

DHEERAN IAS ACADEMY®

(Institute for UPSC, TNPSC & Banking)

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GENERAL STUDIES – I

TOPIC: ART AND CULTURE

NATIONAL MONUMENTS AUTHORITY

In News:

- The National Monuments Authority has recommended that 2 sites associated with Dr Ambedkar be declared Monuments of National importance.
- Sankalp Bhumi Banyan tree campus in Vadodara, where Dr Ambedkar had taken resolved to eradicate untouchability in 1917.
- A place in Satara (Maharashtra) where Bhim Rao Ambedkar received his primary education in Pratap Rao Bhosle High School.
- These recommendations have been placed before the Ministry of Culture.

Analysis of Background:

About National Monuments Authority:

- The Authority works under the Ministry of Culture.
- The Authority was established as per the provisions of the Ancient Monuments and Archaeological Sites and Remains AMASR (Amendment and Validation) Act, 2010.
- The Authority aims to;
 - Work for the protection and preservation of monuments and sites.
 - Management of the prohibited and regulated areas around the centrally protected monuments.
- Evaluate the permissions for construction-related activity in the prohibited and regulated area.

WORLD HERITAGE SITE

In News:

Ahmedabad has made it to Times Magazine's World's Greatest Places of 2022.

Analysis of Background:

 As India's first UNESCO World Heritage City, Ahmedabad boasts both ancient landmarks and contemporary innovations that make it a mecca for cultural tourism, from the serene Gandhi Ashram that sits on 36 acres on the banks of the Sabarmati River to Navratri, a vibrant nine-day celebration (billed as the longest dance festival in the world. Ahmedabad's Gujarat Science City, a sprawling entertainment center and theme park, unveiled three major attractions last year, including a 20-acre nature park to educate the public on local flora as well as provide new spaces for playing chess and practicing yoga. There is also a new interactive robot gallery that celebrates innovation in robotics and features a towering replica of a Transformer. And Science City's new aquarium, which showcases aquatic species from around the globe, is now India's largest.

About Heritage Sites:

- It is a landmark or area with legal protectionby an international convention administered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO).
- World Heritage Sites are designated by UNESCO for having cultural, historical, scientific or other forms of significance.
- As per the 'Convention concerning the Protection of the World Culturaland Natural Heritage'1972, UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.
- As of July 2021, a total of 1,154 World Heritage Sites (897 cultural, 218 natural, and 39 mixed properties) exist across 167 countries. With 58 selected areas, Italy is the country with the most sites on the list.
- Categories: A World Heritage Site can be either cultural or natural areasor objects which are inscribed on UNESCO's World Heritage List for having "outstanding universal value".
- These sites are usually considered to have cultural significance to all the people in the world, including future generations.

How are they selected?

- According to The Operational Guidelines for the Implementation of the World Heritage Convention, a country must first list its significant cultural and natural sites into a document known as the Tentative List.
- The sites selected from that list move onto the Nomination File, which is then evaluated by the International Council on Monuments and Sites and the World Conservation Union.
- Any site that wasn't first included in the Tentative List cannot be nominated.

- The two bodies then make their recommendations to the World Heritage Committee, which consists of diplomatic representatives from 21 countries.
- The committee meets each year to decide whether a nominated property can be inscribed on the World Heritage List.
- The committee makes the final decision if a site meets at least one of the ten selection criteria.

Can a site lose its designation?

- A site may lose its designationwhen the World Heritage Committee determines if it is not properly maintained or protected.
- It is first placed in the list of World Heritage in Danger as the Committee attempts to find a remedy involving the local authorities. If any remedies fail, the designation is revoked.
- A country can also request the Committee to partially or fully delist a property, generally in such cases when its condition has seriously deteriorated.

How many World Heritage Sites are in India?

- There are currently 32 cultural, seven natural and one mixed World Heritage Sitesin India.
- Oldest sites: Agra Fort, Ajanta Caves, Ellora Caves, and Taj Mahal made it to the list in 1983.
- Latest sites: The latest sites to be added to the list Dholavira in Gujarat, Kakatiya Rudreshwara (Ramappa) Temple in Telangana in 2021.
- There are 46 sites in the Tentative Listincluding a group of monuments at Mandu and the historic ensemble of Orchha in Madhya Pradesh, Satpura tiger reserve, temples of Kanchipuram, temples at Bishnupur in West Bengal, and Sri Harimandir Sahib in Amritsar, Punjab.

Indian Properties inscribed on the World Heritage List (40):

Cultural (32)

- Agra Fort (1983)
- Ajanta Caves (1983)
- Archaeological Site of Nalanda Mahavihara at Nalanda, Bihar (2016)
- Buddhist Monuments at Sanchi (1989)
- Champaner-Pavagadh Archaeological Park (2004)
- Chhatrapati Shivaji Terminus (formerly Victoria Terminus) (2004)

- Churches and Convents of Goa (1986)
- Dholavira: a Harappan City (2021)
- Elephanta Caves (1987)
- Ellora Caves (1983)
- Fatehpur Sikri (1986)
- Great Living Chola Temples (1987,2004)
- Group of Monuments at Hampi (1986)
- Group of Monuments at Mahabalipuram (1984)
- Group of Monuments at Pattadakal (1987)
- Hill Forts of Rajasthan (2013)
- Historic City of Ahmadabad (2017)
- Humayun's Tomb, Delhi (1993)
- Jaipur City, Rajasthan (2019)
- Kakatiya Rudreshwara (Ramappa) Temple, Telangana (2021)
- Khajuraho Group of Monuments (1986)
- Mahabodhi Temple Complex at Bodh Gaya (2002)
- Mountain Railways of India (1999,2005,2008)
- Qutb Minar and its Monuments, Delhi (1993)
- Rani-ki-Vav (the Queen's Stepwell) at Patan, Gujarat (2014)
- Red Fort Complex (2007)
- Rock Shelters of Bhimbetka (2003)
- Sun Temple, Konârak (1984)
- Taj Mahal (1983)
- The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement (2016)
- The Jantar Mantar, Jaipur (2010)
- Victorian Gothic and Art Deco Ensembles of Mumbai (2018)

Natural (7)

- Great Himalayan National Park Conservation Area (2014)
- Kaziranga National Park (1985)
- Keoladeo National Park (1985)
- Manas Wildlife Sanctuary (1985)
- Nanda Devi and Valley of Flowers National Parks (1988,2005)
- Sundarbans National Park (1987)
- Western Ghats (2012)

Mixed (1)

• Khangchendzonga National Park (2016)

TOPIC: HISTORY

ACHARYA PRAFULLA CHANDRA RAY

In News:

Ministry of Culture along with Department of Chemistry, University of Delhi and Vijnana Bharti (VIBHA) organised a curtain raiser for two days International Conference on the "Contributions of Acharya Prafulla Chandra Ray as a Chemist and Freedom Fighter"

Analysis of Background:

- Known as "Father of Indian Chemistry", Prafulla Chandra Ray was a well-known Indian scientist and teacher and one of the first "modern" Indian chemical researchers.
- He discovered the stable compound mercurous nitrite in 1896 and established Bengal Chemical and Pharmaceutical Works Ltd, India's first pharmaceutical company in 1901.
- Also a very passionate and devoted social worker, he did not support the caste system.
- In 1892 with a small capital of 700 INR, he established Bengal Chemical Works. It flourished under his management. The company initially produced herbal products and indigenous medicines. In 1901 the enterprise became a limited company, Bengal Chemical and Pharmaceutical Works Ltd (BCPW) and India's first pharmaceutical company. Gradually, the company expanded and became a leading chemicals and medicine producer.
- Prafulla Ray was interested in ancient texts and after much research published "The History of Hindu Chemistry" in two volumes in 1902 and 1908
- He was elected as the Indian Science Congress President in 1920.
- His autobiography "Life and Experiences of a Bengali Chemist", published in two volumes in 1932 and 1935 documents his own motivations as a scientist and the sweeping changes India was experiencing during his lifetime.
- He was a very passionate and devoted social worker and he participated eagerly and actively in helping famine and flood struck people in Bengal during the early 1920s.
- He promoted the khadi material and also established many other industries such as the Bengal Enamel Works, National Tannery Works and the Calcutta Pottery Works.

NATIONAL FLAG

In News:

The Prime Minister of India has appealed to all the citizens to hoist the National Flag of India in Homes between 13th-15th August to show support for the 'Har Ghar Tiranga' Movement.

Analysis of Background:

About Indian Flag:

- The National flag of India is a rectangular tricolour of;
 - 1. India Saffron
 - 2. White
 - 3. India Green.
- The Flag has Ashoka Chakra, a 24-spoke wheel, in navy blue at its centre.
- The National flag was adopted by the Constituent Assembly in 1947, and it became the official flag of India on 15 August 1947.
- The National flag is based on the Swaraj flag, a flag of the Indian National Congress designed by Pingali Venkayya.
- Usage of the flag is governed by the Flag Code of India 2002 and other laws relating to the national emblems.
- Flag Code of India 2002
- Earlier, the display of the National flag was governed by the provisions of The Emblems and Names (Prevention of Improper Use) Act, 1950 and the Prevention of Insults to National Honour Act, 1971.
- The Flag Code of India, 2002, compiled all the earlier laws, conventions, practices and instructions related to National Flag.
- The Flag Code of India took effect on January 26, 2002.
 - It is a set of laws, practices and conventions for the display of the National flag.
- The code has been divided into 3 parts;
 - Part I General description of the National flag.
 - Part II About the display of the National flag by members of public and private organisations, educational institutions, etc.
 - Part III Related to the display of the National flag by Governments and their organisations and agencies.

- According to the Flag Code of India 2002, there shall be no restriction on the display of the National Flag by the general public, private organizations, educational institutions etc, if they show dignity and honour for the National Flag.
- Description of the National Flag under the Flag code;
 - The Colour of the top panel shall be Saffron (Kesari).
 - The Colour of the bottom panel shall be Green.
 - The middle panel Colour shall be White.
 - Ashoka Chakra in navy blue colour with 24 equally spaced spokes in the middle panel.
- Khadi or hand-spun cloth shall be the only material allowed to be used for the National flag, and a flag made of any other material is punishable by law with imprisonment up to 3 years, and also a fine.
 - Paper Flags should not be discarded or thrown on the ground. As far as possible, it should be disposed of in private with dignity.
 - The privilege of flying the National flag on vehicles is restricted to:
 - The President, Vice-President, Governors and Lieutenant governors of the Indian States and Union Territories.
 - Heads of Indian missions/ posts abroad in other countries.
 - Prime Minister and other Cabinet Ministers; Ministers of State and Deputy Ministers of the Union.
 - Chief Minister and other Cabinet Ministers of a State or Union Territory; Ministers of State and Deputy Ministers of a State or Union Territory.
 - Speaker of the Lok Sabha; Deputy Chairman of the Rajya Sabha; Deputy Speaker of the Lok Sabha.
 - Chairman of Legislative Councils in States; Speakers of Legislative Assemblies in States and Union Territories.
 - Chief Justice of India; Judges of Supreme Court; Chief Justice of High Courts; Judges of High Courts.
 - The Supreme Court bench has said that under Article 19(1)(a) of the Indian Constitution, citizens had the fundamental right to fly the National flag on their premises throughout the year, provided the premises do not undermine the dignity of the national flag.

