



# **JUNE, 2022**



**\*\*** Useful for **\*\*** 

CSE, ESE, PSUs, State Services Exams, SSC and Banking Exams

## 8<sup>th</sup> JUNE 2022

## **Defense Acquisition Council**

 Context: Defense Acquisition Council approved the procurement of military equipment and platforms worth Rs 76,390 crore from domestic industries to enhance India's overall combat capabilities.

#### **Key Highlights**

- The Defense Ministry has approved the procurement of military equipment and platforms worth Rs 76,390 crore from domestic.
- The procurement proposals were approved by the Defense Acquisition Council (DAC) headed by Defense Minister Rajnath Singh.
- For the Indian Navy, the DAC accorded approval for the procurement of next generation corvettes (NGCs).

#### **About** Defense Acquisition Council (DAC)

- It is a council that is concerned with acquisition of military equipments by the Indian army.
- The DAC is the apex decision making body of the Ministry of Defense and is chaired by the Defense Minister.

#### **Functions of DAC**

- Give 'in principle' approval to Capital acquisitions in the Long Term Perspective Plan (LTPP) covering a 15-year time span at the beginning of a Five Year Plan period.
- Give 'in principle' acceptance of necessity to each Capital acquisition project for incorporation in the forthcoming Five Year Plan, at least nine months before the commencement of the first year of that plan. The approval involve the identification of:
  - 1. Either: 'Buy' Projects (outright purchase).
  - **2. Or:** 'Buy and Make' projects (purchase followed by licensed production/ indigenous development).
  - **3. Or:** 'Make' Projects (indigenous production and R&D).

• Monitor the progress of major projects on feedback from the Defense Procurement Board.

#### Agni-IV Missile

• **Context:** India successfully carried out a "training launch" of the Agni-IV missile.

#### **Key Highlights**

- The successful test was part of routine user training launches carried out under the aegis of the Strategic Forces Command.
- The successful test reaffirms India's policy of having a 'Credible Minimum Deterrence.

#### **About** Agni-IV Missile

- Agni-IV missile was launched from the APJ Abdul Kalam Island in Odisha.
- Agni-IV is an Intermediate Range Ballistic Missile with a range of around 4,000 km.
- It is developed by Defence Research and Development Organisation (DRDO).
- It can carry a 1,000-kg payload and can go as high as 900 km.
- It is a surface to surface missile and can carry nuclear asd well as conventional warheads.
- The missile is light weight and has two stages of solid propulsion.
- The range of the missile is such that it can reach every part of mainland China.

## National Tribal research Institute

• **Context:** Union Home and Cooperation Minister Amit Shah inaugurated the National Tribal Research Institute (NTRI) in Delhi.

#### **Key Highlights**

 The NTRI will be the premier national institute for the promotion and preservation of tribal heritage and culture and the nerve centre of tribal research issues and matters in academic, executive and legislative fields.

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- The institute will collaborate and network with reputed research institutes, universities, and organisations as well as academic bodies and resource centres.
- NTRI will provide policy inputs to the Ministry of Tribal Affairs and State Welfare Departments with programs and studies that support the socio-economic aspects of the tribes.
- It will also help in establishing and running effective Tribal Museums.
- It will also maintain a database of PMAAGY, which is an online repository of information about the tribes of India.

## About Eklavya Model Residential Schools (EMRS)

- EMRS started in the year 1997-98 to impart quality education to ST children in remote areas.
- The schools focus not only on academic education but on the all-round development of the students.
- Each school has a capacity of 480 students, catering to students from Class VI to XII.
- Grants were given for construction of schools and recurring expenses to the State Governments under Grants under Article 275 (1) of the Constitution.
- It has been decided that by the year 2022, every block with more than 50% ST population and at least 20,000 tribal persons, will have an EMRS.

### 9<sup>th</sup> JUNE 2022

## **NHAI in Guinness World Record**

 Context: State-owned NHAI has created a Guinness World Record for the longest continuously laid bituminous lane of 75 kilometers.

#### **Key Highlights**

 The plan of building a 75-kilometer-long stretch of bituminous concrete in a single lane on National Highway 53 was materialized by National Highways Authority of India's (NHAI).

