to suggest individuals and organizations for a variety of awards granted by the Indian government.
- The government has created this unified National Categories Portal to solicit nominations for various awards.
- The honors presented through the National Awards Portal range from the Padma Award to the Pandit Deendayal Upadhyay Telecom Skill Excellence Award to the Tensing Norgay National Adventure Award and the Sardar Patel National Integration Award.
- With the use of the National Awards Portal, the Government of India will be able to consolidate all of its awards across its numerous Ministries, Departments, and Agencies onto a single digital platform, promoting transparency and public participation.
- The National Prizes Portal aims to make it simpler for members of the public to suggest individuals and groups for several awards presented by the Government of India.

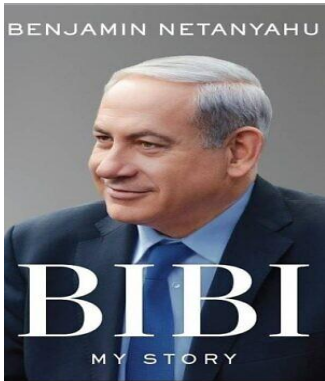
Source: Economic Times

Books and Authors

Netanyahu's autobiography 'Bibi: My Story'

Why in News:

- Former Israeli Prime Minister Benjamin Netanyahu's book, Bibi: My Story, will be released in November 2022.



Key Points:

- "Bibi: My Story" will be released on November 22, three weeks after Israel's parliamentary elections.
- The book covers everything from Netanyahu's childhood to his unique perspective on Middle East geopolitics and his discussions with Presidents Clinton, Obama, and Trump to guarantee their country's future.
- "My life is of tragedies and wins, mistakes and accomplishments, lessons learned and loved ones woven together with Israel, which has demonstrated that faith and drive can overcome great challenges to create a brilliant future," Netanyahu says.
- Netanyahu has previously written publications such as "A Durable Peace" and "Fighting Terrorism."
- Netanyahu is the son of Benzoin Netanyahu, a notable Zionist and teacher, and the brother of Jonathan Netanyahu, who was killed while directing the historic 1976 hostage rescue aboard a hijacked plane in Entebbe, Uganda.
- Benjamin Netanyahu, the noted leader of the Israeli Likud party, served as Prime Minister from 1996 until 1999.

Source: Times of Israel

Important Days

World Water Week 2022

Why in News:

- World Water Week for the year 2022-23 has been organized from 23 August to September 1.



key points:

- World Water Week is an annual event organized by the Stockholm International Water Institute (SIWI) since 1991 with the aim of addressing global water issues and concerns related to international development.
- The theme of the 2022 World Water Week is "Seeing the Unseen: The Value of Water".
- This broad theme for the World Water Week 2022-23 has been selected for three main approaches-
 - The value and development of water for the people.
 - The value of water for nature and climate change.
 - The financial and economic value of water.
- World Water Week is a community of change-makers who collaborate on solutions to some of the world's greatest water-related challenges.
- World Water Week also includes organizing a meeting to accelerate progress towards the Sustainable Development Goals and other international processes.

Source: Indian Express

17th Pravasi Bharatiya Divas 2023

Why in News:

- The 17th Pravasi Bharatiya Divas 2023 will be held in Indore in January 2023, according to Foreign Ministry spokeswoman Arindam Bagchi.



Key Points:

- Every year on January 9, Pravasi Bharatiya Divas commemorates the contribution of the abroad Indian population to the growth of India.
- Pravasi Bharatiya Divas is observed on January 9, 1915, to commemorate Mahatma Gandhi's return to India from South Africa.
- Its format has been changed in 2015 to celebrate Pravasi Bharatiya Divas (PBD) every two years.
- The 16th Pravasi Bharatiya Divas was held in Varanasi from 21 to 23 January 2019, with Mauritius Prime Minister Pravind Jugnauth as the main guest.

- The decision to mark Pravasi Bharatiya Divas was made in response to the recommendations of the Government of India's High-Level Committee (HLC) on the Indian Diaspora, which was chaired by LM Singhvi.
- The then-Prime Minister of India, Shri Atal Bihari Vajpayee, presented the committee's findings during a public gathering at Vigyan Bhawan in New Delhi on 8 January 2002 and announced 9 January 2002 as "Pravasi Bharatiya Divas" (PBD).