MANGAL PANDEY

In News:

19th July is the birth anniversary of the 1857 Sepoy Mutiny hero. Prime Minister Narendra Modi paid tributes to the hero of Sepoy Mutiny Mangal Pandey on his birth anniversary, saying he ignited the spark of patriotism at a very critical period and inspired countless people.

Analysis of Background:

- Pandey, a sepoy, had rebelled against his British officers in 1857, triggering a wave of uprising in what came to be regarded by many as India's first war of Independence before the colonial rulers managed to quell it.
- Born in Uttar Pradesh in 1827, he was executed by the British in 1857.
- He was from a high-caste Brahman landowning family that professed strong Hindu beliefs.
- He joined the army of the British East India Company in 1849 and he was made a soldier (sepoy) in the 6th Company of the 34th Bengal Native Infantry, which included a large number of Brahmans.
- He revolted against the East India Company for introducing cartridges that were greased with animal fat as it hurt the religious sentiments of the soldiers.

ALLURI SITARAMA RAJU

In News:

Prime Minister NarendraModi unveils a 30-ftbronze statue of Alluri SitaramaRaju in Bhimavaram (Andhra Pradesh).

Analysis of background:

- He remains an idol for the tribesmen of Andhra Pradesh. He united various tribes, taught them guerrilla warfare and trained them to fight back with the colonial power.
- He was one of the bravest revolutionaries and freedom fighters.
- Alluri Seetarama initiated the famous "Rampa Rebellion" or Manyam Rebellion in 1922-1924.
- During the period of two years, he fought multiple times with the British troops, always winning against them.
- This gave him the title of "ManyamVeerudu" or the "Hero of Jungle".

Causes Of Rampa Rebellion:

• Firstly, the British rule threatened podu cultivation, a type of shifting cultivation where trees and plants are cleared off a patch of land by burning them, and the ashes were

mixed with soil as manure to cultivate new crops. This got banned by the government as they secured forest land for their own use, calling it 'reserved forest'.

- Secondly, the collection of minor forest produce, such as leaves and roots, got banned under the Forest Act of 1882. Tribal people were also forced into labour for the colonial government. While they were subjected to exploitation at the hands of the muttadars, the British laws and system threatened their way of life itself.
- In the year 1986, the Indian Postal Department issued a stamp on his behalf, featuring his struggle for Independence.

TOPIC: GEOGRAPHY

DERECHO

In News:

• Many States in the United States were hit by a storm system called a derecho. The speed of the wind during the storm was around 140 km per hour. The storm has turned the skies green.

Analysis of Background:

Derecho:

- According to the US's National Weather Service 'Derecho' is "a widespread, long-lived, straight-line windstorm" that is associated with a "band of rapidly moving showers or thunderstorms".
- Derecho is a Straight-line storm in which thunderstorm winds have no rotation, unlike a tornado.
- These storms could travel hundreds of miles and cover a large area.
- They fall into 3 categories; Progressive, Serial and Hybrid.
- In Progressive derecho, a short line of thunderstorms travels for hundreds of miles along a relatively narrow path. It is a summer phenomenon.
- In Serial derecho, an extensive wide and long line of thunderstorms travel across a large area. It usually occurs during spring.
- Hybrid derecho has the features of both progressive and serial Derechos.
- Derechos mostly occur across central and eastern parts of the United States.
- Derechos have also been documented in other parts of the world;
 - In 2010, Russia witnessed its first documented derecho.
 - They have been seen in Germany, Finland, Bulgaria and Poland.

ANTARCTIC BILL

In News:

Lok Sabha passed the Indian Antarctic Bill, 2022 moved by Minister of Earth Sciences Dr Jitendra Singh. The Bill aims at having India's own national measures for protecting the Antarctic environment as also the dependent and associated ecosystem.

Analysis of Background:

- The main aim is to ensure de-militarization of the region along with getting it rid of mining or illegal activities. It also aims that there should not be any nuclear test / explosion in the region.
- The bill is in pursuant to India's accession to Antarctic Treaty, the Protocol on Environment Protection (Madrid Protocol) to the Antarctic Treaty and to the Convention on the Conservation of Antarctic Marine Living Resources.
- Bill provides a harmonious policy and regulatory framework for India's Antarctic activities through well-established legal mechanisms and will help in efficient and elective operations of Indian Antarctic Programme.
- It will also facilitate India's interest and pro-active involvement in the management of growing Antarctic tourism and sustainable development of fisheries resources in Antarctic waters.
- It will also help in increased international visibility, credibility of India in Polar governance leading to international collaboration and cooperation in scientific and logistics fields.
- The continuing and growing presence of Indian scientists in Antarctica in the research stations with concurrent commitment to Antarctic studies and protection of fragile Antarctic ecosystem warrants adoption of domestic legislation on Antarctica consistent with its obligations as a member of Antarctic Treaty System.
- The enforcement of such laws will confer Jurisdiction on the courts of India to deal with any dispute or crimes committed in parts of Antarctica.
- Legislation of such a kind will bind the citizens to the policies of the Antarctic treaty system. This will also be useful in building credibility and enhance the status of the Country globally.
- The Bill also proposed to set-up Indian Antarctic Authority (IAA) under the Ministry of Earth Sciences, which shall be the apex decision making authority and shall facilitate programmes and activities permitted under the Bill.

About Antarctica:

- India today has two operational research stations in Antarctica named Maitri (Commissioned in 1989) and Bharati (Commissioned in 2012).
- India has successfully launched 40 annual scientific expeditions to Antarctica till date.
- With Himadri station in Ny-Alesund, Svalbard, Arctic, India now belongs to the elite group of nations that have multiple research stations within the Polar Regions.
- The Antarctic Treaty was signed at Washington D.C. on the 1st December, 1959 and was initially signed by 12 countries. Since then, 42 other countries have acceded to the Treaty. India signed the Antarctic Treaty on the 19th August, 1983 and received the consultative status on the 12th September, 1983.
- The Convention on the Conservation of Antarctic Marine Living Resources was signed at Canberra on the 20th day of May, 1980, inter alia, for the protection and preservation of the Antarctic environment and, in particular, for the preservation and conservation of marine living resources in Antarctica.
- India ratified the Convention on 17th June, 1985 and is a member of the Commission for Conservation of Antarctic Marine Living Resources under that Convention. the Protocol on Environmental Protection to the Antarctic Treaty was signed at Madrid on 4th October, 1991, inter alia, to strengthen the Antarctic Treaty system and for the development of a comprehensive regime for the protection of the Antarctic environment and dependent and associated ecosystems.
- India signed the Protocol on Environmental Protection to the Antarctic Treaty on 14th January, 1998. Antarctica lies south of 60 ñ South Latitude, which is a natural reserve, devoted to peace and science and should not become the scene or object of any international discord.

KALI BEIN

In News:

Punjab Chief Minister has been admitted to Delhi's Apollo Hospital, days after he had drunk a glass of water directly from the Kali Bein, a holy rivulet in Sultanpur Lodhi.

Analysis of Background:

About the 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.

HEAT WAVES IN EUROPE

In News:

Last month, France was blistered again, by a spring heat wave that also affected Spain, Italy and other countries. Then, this month, Poland and other parts of Eastern Europe suffered during a spell of extreme heat.

Analysis of Background:

Heat waves in Europe

Heat waves in Europe, are increasing in frequency and intensity at a faster rate than almost any other part of the planet, including the Western United States.

Why is this happening?

- Global warming plays a role, as it does in heat waves around the world, because temperatures are on average about 1.1 degrees Celsius higher than they were in the late 19th century, before emissions of carbon dioxide and other heat-trapping gases became widespread. So, extreme heat takes off from a higher starting point.
- But beyond that, there are other factors, some involving the circulation of the atmosphere and the ocean, that may make Europe a heat wave hot spot.
- Warming in the Arctic, which is occurring much faster than other parts of the world, may play a role. As the Arctic warms at a faster rate, the temperature differential between it and the equator decreases. This leads to a decrease in summertime winds, which has the effect of making weather systems linger for longer.
- There are also indications that changes in one of the world's major ocean currents, the Atlantic Meridional Overturning Circulation, may affect Europe's climate.

A weakening of the current as the world warmed would cause changes in atmospheric circulation leading to drier summers in Europe.

What is a Heat Wave?

- A heat wave is a period of abnormally and uncomfortably hot and usually humid weather.
- According to the World Meteorological, a heat wave is when the daily maximum temperature for more than five consecutive days exceeds the average maximum temperature by 9 degrees Fahrenheit.

In India, Heat wave is considered if maximum temperature of a station reaches atleast 40 degree C or more for Plains and at least 30 degree C or more for Hilly regions.

MERCURIAL METER

Some of the new and cross-country benchmarks are listed below. Earlier, they used to vary from state to state





Heat wave: 4.5°C to 6.4°C above normal maximum

Severe heat wave: More than 6.4°C above normal maximum

Based on actual maximum temperature

Heat wave: Temperature equal or greater than 45°C

Severe heat wave: Equal or greater than 47°C

Warm night: (Will apply only when maximum temperature remains *40°C or more)* Minimum temperature departure is 4.5°C to 6.4°C

Very warm night: Minimum temperature departure is above 6.4°C



departure from normal

Cold wave: 4.5°C to 6.4°C below normal minimum

Severe cold wave: Anything more than 6.4°C below normal minimum

Based on actual minimum temperature

Cold wave: Minimum temperature is 4°C or lower

Severe cold wave: Minimum temperature is 2°C or lower

Cold day: (Applies when minimum temperature is 10°C or lower in plains and 0°C or lower in hilly regions) Maximum temperature departure is minus 4.5°C to minus 6.4°C

Very cold day: Maximum temperature departure is greater than minus 6.4°C

How do heat waves form?

- A heat wave is formed when static high pressure generated in the upper atmosphere over a region for several days up to several weeks.
- This static high pressure generates a hot mass of air, which is stagnant for many days and week, which resulted the trapping of more heat that also reduce the convention currents.
- The high pressure acts as a barrier and forces the mass of air to sink to the surface of the land that prevents heat to rise.
- This hot mass of air accumulates only heat and humidity without any trace of precipitation that causes abnormally high temperatures. It is very often during the summer season, from May to November in the northern hemisphere.
- The seal keeps out convection currents that form clouds and eventually rain clouds, both of which would help the area affected cool off.
- Instead the result is a heat wave that has both high heat and high humidity near the ground.
- These heat waves can last from days to weeks.