- NHAI Built this lane in 105 hours and 33 minutes on the national highway between Amravati and Akola districts in Maharashtra.
- The 75 km single lane road is estimated to be equivalent to 35 km of two-lane paved shoulder road.
- The road was laid on a section of NH-53 between the Amravati and Akola districts of Maharashtra.

#### About NHAI

- National Highways Authority of India (NHAI) was constituted by an Act of Parliament in 1988.
- The authority, however, became operational in February, 1995.
- It comes under the administrative control of the Ministry of Road Transport and Highways.
- Its headquarters are in New Delhi.
- NHAI has been set up as a Central Authority to develop, maintain and manage the National Highways entrusted to it by the Government of India.

#### Mandate

- NHAI is mandated to implement the National Highways Development Project (NHDP).
- NHDP is India's largest ever Highways Project in a phased manner.
- The National Highways have a total length of 1,32,499 (approx) km.(2021)
- Although National Highways constitute only about 2 percent of the road network, it carries 40 per cent of the total road traffic.

## **Next Generation Corvettes**

 Context: The Defense Acquisition Council (DAC) has given the Acceptance of Necessity (AoN) for procurement of next-generation Corvettes for the Indian Navy.

#### Key highlights

• DAC will procure next-generation Corvettes for the Indian Navy at an approximate cost of Rs 36,000 crore.

- These next- generation Corvettes will be constructed based on new in-house design of the Indian Navy using the latest technology of ship building.
- It would contribute to further the government's initiative of Security and Growth for all in the region (SAGAR).
- The Indian Navy at present has 4 Kamorta Class Corvettes, which are also known as Project 28- INS Kamorta, INS Kadmatt, INS Kiltan and INS Kavaratti.
- The first of these was commissioned in 2014 and the last one in 2020.
- These ships have an anti-submarine role.
- The four Kamorta Class Corvettes that the Indian Navy possesses are named

#### **Key features**

- A Corvette is the smallest class of naval ships and it falls below the warship class of a frigate.
- These are highly agile ships and are categorized as missile boats, anti-submarine ships, coastal patrol crafts and fast attack naval vessels.
- Modern Corvettes can go up to 2,000 tons in displacement which helps in keeping them agile.
- The next-generation Corvettes will be manufactured for various roles like surveillance missions, escort operations, deterrence, surface action group operations, search and attack and coastal defense.
- These roles will be in addition to the anti-submarine roles being already performed by the existing Corvettes in the Navy.

## **Geospatial Self Certification Portal**

• **Context:** Department of Science and Technology (DST) launched the Self Certification Portal for conveying adherence to provisions of Geospatial Guidelines by Individuals, companies, organizations, and Government agencies.

#### **Key Features**

• One of the key developments brought in by the Guidelines was the replacement of process of prior

approvals, security clearances, licenses and other restrictions for the collection, generation, preparation, dissemination, storage, publication, updating and/or digitization of Geospatial Data and Maps within the territory of India.

- A Self-Certification Regime is introduced for conveying adherence to provisions of Geospatial Guidelines by Individuals, companies, organizations, and Government agencies.
- This Portal facilitates entities engaged in map related activities to certify themselves quickly and easily.
- The portal is built based on Geo-Spatial guidelines released by Govt of India in Feb 2021, which has deregulated all aspects of mapping activities in India from survey to sales.
- The self-certification facility for entities in the portal is free and universal.

#### 10<sup>th</sup> JUNE 2022

## Bharat Blockchain Network and Polyversity

 Context: Information Data System (IDS) launched Bharat Blockchain Network (Academic Blockchain Consortium) & Polyversity (Educational Metaverse).

#### **Key Highlights**

- IDS is building the Bharat Blockchain Network (BBN).
- It will be India's Nationwide hybrid blockchain Network visioned to enable blockchain projects of academic interest around Governance, Issuance of verifiable credentials, Skill badges, Student transfer & Audit Trail along the lines of NEP (National Education Policy) 2020.
- IDS is working with 100 plus academic partners.
- Polyversity is India's Largest Educational Metaverse, with over 100 Academic Partners establishing virtual campuses to make education more accessible, immersive and meaningful.
- Land parcels will be assigned to academic partners in Polyversity.

• IDS intends to skill 500,000 students in blockchain technology.