Source: News on Air

Renewable Energy Day 2022

Why in News:

- Renewable Energy Day, also known as Renewable Energy Day, is observed in India every year on August 20.



Key Points:

- The Theme of Renewable Energy Day 2022 is " Paddy crop growing in the fields on the basis of solar energy."
- The goal of Renewable Energy Day is to raise awareness about renewable energy production and use in India.
- Renewable Energy Day 2022 emphasizes the importance of renewable energy by encouraging and coordinating the alarming rate of natural resource depletion.
- Renewable Energy Day was established in 2004 to assist renewable energy development initiatives and to promote the utilization of natural resources in India.
- The inaugural event was organized in 2004 by then-Prime Minister Manmohan Singh, who published a postage stamp featuring 12000 youngsters creating a human chain to promote the use of renewable energy sources.
- Renewable Energy Day is to target high school and college students in order to raise awareness among the younger generation.
- Natural resources are used to generate renewable energy.

- According to data from the official United Nations website, renewable energy is currently more inexpensive in most nations and creates three times more jobs than non-renewable fossil fuels such as coal, oil, and gas.

Source: Livemint

Sports

Last Panghal: India's first under-20 world champion in wrestling

Why in News:

- Haryana's 17-year-old wrestler Last Panghal defeated Kazakhstan's Atlin Shagayeva 8-0 to win the Under-20 World Champion title.



key points:

- Last Panghal is the first Indian woman to become the under-20 world champion.
- The Under-20 World Wrestling Championship was held in Sofia, Bulgaria.
- With an early 11–0 win over German amary Olivia, the last Panghal has won due to his superior technical prowess.
- The last Panghal is a resident of Bhagana village in the Hisar district of Haryana.
- Last Panghal won a gold medal at the Asian Junior Championships (2022) and a bronze medal at the Cadet World Championships (2021).
- Last year, Panghal also won a silver medal at the U23 Asian Championships.
- In her second match, Ayaka Kimura of Japan was defeated by an Indian wrestler by a fall.
- Panghal faced Ukrainian Natalia Klivchutska in the semi-final match and won the match decisively with a score of 11–2.
- Other wrestlers from India participating in the final have not won a gold medal.
- Two-time U-17 world champion Sonam Malik had to settle for a silver medal after losing to Nonoka Ozaki in the 62kg final.
- India's Priyanka lost in the 65kg final to Japan's Mahiro Yoshitake by a score of 0-8.

Source: Indian Express

UEFA League

Why in News:

- Young striker Manisha Kalyan has become the first Indian footballer to play in the UEFA Women's Champions League.



key points:

- Manisha Kalyan made her debut for Apollon Ladies FC at the European club competition in Angomi, Cyprus.
- Earlier in November 2021, Manisha Kalyan, the 20-year-old became the first Indian footballer to score a goal in the AFC Women's Club Championship.
- There was an impressive performance by Manisha Kalyan for the national team and Gokulam Kerala in the Indian Women's League (IWL).
- Manisha Kalyan Gokulam is the second player from Kerala to have signed for an overseas club after Dangme Grace joined Uzbek outfit FC Nassau.
- Earlier Manisha Kalyan was awarded the AIFF Women's Footballer of the Year for the year 2021-22 season.

Source: Indian Express

Important Personality

17-year-old pilot Mac Rutherford sets world record for solo flight

Why in News:

- Mac Rutherford, a 17-year-old pilot, has become the youngest person in the world to fly solo in a small plane after landing in Bulgaria.



key points:

- Mac Rutherford, a Belgian-British dual citizen, landed at an airstrip west of the Bulgarian capital Sofia, and with this flight, he holds two Guinness World Records.
- Rutherford became the youngest person to fly alone in the world, as well as the youngest person to orbit the globe in a microlight plane.
- Mac Rutherford started his journey on 23 March, Rutherford flew to 52 countries on five continents in this journey.
- Mac Rutherford crossed the equator twice during his travels.
- Mac Rutherford traveled through Africa and the Gulf region to India, China, South Korea, and Japan.
- Mac Rutherford crossed the North Pacific Ocean and landed after 10 uninterrupted hours in the air on a volcanic island near the Bering Strait.

Source: Indian Express