Implications of Heat Waves:

Social impacts

- Extreme heat can lead to heat-related illness and death, particularly in elderly populations, the poor, outdoor workers, and in urban areas.
- Heat waves exacerbate the urban heat island effects, amplifying temperatures in built environments, and resulting in poorer air quality due to the creation of ozone that negatively impacts health.
- Heat-related mortality is expected to be higher in cities, particularly those characterized by high population density, inequalities, limited access to health care, high pollution levels and fewer green spaces.

Economic impacts

- Multiple areas of the economic sector experience reduced worker productivity during heatwaves, especially agriculture and construction.
- Globally, 2% of total working hours is projected to be lost every year, either because it is too hot to work or because workers have to work at a slower pace.
- Lost productivity from heat stress at work, particularly in developing countries, is expected to be valued at \$4.2 trillion dollars per year by 2030, driving more inequality.

- The agricultural sector, where 940 million people earn their livelihood, is set to be harder hit by hotter temperatures, pushing workers, crops and livestock past their physiological heat and drought tolerances.
- This will result in lost labour, in smaller harvests for farmers, higher prices for consumers, and negative impacts on livelihoods.
- A World Bank report suggests that by 2050, about 600 million Indians will live in places that could experience loss of living standards, which could cost 2.8% of the GDP, stalling efforts to pull large parts of the population out of poverty.
- Increasing energy demand for cooling also comes as an extensive economic cost to residents, businesses, and governments.
- With these extreme heat events, the need for access to cooling should be viewed as a basic necessity – not just for health and productivity reasons but, in some cases, even for survival.

Ecological impacts

- Heatwaves, without concomitant increases in precipitation, can lead to water shortages and increased stress for plants, particularly in arid regions.
- This has the effect of reducing plant growth, the basis of energy production and the food chain, with an overall drying-out of the landscape.
- For example, the 2003 European heatwave resulted in a 10% loss in glacier mass in Europe, which was five-times more than the average annual loss.
- Similar impacts were reported for the French Alps in 2019.
- Over time, such deep permafrost warming and thawing could cause landslides and rock falls, continuing the negative ecological impacts.

How long can a heatwave spell last?

- A heatwave spell generally lasts for a minimum of four days.
- On some occasions, it can extend up to seven or ten days.
- The longest recorded heatwave spell, in recent years, was between 18 31 May 2015.
- This spell had severely affected parts of West Bengal along with Odisha, Andhra Pradesh, and Telangana.
- A similar spell in 2014 was reported during June 2 June 11.

Does all of India experience heat wave conditions?

• Heatwaves are common over the Core Heatwave Zone (CHZ) — Rajasthan, Punjab, Haryana, Chandigarh, Delhi, West Madhya Pradesh, Uttar Pradesh, Chhattisgarh,

Orissa, Vidarbha in Maharashtra, parts of Gangetic West Bengal, Coastal Andhra Pradesh and Telangana, as categorised by India Meteorological Department.

- Several recent studies indicate that CHZ experience more than six heatwave days per year during these four months.
- Many places in the northwest and cities along southeastern coast report eight heatwave days per season.
- However, the regions in the extreme north, northeast and southwestern India are lesser prone to heatwaves.

GENERAL STUDIES – II

TOPIC: POLITY/GOVERNANCE

UNIFORM CIVIL CODE

In News:

The Union Law Minister has stated in the Rajya Sabha that the government has no plan to set up a committee to implement the Uniform Civil Code (UCC). The Minister has clarified that the Government has requested the Law Commission of India to examine various issues relating to Uniform Civil Code and to make recommendations.

Analysis of Background:

- Recently the Uttrakhand State Government announced the formation of an expert committee for the implementation of a Uniform Civil Code.
- The expert committee will review the laws governing marriage, divorce, maintenance, inheritance, adoption and other personal laws.
- Retired judge Justice Ranjana Prakash Desai will head the expert committee.
- The committee will examine all laws and matters related to personal law across communities, and draft a uniform civil code.

About Uniform Civil Code:

• Uniform Civil Code comes under Article 44 of the Indian Constitution, which lays down that the state shall aspire to secure a Uniform Civil Code for the citizens throughout the territory of India.

• The Uniform Civil Code (UCC) calls for the formulation of one law for India, which would apply to all religious communities in matters such as marriage, divorce, inheritance, and adoption.

Origin of Uniform Civil Code:

- The origin of the UCC dates back to colonial India when the British government submitted its report in 1835 stressing the need for uniformity in the codification of Indian law relating to crimes, evidence, and contracts, specifically recommending that the personal laws of Hindus and Muslims be kept outside such codification.
- An increase in legislation dealing with personal issues at the far end of British rule forced the government to form the B N Rau Committee to codify Hindu law in 1941.
 - The task of the Hindu Law Committee was to examine the question of the necessity of common Hindu laws.
 - The committee, in accordance with scriptures, recommended a codified Hindu law, which would give equal rights to women.
 - The committee recommended a civil code of marriage and succession for Hindus.
- The Hindu Code Bill
 - The draft of the Rau Committee report was submitted to a select committee chaired by B.R Ambedkar that came up for discussion in 1951 after the adoption of the Constitution.
 - While discussions continued, the Hindu Code Bill lapsed and was resubmitted in 1952.
 - The bill was then adopted in 1956 as the Hindu Succession Act to amend and codify the law relating to intestate or unwilled succession, among Hindus, Buddhists, Jains, and Sikhs.
 - The Act reformed the Hindu personal law and gave women greater property rights, and ownership.
 - It gave women property rights in their father's estate. The daughter is allotted the same share as is allotted to a son.

Arguments in Favor of Uniform Civil Code:

- A Secular republic needs a Common law for all Citizens rather than differentiated rules based on religious Practices.
- Courts also Suggested in their judgments' that the government should move toward a uniform civil code including the judgments in the Shah Bano Case.

- It will address the discrimination against vulnerable groups and harmonies with diverse cultural groups across the country.
- Ensure gender justice, and promote women empowerment.
- The code will simplify the complex laws around marriage ceremonies, inheritance, succession, and adoptions making them one for all. The same civil law will then apply to all citizens irrespective of their faith.
- Dr B R Ambedkar, while formulating the Constitution had said that a UCC is desirable but for the moment it should remain voluntary, and thus it was added as a part of the Directive Principles of the State Policy in part IV of the Constitution of India as Article 44.

Arguments against Uniform Civil Code:

- Cultural diversity cannot be compromised to the extent that our urge for uniformity itself becomes a reason for a threat to the territorial integrity of the nation.
- Diversity, both religious and regional, Should not get subsumed under the louder voice of the majority.
- Article 25 of the Indian constitution preserves the freedom to practice and propagate any religion that gets into conflict with the concepts of UCC.
- Fundamental Rights v/s DPSPs: Fundamental rights are justiciable whereas DPSPs are non-justiciable and optional for the state.
- The demand for a uniform civil code has been framed in the context of communal politics. A large section of society sees it as majoritarianism under the garb of social reform.

AMENDMENTS TO THE WAREHOUSING (DEVELOPMENT AND REGULATION) ACT OF 2007 In News:

The Union Food and Public Distribution Ministry has suggested major amendments to the Warehousing (Development and Regulation) Act of 2007.

Analysis of Background:

- The Government enacted the Warehousing (Development and Regulation) Act, in 2007. The WDRA was established in 2010.
- The main objectives of the Warehousing (Development and Regulation) Act, 2007 are to make provisions for the development and regulation of warehouses, negotiability of warehouse receipts, establishment of a Warehousing Development and

Regulatory Authority (WDRA) and related matters. The Negotiable Warehouse Receipts (NWRs) issued by the warehouses registered under this Act would help the farmers to seek loans from banks against NWRs and will avoid distress sale of agricultural produce. It is beneficial for a number of other stakeholders such as banks, financial institutions, insurance companies, trade, commodities exchanges as well as consumers.

• WDRA was established to ensure scientific storage by prescribing infrastructural and procedural standards. Captive warehouses such as the FCI are excluded from the ambit of the Act.

Amendments:

- At present, registration with the Warehousing Development and Regulation Authority (WDRA) is optional. After the proposed amendment, the central government plans to make it mandatory for third-party warehouses that stock agricultural commodities to register with Warehousing Development Authority by amending the Warehousing (Development & Regulations) Act (WDRA).
- Central government will have powers to exempt any class of warehouses from registration with the Authority. This will ensure a gradual and non-disruptive change to a regulated warehousing system.
- The composition of the authority will also be increased to six from three.

Concern:

- The Samyukt Kisan Morcha said the repealed Act had also talked about similar provisions such as electronic trading in transaction platform and freedom for trading at farmgate, cold storage, warehouse and processing units.
- This would just help some big corporate houses so that they gain even more control over the warehousing and cold storage sector.

Significance:

- The proposed amendment will also strengthen Warehousing Development and Regulatory Authority, giving it enforcement powers.
- The proposed amendment will encourage scientific warehousing ecosystems, thus helping farmers store their produce in scientific godowns, an official aware of the development. It will also make it compulsory for warehouse operators to issue digitised negotiable warehouse receipts (NWR), making the system more transparent.
- Lending institutions like banks will have access to NWR repositories, thereby increasing ease of lending.
- Farmers can pledge to get bank loans against their agri-produce kept in warehouses.

 While the government will start with registration of warehouses with capacity of 5,000 metric tonnes and above, it will later move on to bring under its purview all warehouses up to 100 metric tonnes capacity, thus bringing under its ambit a lot of warehouses at the farm gate and benefiting farmers directly.

PM DAKSH YOJANA

In News:

The Union Minister of State for Social Justice and Empowerment has updated Rajya Sabha about the steps taken under PM DAKSH Yojana.

Analysis of Background:

Steps were taken under PM DAKSH Yojana:

- The Minister said that the total amount of funds released under the Yojana for the year 2022-23 is Rs.84 crores.
- The Department of Social Justice and Empowerment has launched PM-DAKSH Portal and PM-DAKSH Mobile App.

About PM-DAKSH Yojana:

- The Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi (PM-DAKSH) Yojana was launched in 2021, by the Minister of Social Justice and Empowerment.
- PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi) Yojana is a National Action Plan for skilling marginalized persons covering SCs, OBCs, EBCs, DNTs, Sanitation workers including waste pickers.
- Support artisans to improve their revenue generation capacities within their practising vocations.
- Empower Women to enter into self-employment thereby financially empowering themselves without neglecting their domestic activities.
- Encourage Youth from the target groups to acquire long-term training and specialization in employable vocations giving them better standing in the job market.
- The Union Minister for Social Justice and Empowerment also launched the 'PM-DAKSH' Portal and 'PM-DAKSH' Mobile App.

Key Features of the Scheme

- Beneficiaries between the age of 18-45 years.
- Free of cost for training, 100% grants by the Government.