#### **About IDS**

- IDS is a multinational corporation headquartered in Michigan, providing services to Fortune 500 clients in various industries since 1996.
- IDS, a leader in enterprise blockchain technology, is a leading provider of training in emerging technologies such as Blockchain, AI/ML, Cyber Security, and cloud.
- IDS's clients include governments, universities, schools, pharmaceutical and logistics companies, and medical offices.
- IDS is one of the world's only 17 Hyperledger Certified Service Providers and one of only 7 Hyperledger Training Partners.

#### **Green Open Access Rules**

• **Context:** The government has notified the Green Open Access Rules 2022 to further accelerate India's renewable energy programmes.

#### **Key features**

- These rules are notified for promoting generation, purchase and consumption of green energy including through waste-to-energy plants.
- It enables a simplified procedure for the open access to green power, the power ministry said in a statement.
- Consumers can now demand green power from discoms (power distribution companies).
- Every consumer becomes stakeholder to contribute in achieving India's commitment of 500 GW of nonfossil fuel by 2030.
- As per the rules, the green open access is allowed to any consumer and the limit of open access transaction has been reduced from 1 MW (megawatt) to 100 kW for green energy in order to enable small consumers

also to purchase renewable power through open access.

- There will be transparency in the approval process of the open access applications.
- As per the rules, the approvals are to be granted in 15 days or else it will be deemed to have been approved subject to fulfilment of technical requirements.
- It will be through a national portal.
- The tariff for the green energy shall be determined separately by the appropriate commission, which shall comprise of the average pooled power purchase cost of the renewable energy, cross-subsidy charges, if any, and service charges covering the prudent cost of the distribution licensee for providing the green energy to the consumers.

#### Significance

- The rules will help streamline the overall approval process for granting open access, including timely approval, to improve predictability of cash flows for renewable power producers.
- It will also bring uniformity in the application procedure.
- The rules provide certainty on open access charges to be levied on green energy open access consumers.
- Cap on increasing the cross-subsidy surcharge as well as the removal of additional surcharge not only incentivises the consumers to go green but also addresses the issues that have hindered the growth of open access in India.
- Consumers will be given certificates if they consume green power.
- Cross subsidy surcharge and additional surcharge shall not be applicable, if green energy is utilized for production of green hydrogen and green ammonia.

#### **Aegean Islands**

• **Context:** Turkish President Recep Tayyip Erdogan warned Greece to demilitarize islands in the Aegean Sea.

#### **Key Issue**

- Turkey has accused Greek authorities of building a military presence in violation of the 1923 Treaty of Lausanne and the 1947 Paris Treaty, which guarantee the islands' unarmed status.
- Greece has stated that the islands located within striking distance of a large Turkish landing fleet cannot be left undefended and have been garrisoned for decades.
- Greece stated that Turkey has deliberately misinterpreted international treaties and says it has legal grounds to defend itself against hostile actions by Turkey.
- The two countries are NATO allies, they have long engaged in disputes over migration, maritime borders and mineral exploration in the eastern Mediterranean.

#### **About** Aegean Island

- Aegean Islands are located in Aegean Sea, with Greece in West and Turkey on East
- The vast part of Aegean Islands belongs to Greece with Turkey possessing few in northeastern part of sea.
- Greece absorbed the islands of Limnos, Samothrace, Lesvos, Samos, Chios and Ikaria from the Ottoman Empire in the Balkan Wars of 1912-13. It was officially awarded sovereignty over them in the Treaty of Lausanne of 1923.
- Another treaty drawn up in London in 1914 had made Greek possession of the islands conditional on their demilitarization.

## 11<sup>th</sup> JUNE 2022

#### Acnovax

• **Context:** The agriculture ministry launched India's first COVID vaccine for animals called Ancovax.

#### **Key Highlights**

• The vaccine is developed by D the Hisar-based National Research Centre on Equines.

- Ancovaxa can protect animals against the Delta and Omicron variants of SARS-CoV-2.
- Ancovax can be used in dogs, lions, leopards, mice, and rabbits. It is an inactivated vaccine developed using an infectious part of the delta variant.
- In addition, it uses Alhydrogel as an adjuvant to boost the immune response.
- This is the first COVID-19 vaccine for animals developed in India.