- Support of Rs.1,000/- to Rs.1,500/- per month per trainee having 80% and above attendance in short-term and long-term training.
- Wage compensation @ Rs.3000/- per trainee having 80% and above attendance in Reskilling/Up-skilling.
- Trained candidates will be provided certification after successful completion of training and assessment.
- Trained candidates will be provided placement after assessment and certification.

STATUS OF JAMMU AND KASHMIR

In News:

- The Union Defence Minister has highlighted that Jammu and Kashmir would always be an integral part of India.
- He also mentioned that Pakistan-occupied Kashmir (PoK) and Gilgit-Baltistan were illegally occupied by Pakistan.
- He stated that Article 370 was an artificial legal barrier. Its abrogation brought new hope to the people.

Analysis of Background:

- The state of Jammu and Kashmir was accorded special status by Article 370 of the Constitution of India.
 - Jammu and Kashmir had their constitution, flag and administrative autonomy.
 - Indian citizens from other states were not allowed to purchase land or property in Jammu and Kashmir.

Present Status of Jammu and Kashmir:

- Jammu and Kashmir lie to the north of the Indian states of Himachal Pradesh and Punjab and to the west of Ladakh, which is also subject to the dispute as a part of Kashmir, and administered by India as a union territory.
- Some areas have been disputed between India and Pakistan since 1947 and between India and China since 1962.
- The Line of Control separates Jammu and Kashmir from the Pakistani-administered territories of Azad Kashmir and Gilgit-Baltistan in the west and north.
- Unrest and violence persisted in the Kashmiri Valley and, following a disputed state election in 1987, an insurgency persisted in protest over autonomy and rights.

- A resolution to repeal Article 370 was passed by both the houses of the Parliament of India in August 2019. At the same time, a reorganization act was also passed, which reconstituted the state into two union territories, Jammu and Kashmir and Ladakh. The reorganisation took effect on 31 October 2019.
 - This also suspended Article 35A.
 - Article 35A had allowed J&K to define who its 'permanent residents' are and what rights and privileges are attached to such residency.
- Currently, the union territory of Jammu and Kashmir is administered under Article 239 of the Constitution of India.
- Article 239A, originally formulated for the union territory of Puducherry, will also apply to Jammu and Kashmir.
- The union territory is under the jurisdiction of the Jammu and Kashmir High Court, which also serves as the high court for Ladakh.
- In Parliament: Jammu and Kashmir now have 5 Lok Sabha Seats and 4 Rajya Sabha Seats.

Key facts about Jammu and Kashmir:

- Jammu and Kashmir is home to several valleys such as the Kashmir Valley, Tawi Valley, Chenab Valley, Poonch Valley, Sind Valley and Lidder Valley.
- The Himalayas divide the Kashmir valley from the Tibetan plateau while the Pir Panjal range, which encloses the valley from the west and the south, separates it from the Punjab Plain of the Indo-Gangetic Plain.
- The Jhelum River is the major Himalayan river which flows through the Kashmir valley. The Tawi, Ravi and Chenab are the other important rivers flowing through the region.
- The union territory of Jammu and Kashmir is divided into 20 districts and consists of two divisions: the Jammu Division and the Kashmir Division.
- Important Tribes; Gujjar, Bakerwal, and Gaddi.
- The most widely spoken language in Jammu and Kashmir is Kashmiri, the mother tongue of 52.72% of the population according to the 2011 census. The second most spoken language is Dogri, spoken by 20% of the population.
- According to the 2011 census, the literacy rate in Jammu and Kashmir was 67.17%.

KARGIL VIJAY DIWAS

Details of Kargil Vijay Diwas:

- The 1999 Kargil war was fought by the Indian Army to recapture the Indian territories from Pakistan intruders in the Kargil-Drass sector in 1999.
- In the war, India came out victorious on July 26, 1999.
- 26 July is marked as the Kargil Vijay Diwas to show respect and gratitude to the armed forces personnel who sacrificed their lives during the war.

Kargil War:

- The Kargil War took place in 1999 from 3rd May-26th July.
- The war was fought in the Kargil district of Kashmir and along the Line of Control (LOC).
- Indian Army launched 'Operation Vijay' to clear the infiltration Kargil sector from Pakistani soldiers and Kashmiri militants on the Indian side of the Line of Control.
- Indian Air Force launched the 'Safed Sagar' operation; it was a major part of the Kargil war.
- India lost more than 500 military men on the Kargil territory.
- The 60-day-long war resulted in the loss of several lives on both sides; India eventually won the war by regaining control of all the previously held territory.

GUIDELINES ON BAIL AND ARREST

In News:

Recently the Supreme Court of India in the Satender Kumar Antil vs CBI case has laid down new guidelines on arrests to ensure compliance with the provisions of the Code of Criminal Procedure, 1973. The Court has also highlighted the need to bring reforms in the Bail-related law.

Analysis of Background:

- The Code of Criminal Procedure (CrPC) was drafted in 1882 and it continues to be in use with amendments from time to time.
- The CrPC does not define the word bail in the draft but only categories offences under the Indian Penal Code (IPC) as 'bailable' and 'non-bailable'.

Suggestions by Supreme Court

• The Supreme Court has released guidelines on certain procedural issues for the police and judiciary.

- The court has raised concern over the fact that the CrPC, despite amendments since Independence, largely retains its original structure as drafted by a colonial power over its subjects.
- The court has stated that the magistrates do not necessarily exercise their discretionary powers uniformly.
- The court suggested framing a separate law that deals with the grant of bail.
- The court has raised concern over too many arrests, specifically for non-cognisable offences.
- The Supreme Court has also directed all state governments and Union Territories to avoid indiscriminate arrests.

Bail Provisions under the Indian Law:

- Bail is the temporary release of the accused in a criminal case in which the court has a trial pending and is yet to announce the judgement.
- Bail is granted to the convicted person after submitting a personal bond or assurance to follow the conditions imposed by the court.
- A person can apply for bail, at the moment he/she is arrested.
- The accused can get bail for a non-bailable offence.
 - Bail can be obtained from Sessions Court or High Court, depending upon the seriousness of the offence the accused is charged with and the discretion of the court.
- For a bailable offence: A person doesn't need to go to court, as it is given by the Police Officer.

TYPES OF BAILS IN INDIA

- Regular Bail is granted to the person who has been arrested or is in police custody.
- Interim Bail is a short-term bail granted for a short period.
- It is granted before the hearing for the grant of anticipatory bail.
- Anticipatory Bail; A person can apply for anticipatory bail when he/she finds out that he or could be arrested for a non-bailable offence.
- At the time of granting anticipatory bail the Court imposes certain terms and conditions which if violated, the Court may cancel the anticipatory bail.

| Basis for | BAIL | PAROLE | PROBATION |
|----------------|---------------------------------------|-----------------------------------|--------------------------------|
| comparison | | | |
| | The term bail refers to paying a | A parole is when a person | Probation is the suspension of |
| | certain amount to the government | gets some time off from their | sentence of an offender and |
| | in return of freedom before the | jail sentence in order to fulfill | allowing them to stay in the |
| | date of the trial. A parole is really | some requirements | community while inculcating |
| Meaning | different from a bail. | | good behavior, under the |
| | | | supervision of an officer. |
| What is it | Conditional Release from jail | Conditional release from jail | It is an alternative to jail |
| Act Applicable | Criminal Procedure Code, 1973 | Prison Act, 1894 | The Probation Offenders Act, |
| | | Prisoner Act, 1900 | 1958. |
| | | The Prisons (Bombay | Criminal Procedure Code, |
| | | Furlough and Parole) Rules, | 1973 |
| | | 1959 | |
| Awarded by | Judge | A Parole Board | Judge |
| | | | |
| | at the beginning of the trial before | Parole is granted to the | Probation is granted to the |
| | going to jail or while serving a | accused after serving a | offender before going to jail |
| When granted | prison sentence | specific period of | |
| | - - | imprisonment | |
| | It is granted to the Accused before | It is granted to convicts that | It is granted to first time |
| Grant to Whom | trial of the matter or accused | are already serving the jail | offenders and crimes that do |
| | already serving the jail term | term | not involve violence. |
| | | | |
| | Required to Pay Bail Amount | Not required | Court May be imposed cost at |
| Payment/Cost | before the Court | | the time of release or may |
| | | | release the offender after |
| | | | giving instruction. |
| | Requires no supervision, but the | supervision is required, | supervision is required, |
| Supervision | Accused is expected to show up at | | |
| | the trial. | | |

Significance of Bail Provisions

- Bail is an essential element of any criminal justice system, as it guarantees the right to a fair trial for the accused.
- It is needed to safeguard the fundamental right to liberty, as mentioned under Article 21 "No person shall be deprived of their liberty unless prescribed so by a reasonable, fair, and just procedure".
- According to the Supreme Court of India, Bail is a measure to balance the personal freedom of the accused and the public interest. Therefore the release is conditional.

SUSPENSION OF MPs IN INDIA

In News

Recently 19 Opposition members were suspended from the Rajya Sabha for a week.

Analysis of Background:

Reason for suspending an MP

 It is the role and duty of the Presiding Officer; Speaker of Lok Sabha and Chairman of Rajya Sabha to maintain order in the House to ensure smooth functioning of the house.

- 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.
- The MPs were suspended for "unruly behaviour".

Rules under which the Presiding Officer acts

- Rule Number 373 of the Rules of Procedure and Conduct of Business says: "The Speaker, if he believes that the conduct of any Member is grossly disorderly, may direct such Member to withdraw immediately from the House, and any Member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting."
- Rule 374 says: The Speaker may name a Member who disregards the authority of the Chair or abuses the rules of the House by persistently and wilfully obstructing the business thereof.
- Like the Speaker in Lok Sabha, 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.

RIGHT TO REPAIR

In News:

The Ministry of Consumer Affairs, Food and Public Distribution have set up a committee to develop a comprehensive framework for 'Right to Repair'. The Committee is chaired by Nidhi Khare.

Analysis of Background:

- Normally the manufacturers maintain control over the supply of spare parts, including their design.
- The Union government has raised concern over this, and stated that this kind of monopoly on repair processes violates the customer's "right to choose".

 Warranty cards of many products highlight that products repaired from the outside would not be recognised by the makers and the customers would also lose their warranty benefit.

Details:

- Recently, the committee for 'Right to Repair' held its first meeting where essential sectors for 'Right to Repair' were identified.
 - The members have discussed key issues including farming equipment, mobile phones/ tablets, consumer durables and automobiles/automobile equipment were listed out.
- They raised concern over various issues including;
 - Several Companies avoid the publication of manuals that can help users to make repairs easily.
 - Manufacturers have control over spare parts.
 - Monopoly on repair parts and processes violates the customer's "right to choose".
- They discussed various international practices and steps that have been taken by other countries.
- The Committee has given many suggestions including:
 - Companies should provide complete knowledge and access to manuals, and software updates.
 - The parts and tools of devices should be made available to third parties, including individuals so that the product can be repaired in case of minor issues.
- The Committee highlighted that once "Right to Repair" is adopted in India, it will become a "game-changer" for the sustainability of the products and also promote employment generation.