#### **Need for the Vaccine**

- There have been reports of COVID-19 infection in several animals, including dogs and cats.
- The vaccine can protect animals in the zoo.
- It can also prevent transmission from companion animals to humans.
- The aim of the vaccine is to protect endangered animals such as lions and tigers.
- India reported at least nine COVID infections in Asiatic lions in Chennai zoo last year, with one of the lioness likely to have died of it.
- A study by the Indian Veterinary Research Institute found at least three natural COVID infections in wild Asiatic lions, and a leopard cub was found dead and then tested positive for COVID-19.

#### Suraksha Mitra Scheme

 Context: The Suraksha-Mitra project, a vehicle monitoring system that sends distress messages in case of any accident, has become operational in the State.

#### **Key Highlights**

- The project under the Nirbhaya scheme is launched by the Motor Vehicle Department.
- It envisages sending a distress message to the owners' mobile phones in case of any untoward incidents while travelling.
- Tracking of Public Transport Vehicles for Public, Real time Alerting System, Nearest Aid alerting for quick response are some the features of the scheme.

#### **About** Suraksha Mitr Scheme

- Suraksha Mitr" is developed by C-DAC is a highly scalable, comprehensive tracking solution for public transport vehicles designed for enhancing safety and enforcement.
- It is compatible with the AIS-140 standards published by MoRTH.
- C-DAC's proposal to MoRTH is for rollout "Suraksha Mitr" in all States/UTs with required customizations and can be deployed in any public cloud or State Data Centers.
- C-DAC has implemented "Suraksha Mitr"- GPS based vehicle tracking and monitoring system for ensuring safety and enforcement in public transport vehicles in Kerala.

## Sangri-La Dialogue

• **Context:** The 19th Shangri-La Dialogue, was hosted by International Institute for Strategic Studies (IISS) in Singapore.

#### **Key Highlights**

- Japanese Prime Minister Fumio Kishida gave the opening keynote address on Japan's vision for regional security.
- Chinese defence minister accused India of causing instability at the Indo-China broder.
- On the sidelines, a trilateral between US Secretary of Defence Lloyd Austin, Japanese Defence Minister Kishi Nobuo and South Korean Defence Minister Lee Jong-sup was also held.

#### **About Shangri-La Dialogue**

- The Shangri-La Dialogue is Asia's premier defense summit.
- It's a unique meeting where ministers debate the region's most pressing security challenges, engage in important bilateral talks and come up with fresh approaches together.

• Since its launch in 2002 by the British think tank IISS with the support of the Singaporean government, the Shangri-La Dialogue, officially known as the Asia Security Summit, has been held annually except for 2020 and 2021.

## 12<sup>th</sup> JUNE 2022

### **Greenhouse Gas Offset Credit System**

• **Context:** Canada has launched the Greenhouse Gas Offset Credit System, a market-based incentive.

#### **Key Highlights**

- The system is launched to put in place a marketbased mechanism to incentivize businesses and municipalities to invest in businesses to cut down pollution.
- Under the new system, registered participants can carry out projects following a federal offset protocol, which sets out a consistent approach for measuring GHG emissions reductions or removals for specific types of projects.
- These projects can generate one tradeable offset credit for every tonne of emissions they reduce or remove from the atmosphere.
- Once a credit is earned, it can be sold to others to help them meet their compliance obligations or emissions reduction goals under the carbon pollution pricing system.

#### About Greenhouse Gas Offset Credit System

- Canada's Greenhouse Gas (GHG) Offset Credit System enables project proponents to generate federal offset credits if they register and implement projects that reduce GHGs using a published federal GHG offset protocol.
- Offset credits can be sold and used for compliance by facilities covered in the federal Output Based Pricing System or sold and used by others who are looking to meet voluntary climate targets or commitments.

## **TVS-2M nuclear fuel**

 Context: Rosatom State Corporation of Russia has supplied the first batches of the TVS-2M nuclear fuel, to India for the Units 1 & 2 of Kudankulam Nuclear power plant.