Right to Repair:

- The core value behind the 'Right to Repair' is that when customers buy a product, they own it completely, and they have the right to repair and modify the product with ease and at a reasonable cost, without being dependent on the manufacturers.
- The objective is to empower consumers, coordinate trade between the original equipment manufacturers and the third-party buyers and sellers, and reduce e-waste.
- The 'Right to Repair' has been recognised in many countries, including the US, UK and European Union

GOAL 2.0

In News:

The Union Minister for Tribal Affairs has stated in the Lok Sabha that the second phase of the GOAL Programme (GOAL 2.0) was launched recently to promote digital empowerment among tribal youth.

Analysis of Background:

About GOAL Programme:

- GOAL (Going Online as Leaders) is a joint initiative of the Ministry of Tribal Affairs and Meta (formerly Facebook).
- The main objective of the programme is to ensure the digital empowerment of tribal youth and women.

1st Phase of GOAL Programme

- The first phase of the GOAL programme was launched as a pilot project in May 2020.
- During the 1st Phase; Tribal youth were provided with more than 40 hours of training across three-course:
 - Communication and Life Skills.
 - Enabling Digital Presence.
 - Leadership and Entrepreneurship.
- The Goal programme is fully funded by Meta (Facebook India).
- During the 1st phase, 176 tribal youth from 23 States across India were selected through an online application process.
 - $_{\circ}$ $\,$ They were given a Smartphone and Internet Connectivity by Facebook.

2nd Phase of GOAL Programme:

- The 2nd phase of the GOAL Programme (GOAL 2.0) was launched in June 2022.
- The main objective is to digitally upskill and empower tribal youth by promoting entrepreneurship and opening up opportunities for them using digital technology.
- It will be open to all people from tribal communities.
- The program promotes skill development and digitally empowers tribal youth via Facebook digital learning tool.
- The programme is fully funded by Meta (Facebook India) and the Ministry of Tribal Affairs has not provided any funds for the implementation of the program.

HATE SPEECH

In News:

The Supreme Court of India has asked the Union and States to explain the actions taken against hate speeches. The court suggested Union and State governments adopt a zero-tolerance attitude toward hate crimes.

Analysis of Background:

The Court had defined that hate crimes are the product of intolerance, ideological dominance and prejudice. The court had directed State governments to create special task forces to prevent hate crimes.

The Court made it clear that hate speeches are an attack on individuals' dignity and against the constitutional rights and values of freedom of thought, expression, belief, faith and worship, and it also threatened the unity of the nation as a whole.

About Hate Speech:

- Hate speech can be defined as "Any kind of communication; in speech, writing or behaviour that attacks or uses derogatory or discriminatory language with reference to a person or a group based on their religion, ethnicity, nationality, race, colour, descent, gender or other identity factors."
- It is an act of using threatening words or Signs within the hearing or sight of a person to create fear.
- It has become one of the biggest challenges to the rule of law and our democratic structure.
- Hate speech is a serious global challenge; Recently Facebook, in its Transparency Report, disclosed that it ended up taking down 3 million hateful posts from its platform while YouTube removed 25,000 posts in one month alone.

Concern:

- The criminal law or the Constitution does not define hate speech.
- Hate Speech is the root of many forms of violence that are being committed.
- One of the most visible effects of hate speech is growing electoral mobilization along communal lines.
- It not only negatively affects the human rights values but also affects the socioeconomic development of the nation and also undermines constitutional values.
- Hate speech has reached a systemic presence in the media and the internet, from electoral campaigns to everyday life.

- Abusive speech directed against minority communities, disinformation campaigns on TV channels and Social Media, trolling and fake news are becoming the new normal.
- In 2019, the Supreme Court criticized the Election Commission, dubbing it "toothless" for not taking action against candidates engaging in hate speech during the election campaigns.

Provisions under Present laws to deal with Hate Speech

- There are many laws signified to curb hate speech.
- Sections 153A, 295A and 298 of the Indian Penal Code, criminalize the promotion of hostility between different groups of people on grounds of religion and language.
- Section 125 of the Representation of People Act states that any person during an election campaign promoting feelings of hostility and hatred on grounds of religion and caste is punishable with imprisonment up to 3 years and a fine or both.

Suggestions to curb the menace of Hate Speech

- Monitoring and analyzing hate speech trend
 - Authorities must recognize, monitor, collect data and analyze hate speech trends.
- Addressing root causes, drivers and actors of hate speech
 - Government should adopt a common understanding of the root causes and drivers of hate speech to take relevant action to best address and/or mitigate its impact.
 - $_{\circ}$ $\,$ Government should also identify and support actors who challenge hate speech.
- Engaging and supporting the victims of hate speech
 - Government should show solidarity with the victims of hate speech and enforce human rights-centred measures which aim at countering hate speech and escalation of violence.
- Promote measures to ensure that the rights of victims are upheld, and their needs addressed, including through advocacy for remedies, access to justice and psychological counselling.
- The government must also engage private sector actors, including social media companies, to address and counter hate speech, encouraging partnerships between government, industry and civil society.
- Raise awareness about respect for human rights, non-discrimination, tolerance and understanding of other cultures and religions, as well as gender equality, including in the digital world.
- We should promote intercultural, interfaith and interreligious dialogue and mutual understanding.

 Citizens' support must be used to address, counter and mitigate the impact of hate speech, as well as counteract its bearing, without restricting the right to freedom of expression.

PM KUSUM

In News:

The Union Minister of State for New and Renewable Energy (MNRE) has stated in the Lok Sabha that the government has started the PM-KUSUM with the objectives of;

- De-dieselisation of the farm sector.
- Providing water and energy security to farmers.
- Increasing the income of farmers and curbing environmental pollution.

Analysis of Background:

About PM Kusum:

- The Ministry of New and Renewable Energy (MNRE) has launched the Pradhan Mantri Kisan Urja Suraksha evem Utthan Mahabhiyan (PM KUSUM) Scheme for the installation of solar pumps and grid-connected solar and other renewable power plants in the country.
- The scheme aims to add solar and other renewable capacities of 25,750 MW by 2022 with a total central financial support of Rs. 34,422 Crore including service charges to the implementing agencies.

The Scheme consists of three components:

- Component A: 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants of individual plant size up to 2 MW.
- Component B: Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps of individual pump capacity up to 7.5 HP.
- Component C: Solarisation of 10 Lakh Grid-connected Agriculture Pumps of individual pump capacity up to 7.5 HP.

Significance of the Scheme

• Increase in income: This program provides landowners with a stable and continuous source of income for 25 years by using dry /non-cultivable land.

- Employment: It will also help increase green energy production and create jobs in rural areas, later enabling the government sector to solarize pipe wells and pump water irrigation projects.
- Energy availability and security: This system makes available local solar/other renewable energy sufficient to power rural load centres and agricultural pump units that primarily need electricity during the day.
- Reduction of transmission loss: These power plants are distributed near agricultural loads or substations, reducing transmission losses for STUs and Discom. In addition, this program helps Discom achieve its RPO goals.
- Cost reduction: Solar pumps save diesel costs for operating diesel pumps and provide farmers with a reliable source of irrigation through solar pumps.
- Environmentally Friendly: This program helps prevent harmful pollution from the operation of diesel pumps.
- Achieve national goals: This supports India's commitment to increase the percentage of installed electricity capacity from non-fossil fuels to 40% by 2030.

Challenges

- Regulation: Very few federal states have started bidding or commissioning projects for solar feed-ins or grid-connected pumps.
- Operational and technical: Discoms are more utility than distributed PV (under the program) because of the higher cost of distributed PV and the loss of location benefits due to the exemption from interstate transmission system (ISTS) fees.
- Financially: The current barriers to their introduction are concerns about their economic feasibility in the face of high agricultural subsidies, supplying excess electricity when selling water or irrigating additional land.
- Lack of Credit: In addition, many unsecured farmers do not have access to bank credit.
- Lack of trust: The grid connection model requires the pump to be measured and billed for billing, but lacks trust between the farmer and the nightclub.
- Awareness: barriers include limited awareness of solar pumps and the inability of farmers to pay upfront payments.
- COVID: The pandemic turmoil, limited purchases from the state, and implementation challenges all affected the implementation of the program.

PRESIDENT AND VICE-PRESIDENT ELECTION In News:

The Election Commission of India has scheduled the President of India election on 18th July. The tenure of the 15th President of India 'Ram Nath Kovind' will come to an end on 24th July 2022.

Analysis of Background:

- According to Article 62 of the Indian Constitution, an election to the President post due to the expiration of the office term shall be completed before the term ends
- The Commission has also scheduled the election for the post of Vice-President on 6th August.
- The tenure of the present vice-president will end on 10th August.

President of India:

- Part V of the Indian Constitution precisely deals with the Union executive from Articles 52 to 78.
- The President, Vice-President, Prime Minister, Council of Ministers, and Attorney General of India constitute the Union executive.
- He is India's first citizen and symbolises the country's unity, integrity, and solidarity.

Eligibility:

- The candidate should be an Indian citizen.
- Should have completed the age of 35 years.
- Should be qualified for election as a member of the Lok Sabha.
- Should not hold any office of profit under the Union Government or any state government or any local or other authority.
- The President should not be a member of any house of Union or State legislature.

Election of the President

- The President of India is elected by an electoral college consisting of:
 - Elected members of the two Houses of Parliament and Legislative Assemblies of the States.
 - It includes the national capital territory of Delhi and the Union territory of Pondicherry.
- The President's election is held under a system of proportional representation through a single transferable vote.

Presidents' Term of Office:

- The oath of office to the President is administered by the Chief Justice of India and in his absence, by the senior-most judge of the Supreme Court available.
- According to Article 62 (1), An election should be held to fill the vacancy of the Presidential post before the expiration of the President's term.
- The President holds office for a five-year term from the date on which he enters the office.
- The President can resign at any time by addressing the resignation letter to the Vice-President of India.
- When a vacancy occurs in the President's office due to his death, resignation or removal or otherwise, the Vice- president acts as the President until a new President is elected.
- An election to fill such a vacancy should be held within 6 months from the date of occurrence of such vacancy.
- A person is eligible for re-election to the Presidential office.

Impeachment of President:

- According to Article 61, the President may be impeached from his office for violation of the constitution.
- The impeachment charges may be initiated by either Lok Sabha or Rajya Sabha and they should be signed by at least 1/^{4th} members.
- Regarding the charges, a 14 days notice should be given.
- The resolution of the charges for the impeachment of the President should be passed by at least 2/3rd majority.
- Afterwards, the charges are investigated in the other House of Parliament.
- If the resolution is passed in this House also with a 2/3rd majority, then the President stands removed from his office from the date on which the bill is passed.

Vice-President

- The Vice-President occupies the second-highest constitutional office in the country.
- This office is modelled on the lines of the American Vice-President.
- Article 63: There shall be a Vice-President of India. The office cannot remain vacant.
- The Vice-President holds office for a term of five years from the date on which he enters his office.

- He can continue to be in office, irrespective of the expiry of the term until the success or assumes office.
- He can resign from his office at any time by addressing the resignation letter to the President.
- A formal impeachment is not required for his removal.
- He can be removed by a resolution of the Rajya Sabha passed by an absolute majority (ie, a majority of the total members of the House) and agreed to by the Lok Sabha.
- He is also eligible for re-election to that office. He may be elected for any number of terms.

Election:

- The Electoral College is different from the Electoral College for the election of the President in the following two respects:
- It consists of both elected and nominated members of the Parliament (in the case of the president, only elected members).
- It does not include the members of the state legislative assemblies (in the case of the President, the elected members of the state legislative assemblies are included).

Qualification:

- To be eligible for election as Vice-President, a person should fulfil the following qualifications:
 - He should be a citizen of India.
 - He should have completed 35 years of age.
 - $_{\circ}$ $\,$ He should be qualified for election as a member of the Rajya Sabha.
 - He should not hold any office of profit under the Union government or any state government or any local authority or any other public authority.
- He should not be a member of either House of Parliament or a House of the state legislature.
 - If any such person is elected Vice-President, he is deemed to have vacated his seat in that House on the date on which he enters his office as Vice-President.
- He should not hold any other office of profit.

The function of the Vice President:

- He is the Chairman of the Rajya Sabha. Vice-President presides over the Rajya Sabha.
- The Vice-President acts as President when there is a vacancy in the office of the President.

- The vacancy may occur for reasons of death, resignation, removal by impeachment or otherwise.
- He discharges the functions of the President when the President is unable to perform his functions.
- The reasons may also include the absence of the President from India or illness or some other cause.
- He is not a member of the Rajya Sabha; he has no right to vote but can exercise a —Casting Vote.
- When Vice-President is acting as, or discharging the functions of the President, have all the powers and immunities of the President and be entitled to such emoluments, allowances, and privileges as may be determined by the Parliament by law and, until provision in that emoluments, allowances, and privileges as are specified in the Second Schedule.
- When he acts as the President, he will not draw the salary of the Chairman of the Council of State as he ceases to perform these duties as the Chairman.

PM CARES

In News:

The Delhi High Court has passed a judgement to stay the Central Information Commission (CIC) order to the Income Tax Department to provide all the copies of the documents submitted by PM CARES Fund while applying for exemption under the Income Tax Act.

Analysis of Background:

About PM-CARES Fund

- PM CARES Fund has been registered as a Public Charitable Trust under the Registration Act, 1908.
- Prime Minister is the ex-officio Chairman of the PM CARES Fund and the Minister of Defence, Minister of Home Affairs and Minister of Finance, of the Government of India, are ex-officio Trustees of the Fund.
- The fund consists entirely of voluntary contributions from individuals/organizations and does not get any budgetary support.
- Donations to the Fund would qualify for 80G benefits for 100% exemption under the Income Tax Act, 1961.
- Donations to the Fund will also qualify to be counted as Corporate Social Responsibility (CSR) expenditure under the Companies Act, 2013.

- It has also got exemption under the Foreign Contribution Regulation Act (FCRA), which enables PM CARES Fund to accept donations and contributions from individuals and organizations based in foreign countries.
- PM-CARES Fund is not a public authority under the Right to Information Act (RTI), 2005.
- The Comptroller and Auditor General's (CAG) clarified that it wouldn't audit the Fund as it is 'a charitable organization' and is also based on donations from individuals and organizations.
- It would be audited by an independent auditor outside of the government.

Eligibility criteria under PM CARE

- PM-CARE covers all children who have lost: Both parents Surviving parents or legal guardians/adoptive parents/single adoptive parents due to COVID 19 pandemic, starting from 11th March 2020 the date on which WHO has declared and characterized COVID-19 as a pandemic till 28th February 2022.
- To get benefits under this scheme, a child should not have completed 18 years of age on the date of death of their parents.

Status of PM-CARE Fund

- The total donation received under the fund is nearly Rs 11,000 crore, while the expenditure made from the fund is about Rs 3,980 crore, according to the latest audited statement.
- Rs 1,000 crore was granted for migrant welfare
- The government has used a part of the fund to buy medical equipment, including ventilators, to support the fight against COVID-19 and has also provided relief to migrants.

Controversy related to PM-CARE Fund

- Notices were issued by various government departments, "urging" employees to contribute their part of their salary.
- Indian Railway, Army, Navy and Air force, Defence PSUs and employees of the defence ministry have donated to the Fund. While a major portion of these contributions has been voluntary, it appears that many government employees weren't given any choice.
- Donations are made from Public departments, and therefore the public has the right to know details of the fund and expenditure made under it, but the government made it

clear that the fund is outside the preview of the RTI act, and CAG will not audit the fund.

- The PMO has also refused to make public any documents related to the PM CARES fund. Total lack of transparency about the use of the funds.
- The PM CARES Fund is exempt from scrutiny and monitoring of all foreign donations.

NATIONAL EMBLEM

In News:

On 11th July, the Prime Minister revealed the National Emblem model on the roof of the new Parliament building.

Analysis of Background:

- The National Emblem is cast at the top of the Central Foyer of the new Parliament building.
- It is 6.5-metre-high and is made of bronze and weighs around 9,500 kg.
- A supporting structure of steel has been constructed to support the Emblem.
- The process of casting the National Emblem on the roof of the new parliament building went through 8 different stages of preparation from clay modelling/ computer graphics to bronze casting and polishing.

New Parliament Building:

- It will have 6 granite statues of important personalities.
- 4 galleries each for the 2 Houses of Parliament.
- 3 ceremonial foyers.
- 3 India galleries.
- 1 Constitution gallery.
- Each wall in the building will have a dedicated theme to the contribution of tribal leaders, or to showcase the contribution of women.
- The wall will display a mix of portraits, illustrative arts, installations, sculptures, and decorative art.
- Bimal Patel is the architect in charge of the building, which is triangular.
- The building is designed to be earthquake-resistant.
- The new Parliament has 888 seats in the Lok Sabha chamber and 384 seats in the Rajya Sabha chamber.

State Emblem of India:

- It is the national emblem and is used by the union government, state governments, and other government agencies.
- The emblem is adopted from the Lion Capital of Ashoka at Sarnath.
- The statue shows four lions.
- It became the National emblem in December 1947.
- The emblem appears on all Indian currencies and appears prominently on Indian passports.
- The Ashoka Chakra (Ashoka wheel) in its base is adopted in the centre of the national flag of India.
- The usage of the national emblem is regulated under the State Emblem of India (Prohibition of Improper Use) Act, 2005.
- Under the act, no individual or private organisation is allowed to use the emblem for their official correspondence.
- The original Piller was carved from a single block of sandstone.
- Only three lions are visible, the 4th being hidden from view.
- The wheel appears in the centre of the abacus, with a bull on the right and a galloping horse on the left, and outlines of Dharma Chakras on the extreme right and left.
- The bull represents hard work and steadfastness, while the horse represents loyalty, speed, and energy.
- The bell-shaped lotus beneath the abacus has been omitted.
- An integral part of the emblem is the slogan inscribed in the Devanagari script: Satyameva Jayate (Truth alone triumphs).
- This quote is inspired by Mundaka Upanishad, the concluding part of the sacred Hindu Vedas.



COMPTROLLER AND AUDITOR GENERAL

In News:

Recently Comptroller and Auditor General (CAG) tabled a report in the Delhi Assembly. According to the report 'Over 94% of the amount meant for the welfare of laborers lying unused". The report also highlighted that the cess collected for providing social security, healthcare, etc was being poorly utilised.

Analysis of Background:

About Comptroller and Auditor General of India:

- The constitution of India under Article 148 provides for an independent office of the Comptroller and Auditor General of India (CAG).
- He is the head of the Indian Audit and Accounts Department.
- He is the guardian of the public purse and controls the entire financial system of the country at both levels—the Center and the state.

Appointment and Term

- The CAG is appointed by the president of India by a warrant under his hand and seal.
- He holds office for six years or up to the age of 65 years, whichever is earlier.
- He can resign at any time from his office by addressing the resignation letter to the president.
- He can also be removed by the president on the same grounds and in the same manner as a judge of the Supreme Court.
- In other words, he can be removed by the president based on a resolution passed to that effect by both the Houses of Parliament with the special majority, either on the ground of proven misbehaviour or incapacity.
- He is not eligible for further office, either under the Government of India or of any state, after he ceases to hold his office.
- His salary and other service conditions are determined by the Parliament. His salary is equal to that of a judge of the Supreme Court.
- The administrative expenses of the office of the CAG, including all salaries, allowances and pensions of persons serving in that office are charged to the Consolidated Fund of India. Thus, they are not subject to the vote of Parliament.

Duties and Powers

 Acts as a guide, friend and philosopher of the Public Accounts Committee of the Parliament.

- The constitution (Article 149) authorizes the Parliament to prescribe the duties and powers of the CAG about the accounts of the Union and the states and any other authority or body.
- Audits the accounts related to all expenditure from the Consolidated Fund of India, consolidated fund of each state and consolidated fund of each union territory having a Legislative Assembly.
- Audits all expenditures from the Contingency Fund of India and the Public Account of India as well as the contingency fund of each state and the public account of each state.
- Audits all trading, manufacturing, profit and loss accounts, balance sheets and other subsidiary accounts kept by any department of the Central Government and state governments.
- Audits the receipts and expenditure of the Center and each state to satisfy himself that the rules and procedures on that behalf are designed to secure an effective check on the assessment, collection and proper allocation of revenue.
- Audits the receipts and expenditures of the following:
 - All bodies and authorities are substantially financed from the Central or state revenues;
 - Government companies; and other corporations and bodies, when so required by related laws.
- Advises the President about the prescription of the form in which the accounts of the Center and the states shall be kept (Article 150).
- Submits his audit reports relating to the accounts of the Center to the President, who shall, in turn, place them before both the Houses of Parliament (Article 151).
- Submits his audit reports relating to the accounts of a state to the governor, who shall, in turn, place them before the state legislature (Article 151).
- The President lays these reports before both the Houses of Parliament.
- After this, the Public Accounts Committee examines them and reports its findings to the Parliament.

RAJYA SABHA MEMBERS

In News:

The Prime Minister of India has congratulated the new nomination Rajya Sabha Members.