## **Key Highlights**

- The TVEL Fuel Company of Rosatom has supplied the first batches of TVS-2M nuclear fuel to India for the two functioning units of KNPP, powered by VVER-1000 reactors.
- After the nearest refueling, the power unit 1 will start operations in an 18-month fuel cycle.
- TVEL has fulfilled the agreement with Nuclear Power Corporation of India Limited (NPCIL) on implementation of a comprehensive engineering project, including introduction of TVS-2M nuclear fuel and elongation of the fuel cycle from 12 to 18 months for both VVER-1000 reactors.
- Russia is building the KNPP under an Inter-Governmental Agreement (IGA) of 1988 and follow on agreements in 1998 and 2008.

## **Advantages of fuel**

- The fuel is more reliable and cost-efficient than the existing one.
- Because of the welded frame, the fuel assemblies in the reactor core retain their geometry.
- The spacer grids protect the fuel rod cladding from fretting wear and the additional spacer grid makes the fuel assemblies more vibration-resistant.
- The new fuel has increased uranium capacity- one TVS-2M assembly contains 7.6% more fuel material as compared to the earlier fuel bundles.
- In addition, the special feature of the Kudankulam fuel in particular is the new generation anti-debris filter protecting bundles from debris damage, which may be caused by small sized objects in the reactor core.
- Operation in longer fuel cycles also enhances the economic efficiency of a plant.

- As reactors have to undergo stoppage and refueling less frequently, the power units can produce more electricity.
- Besides, the plant needs to buy less fuel, and as the result, has to deal with smaller amounts of spent fuel.

## **IN-SPACe**

• **Context:** Prime Minister Narendra Modi inaugurated the headquarters of the Indian National Center for Space Promotion and Authorization (IN-SPACe) in Ahmedabad.

## **Key Highlights**

- A part of Indian Space Research Organization (ISRO), the new space center will pave the way for space exploration for private players in space sector.
- IN-SPACe will be the single-window autonomous nodal agency to enhance participation of private companies in activities related to space science, the Prime Minister said.
- IN-SPACe will take care of the needs and demands of private players, including educational and research institutions, and explore ways to accommodate these requirements in consultation with ISRO.
- Existing ISRO infrastructure is planned to be made accessible to interested individuals to enable them to carry out their space-related activities.

## India' Share in global Space industry

- According to estimates, the global space economy is worth USD 400 billion and is expected to expand up to USD 1 trillion by 2040.
- India's share is only 2% and this is expected to go up in the near future with an increase in private participation.

#### **About** In-SPACe

IN-SPACe is an independent nodal agency under Department of Space for allowing space activities and usage of DOS owned facilities by non- government private entities (NGPEs) as well as to prioritize the launch manifest.

#### **Roles and responsibilities**

- Space activities including building of launch vehicles and satellites and providing space based services as per the definition of space activities.
- Sharing of space infrastructure and premises under the control of ISRO with due considerations to ongoing activities.
- Establishment of temporary facilities within premises under ISRO control based on safety norms and feasibility assessment.
- Establishment of new space infrastructure and facilities, by NGPEs, in pursuance of space activities based on safety norms and other statutory guidelines and necessary clearances.
- Initiation of launch campaign and launch, based on readiness of launch vehicle and spacecraft systems, ground and user segment.
- Building, operation and control of spacecraft for registration as Indian Satellite by NGPEs and all the associated infrastructure for the same.
- Usage of spacecraft data and rolling out of space based services and all the associated infrastructure for the same.

## 13<sup>th</sup> JUNE 2022

## **World Investment Report**

• **Context:** The United Nation Conference on Trade and Development recently released the World Investment Report.

#### **Key Findings**

- UNCTAD's World Investment Report shows that despite a decline in FDI India remains among the top 10 global FDI recipients.
- However inflows in India are dropping by 30% to \$45 billion in 2021.

- A proximate cause is that big-ticket mergers and acquisitions (M&As) which boosted FDI flows in the recent past were not repeated.
- In 2020, for instance, cross-border M&As surged 83% to \$27 billion in ICT, health, infrastructure and energy to boost overall FDI to \$64 billion.
- During the following year, cross-border M&As were down by a massive 70% to \$8 billion, which impacted overall flows to the country.
- Repatriation and disinvestments by foreign investors, surged to \$27 billion in 2020-21 and \$28.6 billion in 2021-22.

#### About UNCTAD

- The United Nations Conference on Trade and Development (UNCTAD) was established in 1964.
- It is an intergovernmental organization that promote the interests of developing nations in world trade.
- The headquarters of UNCTAD are located in Geneva, Switzerland.

#### • It helps developing countries to:

- Comprehend options to address macro-level development challenges
- Achieve beneficial integration into the international trading system.
- Diversify economies to make them less dependent on commodities.
- Limit their exposure to financial volatility and debt.
- Attract investment and make it more development friendly.
- Increase access to digital technologies.
- Promote entrepreneurship and innovation.
- Help local firms move up value chains.
- Speed up the flow of goods across borders.
- Protect consumers from abuse.
- Curb regulations that stifle competition.
- Adapt to climate change and use natural resources more effectively.

## 14<sup>th</sup> JUNE 2022

## **Fast radio Bursts**

 Context: Astronomers detected a signal from a galaxy believed to be nearly 3 billion light-years away called Fast Radio Burst (FRB).



#### **Key Highlights**

- An international team of astronomers working on China's Five-hundred-meter Aperture Spherical Radio Telescope (FAST) has detected a new fast radio burst (FRB) with unusual properties.
- This Fast Radio Burst (FRB 20190520B) is said to be co-located with a compact, persistent radio source and associated with a dwarf host galaxy of high specific star-formation.
- The discovery provides insights into the formation and evolution of fast radio bursts, which are some of the most extremely energetic phenomena in the universe, lasting mere milliseconds.

#### **About Fast Radio Bursts**

- FRBs are intense and brief flashes of radio frequency emissions that typically last milliseconds.
- These usually repeat multiple times.
- Scientists are still yet to fully understand the phenomena which was first detected in 2007.
- This is the second time it was ever detected.

- A leading candidate for what generates these FRBs is a magnetar, which is a neutron star with a really strong magnetic field emitting radio waves.
- FRBs are triggered by explosive events in the universe, such as a supernova or the collision of two compact objects like a neutron star and a black hole.
- Such bursts typically occur as a transient flash only once, never to be seen again.

#### Multilingual Resolution in UNGCA

 Context: At the United Nations, the 76th session of the United Nations General Assembly (UNGA) adopted an India sponsored resolution on multilingualism.

#### **Key Highlights**

- The resolution romoted the UN's Department of Global Communications to use both official and non-official languages, including Bangla, Hindi, and Urdu, in its communications.
- It also mentioned languages like Portuguese, Kiswahili, and Persian.
- The resolution was co-facilitated by Andorra and Columbia.
- The resolution is of importance and provides long due recognition to Hindi, specifically given the numbers that speak the language around the world.

#### **Official languages in UN**

- The UN has six official languages English, Russian, Spanish, Chinese, Arabic and French.
- The addition of Hindi, Bangla, and Urdu will instrumentalise and institutionalize their usage as mediums for disseminating UN information.
- 'Hindi @ UN' project was launched in 2018 with an objective to enhance the public outreach of the United Nations in the Hindi language, and to spread greater awareness about global issues among millions of Hindi-speaking populations around the world.

## **National Museum of Customs and GST**

• **Context:** National Museum of Customs and GST was launched in Goa by the Union Finance Minister Nirmala Sitharaman.

#### **Key Highlights**

- Union Finance Minister Nirmala Sitharaman inaugurated the National Museum of Customs and GST "Dharohar" in Goa as part of the Azadi Ka Amrit Mahotsav Iconic week of the Ministry of Finance.
- "Dharohar" Museum showcases the artifacts seized by Indian Customs and depicts various

aspects of work performed by the Customs Department while safeguarding the economic frontiers of the country, its heritage, flora & fauna and the society.

- Dharohar has 8 galleries viz: Introductory gallery, History of Taxation Gallery, Guardians of our economic frontiers gallery, Guardians of our Art & Heritage, Guardians of Flora & Fauna, Custodians of our social well being, Journey of Indirect taxes -Salt Tax to GST and the GST gallery.
- The Museum provides the rare opportunity of having a peep into the working of the Department over the years ushering in change in its methodologies to meet the emanating challenges while at the same time providing yeomen service to the Nation.
- Its displays are the manuscript of Ain-i-Akbari intercepted by the Indian Customs at the Indo-Nepal border at Raxaul, a replica of Amin pillars from Kaurkshetra, medieval period astronomical instruments, seized metal and stone artifacts, ivory items and wildlife items.