Recently nominated Members in Rajya Sabha:

• Athlete P.T. Usha, Music Composer 'Ilaiyaraaja', Philanthropist and social worker 'Veerendra Heggade', Film Director and Screenwriter 'V. Vijayendra Prasad Garu'

Analysis of Background:

About Rajya Sabha:

- Rajya Sabha was 1st Constituted in 1952.
- In 1954, Rajya Sabha announced that the Council of States would be Called 'Rajya Sabha'.
- Radhakrishnan was appointed as 1st Chairman.
- Maximum Strength: 250, of which 238 are to be elected and 12 are to be nominated by the President.
- Present Strength: 245, of which 233 are elected and 12 are nominated.
 - 4 members are elected from UTs (3 from Delhi and 1 from Puducherry). Other Union territories are not represented.
- Not subject to dissolution, one-third of its members retire every 2nd year.
- 6 years Tenures, but a member elected in a bye-election Serves for the remainder of the term.
- The vice-President is the ex officio Chairman, elected by members of both Houses of Parliament in accordance with the System of proportional representation by means of a Single transferable vote, 5 years tenure.
- Deputy Chairman is elected by members of Rajya Sabha from amongst its members.
- Normally, Prime Minister nominates a Minister who is a member of Rajya Sabha as Leader of the House, but if Prime Minister himself is a member of Rajya Sabha, he will act as Leader of the House.
- Secretary-General in Rajya Sabha: Appointed by Chairman and holds a rank equivalent to Cabinet Secretary, Assists Presiding Officers by giving them advice and expert opinion.

Members of Rajya Sabha:

- Members are elected by the elected members of Assemblies of States and UTs in accordance with the System of proportional representation by means of the Single transferable vote.
- 12 members are nominated by President from amongst persons having special knowledge or practical experience in literature, science, art and Social Service.
- Rajya Sabha members can vote in the election of Vice-President but are not allowed to vote in the election of President.

- A Minister who is a Member of Lok Sabha has the right to speak in and takes part in the proceedings of Rajya Sabha but has no right to vote in Rajya Sabha and vice versa.
- Under Article 105, Members enjoy certain powers and privileges.
- If any question arises about disqualification, it is referred to the decision of the President and his decision is final.
- Before giving any decision on any such question, President obtains the opinion of the Election Commission and acts according to such opinion.
- If any question arises about disqualification under the 10th Schedule, the question is referred to Chairman and his decision is final.

Special powers of Rajya Sabha:

- Empower Parliament to make laws in respect of any matter enumerated in the State List in the national interest by adopting a resolution to this effect (Article 249).
- Creation of All India Services (Article 312).
- Approving Proclamations (issued under article 352 or article 356 or article 360).
- In legislative matters, Rajya Sabha enjoys almost equal powers with Lok Sabha, except in the case of Money Bills.
- Joint Sitting of the Houses for resolving the deadlock between the two Houses, except in Case of Money Bill and Constitution Amendment Bill, till now only 3 joint Sitting.

NATIONAL INVESTIGATION AGENCY

In News:

The National Investigation Agency (NIA) has taken over the investigation of THE killing of a person in Rajasthan's Udaipur over a social media post.

Analysis of Background:

National Investigation Agency:

- The National Investigation Agency (NIA) Act of 2008 established the National Investigation Agency (NIA).
- It is a central agency charged with investigating and prosecuting crimes:
- Harming India's sovereignty, security, and integrity, as well as state security and amicable ties with other countries.
- Oppose nuclear and atomic power plants.
- High-Quality Counterfeit Indian Currency Smuggling.
- Its goal is also to fight terrorism in India.

• The Central Counter-Terrorism Law Enforcement Agency is in charge of it.

Concern:

- Legal Requirements:
 - In the Indian judicial system, no provision allows a domain expert to be a formal member of the evidence-gathering team.
 - In the absence of such a provision, the prosecution risks being charged with evidence tampering if any agency uses a domain expert, as the Criminal Procedure Code only allows the police to gather evidence.
- Inducement of experts:
 - Domain expertise was also required for efficient use of the instruments used to investigate such crimes.
 - Investigative agencies had often made suggestions for inducting specialists and providing necessary staff training during the UPA era.
- Cross-border investigation:
 - Problems involving many countries demand more skilled and effective teams.
 - Such team formations necessitate a change in the legislation as well as the government's willingness to make the change.
- Police the state subject:
 - The preservation of public order and police forces are listed as matters of state in Schedule VII of the Constitution.
 - Criminal law, on the other hand, is on the concurrent list, while national security is on the union list.

FOREIGN CONTRIBUTION REGULATION ACT

In News:

The Union Ministry of Home Affairs has amended the Foreign Contribution Regulation Act (FCRA) to provide certain relaxations.

Analysis of Background:

- The new rule allowed relatives to send Rs 10 lakh (earlier it was Rs 1 lakh) to India without informing the government.
- In case the amount limit exceeds, then the individuals will get 3 months to inform the government, earlier it was 30-days
- It will provide more time to the organisations to inform the government about the opening of bank accounts for the utilization of funds received under the 'registration' or 'prior permission' category.

• The provision to declare foreign contributions by the organisation/individual at every quarter on its official website has been removed.

Foreign Contribution Regulation Act:

- The Foreign Contribution Regulation Act was passed by the Indian Parliament in 2010.
- The act regulates the foreign contribution by individuals or associations or companies.
- The Union Minister of Home Affairs introduced the Foreign Contribution (Regulation) Amendment Bill in 2020, which made several changes.
- Foreign Contribution (Regulation) Amendment Act, 2020
- The Act regulates the acceptance and utilisation of foreign contributions by individuals, associations and companies.
- Foreign contribution is the donation or transfer of any currency, security or article (of beyond a specified value) by a foreign source.
- Prohibition to accept foreign Contributions: Certain persons are prohibited to accept any foreign contribution. These include:
 - Election candidates, editor or publisher of a newspaper, judges, government servants, members of any legislature, and political parties, among others.
 - The Bill adds public servants (as defined under the Indian Penal Code) to this list.
 A public servant includes any person who is in service or paid by the government or remunerated by the government for the performance of any public duty.
- Transfer of foreign Contributions
 - Foreign contribution cannot be transferred to any other person unless such person is also registered to accept foreign contribution (or has obtained prior permission under the Act to obtain foreign contribution).
 - The Act prohibited the transfer of foreign contributions to any other person. The term 'person' under the Act includes an individual, an association, or a registered company.
- Aadhar for registration
 - Any person seeking registration (or renewal of such registration) or prior permission for receiving a foreign contribution must make an application to the central government in the prescribed manner.
 - The Act adds that any person seeking prior permission, registration or renewal of registration must provide the Aadhar number of all its office bearers, directors or key functionaries, as an identification document.
 - In the case of a foreigner, they must provide a copy of their passport or the Overseas Citizen of India card for identification.

- FCRA Account
 - Foreign contributions must be received only in an account designated by the bank as an "FCRA account" in such a branch of the State Bank of India, New Delhi, as notified by the central government.
 - No funds other than the foreign contribution should be received or deposited in this account.
 - The person may open another FCRA account in any scheduled bank of their choice for keeping or utilising the received contribution.
- Restriction in the utilisation of foreign contribution
 - The Government may restrict the usage of unutilised foreign contributions for persons who have been granted prior permission to receive such contributions.
- Renewal of licence
 - Every person who has been given a certificate of registration must renew the certificate within 6 months of expiration.
 - The Act provides that the government may conduct an inquiry before renewing the certificate.
- Reduction in use of foreign contributions for administrative purposes
 - A person who receives a foreign contribution must use it only for the purpose for which the contribution is received.
 - They must not use more than 20% of the contribution for meeting administrative expenses (earlier it was 50%).
- Suspension of Registration
 - Earlier governments may suspend the registration of a person for a period not exceeding 180 days.
 - The Act adds that such suspension may be extended up to an additional 180 days.

SDGs in PANCHAYATI RAJ INSTITUTIONS

In News:

- The Union Minister of State for Panchayati Raj has inaugurated National Write-Shop on "Roadmap and Plan of Action on Localisation of Sustainable Development Goals in Panchayati Raj Institutions".
- The agenda is to prepare the Roadmap and Draft a Plan of Action on the Localization of SDGs in PRIs.

Analysis of Background: About Panchayati Raj:

- The 73rd Constitutional Amendment Act 1992 has added a new Part IX to the Indian constitution titled "The Panchayats".
 - The new Part covers provisions from Article 243 to 243(O)
 - It also introduced the 11th Schedule covering 29 subjects within the functions of the Panchayats.
- The core objective behind the amendment;
 - Provide adequate autonomy to local governments.
 - Provide adequate powers to take decisions in matters transferred to local governments.
 - Devolution of functions, finance and functionaries.
 - Ensuring social justice and local economic development.
 - To cover all aspects of rural development and human development.
- The Amendment Act implemented article 40 of the DPSPs which states that the "State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government".

Key features of the 73rd Amendment Act:

- Every State shall have Panchayati raj institutions in rural areas.
- A three-tier system for States with a population of over two million.
- Gram Panchayat at the village level.
- Panchayat Samiti at the block level.
- Zila Parishad at the district level.
- For areas with less than 2 Million population, a two-tier system;
 - Gram Panchayat at the village level.
 - Zila Parishad at the district level.
 - There is also a provision for reservation of seats not less than one-third of seats for women while for scheduled caste and tribes, proportional to their population.
- 5 years term of office for the elected representatives of these local bodies.
- Each district has a District Planning Committee (DPC), which prepares a development plan for the district consolidating the urban and rural local plans and higher-tier plans.
- States are required to transfer power and responsibilities to these Gram Sabhas.
- 29 subjects are transferred to the local governments.
- State Government needs to appoint a finance commission every five years to make recommendations on the following:
 - The Distribution of the taxes, duties, tolls, fees etc. between the state and Panchayats.
 - $_{\circ}$ $\,$ Allocation of proceeds between various tiers.

- $_{\circ}$ $\,$ Grant in aids.
- State to form a State Election Commission that would have the power to supervise, direct and control the elections to the Panchayats.
- Any person who is qualified to become an MLA is qualified to become a member of the Panchayat, but for Panchayat the minimum age prescribed is 21 years.
- The provisions under 73rd Amendment do not apply to:
 - Entire states of Nagaland, Meghalaya and Mizoram.
 - Hill areas in the State of Manipur for which District Councils.

Role of Panchayati Raj Institutions in Socio-economic development:

- Panchayati raj institutions have the potential to maximize the production and productivity of agriculture and rural industries.
- It could create new employment opportunities by formulating appropriate policies for the development of agriculture, and animal husbandry, and by encouraging the adoption of the best available technologies and practices.
- It could help in creating an atmosphere to promote Value-added products from agriculture, animal husbandry, and non-timber forest produce.
- Assured employment opportunities for all households in the village through effective management of MGNREGA.
 - It can also ensure equitable wages for men and women and zero child labour.
 - Employment opportunities for persons with disabilities.
- Identify potential candidates for setting up of enterprises and skill mapping of the interested candidates.
- Situation analysis of existing micro, small and medium enterprises within the Panchayat area.
- Organize entrepreneurial development training/skill training.

Step by the Government

- Deen Dayal Upadhyaya Grameen Kaushal Yojna
 - It is a placement-linked skill development scheme for rural poor youth.
- Swachchh Bharat Mission:
 - To provide access to every person to sanitation facilities including toilets, solid and liquid waste disposal systems, village cleanliness and safe and adequate drinking water supply.
- Sansad Adarsh Gram Yojna

- Each Member of Parliament will take the responsibility for developing physical and institutional infrastructure in selected villages.
- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
 - Provide 'right to work' to the people falling Below Poverty Line.
 - It guarantees 100 days of employment in a year to the village people.
 - 50 workers should be women.
- National Rural Livelihood Mission
 - Under this scheme, the government provides loans up to 3 lakh rupees at the rate of 7% which could be lowered to 4% on timely repayment.
- Pradhan Mantri Gram Sadak Yojna
 - To provide all-weather road connectivity to the rural areas whose population is more than 500 persons and in terms of hilly areas, it is 250 persons.
- Antyodaya Anna Yojna (AAY)
 - The scheme provides food grains to Below Poverty Line (BPL) families at a very subsidized rate.
 - A total of 35 kgs of food grains is provided to a family. Rice is provided at the rate of Rs. 3/kg and wheat at 2 Rs.2/kg.
- Aam Aadmi Bima Yojna
 - Under this scheme, one member of the family is covered.
 - The premium of Rs. 200 per person per annum is shared by the state and central governments.
 - The insured person need not pay any premium if his/her age is between 18 years to 59
- Sarva Siksha Abhiyan
 - Its main aim is to make free and compulsory education for children between the ages of 6 to 14, a fundamental right.
 - The right to education is related to the 86th Amendment to the Constitution of India.

ELECTORAL BONDS

In News:

Under the provisions of the Electoral Bond Scheme, the State Bank of India (SBI) has started to issue and encash Electoral Bonds through its Authorized Branches.

Analysis of Background:

Electoral Bond Scheme:

- The Electoral bonds were introduced with the Finance Bill (2017).
- The Union Government has notified the detailed guidelines about the Electoral Bonds Scheme in January 2018, with the objective to cleanse the system of political funding in the country.
- The Electoral Bond is a bearer instrument like a Promissory Note and an interest-free banking instrument.
 - A bearer instrument is a document that authorises the holder with the right of ownership or title of the property, such as Currency, shares or bonds.
 - Unlike normally registered instruments, no record is kept about the owners of bearer instruments or the transfer of ownership.
 - Whoever physically holds the bearer document is assumed to be the owner of the property.
- Electoral bonds may be purchased by a person, who is a citizen of India or established in India.
 - An individual can buy electoral bonds either singly or jointly with other individuals.
 - The Electoral Bond does not carry the name of the payee.
- Electoral bond would be issued/purchased for any value, in multiples of Rs 1,000 from the specified branches of the State Bank of India (SBI).
 - Electoral Bonds have a validity of 15 days.
- Political parties registered under Section 29A of the Representation of the People Act, 1951 and also secured a minimum of 1% of voters polled in the last general election to the House of the People or the Legislative Assembly of the State are eligible to receive electoral bonds.
- The Electoral Bonds shall be available for purchase for 10 days each in January, April, July and October, as may be specified by the Central Government.
- An additional period of 30 days shall be specified by the Central Government in the year of the General election to the House of People.

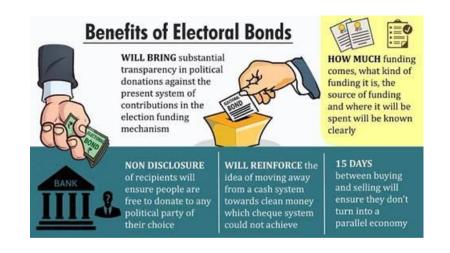
- Electoral Bonds can be encashed by an eligible political party only through their bank accounts with the authorised bank.
 - $_{\circ}$ $\,$ The bonds do not have the name of the donor or the receiving political party.
 - It only carries a unique hidden alphanumeric serial number as an in-built security feature.
- Electoral bonds protect the identity of political donors and parties receiving contributions.
 - Donors who contribute less than Rs 20,000 to political parties through the purchase of electoral bonds need not provide their identity details such as PAN, etc.

Finance Bill (2017)

- Before the bill came into force;
 - A company donating to a political party could contribute a maximum of 7.5% of the average net profits in the last three financial years.
 - It was required to disclose the details of the contributions made to any political parties along with the name of the political parties to which such contributions were made.
- The Finance Bill (2017) introduced new provisions;
 - It removed the maximum limit set on the companies for donations to political parties, now there is no limit on companies for donating to political parties.
 - It also removed the requirement for a company to disclose the name of the political parties to which it was donating.
- The bill adds that "contributions will have to be made only through a cheque, bank draft, electronic means, or any other scheme notified by the government to make contributions to political parties."

Arguments in favour of Electoral Bond:

- It promotes transparency in funding and donation received by political parties.
- It is an important "electoral reform" toward a "cashless-digital economy".
- It is a tool to eradicate black money in political funding.



Arguments against Electrol Bond:

- The bonds increase the anonymity of political donations, Citizens will not be able to know who is donating how much money to which political party.
- Promoting corruption and lack of transparency in the accounts of all political parties.
- The electoral bonds scheme has opened floodgates to unlimited corporate donations to political parties and anonymous financing by Indian as well as foreign companies which is a threat to Indian democracy.

Concern:

- The Election Commission and the Reserve Bank of India objected to electoral bonds and had advised against the issuance of electoral bonds as a mode for donation to political parties.
- It alleged that almost 99% of electoral bonds purchased are of value one crore and 10 lakh denominations which shows that it is not individual citizens but large corporations which are purchasing these bonds with a view to receiving kickbacks from the government.
- The Election Commission of India had filed an affidavit in 2019, saying the government's scheme for political funding has legalised anonymity.

TOPIC: IR/IO

NORTH ATLANTIC TREATY ORGANIZATION (NATO) In News:

At a signing ceremony hosted by NATO Secretary-General Jens Stoltenberg, Leaders and Ministers from 22 Allied countries launched NATO's Innovation Fund, the world's first multi-sovereign venture capital fund.

Analysis of Background:

- With a 15-year timeframe, the NATO Innovation Fund will help bring to life those nascent technologies that have the power to transform our security in the decades to come, strengthening the Alliance's innovation ecosystem and bolstering the security of our one billion citizens.
- The Fund will invest 1 billion euros in early-stage start-ups and other venture capital funds developing dual-use emerging technologies of priority to NATO.
- These include: artificial intelligence; big-data processing; quantum-enabled technologies; autonomy; biotechnology and human enhancement; novel materials; energy; propulsion and space.
- The Fund will complement NATO's Defence Innovation Accelerator for the North Atlantic – or DIANA – which will support the development and adaptation of dual-use emerging technologies to critical security and defence challenges.
- There has also been significant progress for DIANA at the 2022 Madrid Summit where Allies agreed that innovators participating in DIANA's programs will have access to a network of more than 9 Accelerator Sites and more than 63 Test Centres across Europe and North America.

About NATO:

- The North Atlantic Treaty Organization is a military alliance created in 1949.
- Aim: to provide collective security against Soviet expansionism and to encourage European political integration in the aftermath of World War II.
- It serves as a collective security system, wherein its member states agree to mutually defend any attack on a member party.
- Membership: There are 30 countries that are currently part of NATO. Two countries in North America and 28 European countries, including several former Soviet nations.
- What does it take to become a member of the alliance?
- It employs an "open door policy" for aspiring members.
- Any European country can become a member of the Alliance at the invitation of the North Atlantic Council.

- Aspiring nations have to meet certain political, economic, and military standards to join.
- That includes,
 - 1. New members must uphold democracy, including tolerating diversity
 - 2. New members must be making progress toward a market economy
 - 3. Their military forces must be under firm civilian control
 - 4. They must be good neighbors and respect sovereignty outside their borders
 - 5. They must be working toward compatibility with NATO forces

RUSSIA, UKRAINE GRAIN EXPORTS DEAL

In News:

Russia and Ukraine signed separate agreements with Turkey and the U.N., clearing the way for exporting millions of tons of desperately needed Ukrainian grain — as well as Russian grain and fertilizer — ending a wartime standoff that had threatened food security around the globe.

Analysis of Background:

Why was the grain export deal signed with Ukraine?

- 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.
- Ukrainian and Russian military delegations reached a tentative agreement on a U.N. plan that would also allow Russia to export its grain and fertilizers.
- What is the grain export deal?
- 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.
- Ukraine was expected to export 22 million tons of grain and other agricultural products that have been stuck in Black Sea ports due to the war.

CHINA PAKISTAN ECONOMIC CORRIDOR In News:

Days after China and Pakistan held a meeting to bring other countries into the China-Pakistan Economic Corridor (CPEC), India said that efforts to broaden CPEC's scope are "inherently illegal".

Analysis of Background:

- The Joint Working Group of International Cooperation and Coordination under CPEC met on July 21, when the Pakistani and Chinese officials discussed bringing in a third county into the fold.
- CPEC consists of a number of infrastructure projects that are under construction across Pakistan and is aimed at connecting China overland with the Gulf countries by cutting through the Himalayan range in Gilgit Baltistan and the Pakistan-occupied Kashmir.
- Soon after coming to power in Afghanistan last year, the Taliban had expressed desire to join the infrastructure project.
- India reminded Taliban and similar potential third parties of the problems associated with the CPEC, saying, "Such activities are inherently illegal, illegitimate and unacceptable, and will be treated accordingly by India."
- Earlier, Pakistan signed a new agreement with China to begin the second phase of the USD 60 billion China-Pakistan Economic Corridor (CPEC).

About CPEC:

- CPEC is a 3,000-km long route of infrastructure projects connecting China's northwest Xinjiang Uygur Autonomous Region and the Gwadar Port in the western province of Balochistan in Pakistan.
- It is a bilateral project between Pakistan and China, intended to promote connectivity across Pakistan with a network of highways, railways, and pipelines accompanied by energy, industrial, and other infrastructure development projects.
- It will pave the way for China to access the Middle East and Africa from Gwadar Port, enabling China to access the Indian Ocean and in return China will support development projects in Pakistan to overcome the latter's energy crises and stabilising its faltering economy.
- CPEC is a part of the Belt and Road Initiative.

Background:

- In 2013, Chinese President Xi Jinping, during his visits to Kazakhstan and Indonesia, expressed his vision to build a Silk Road Economic Belt (SERB) and a 21st Century Maritime Silk Road (MSR), to break the "bottleneck" in Asian connectivity. Thus, the Belt and Road initiative was born.
- The initiative envisioned a Chinese-led investment of over \$1 trillion in partner countries by 2025. More than 60 countries have now joined BRI agreements with China, with infrastructure projects under the initiative being planned or under construction in Asia, Africa, Europe, and Latin America.
- To finance BRI projects, China offers huge loans at commercial interest rates that countries have to pay within a fixed number of years.
- The west has accused China of debt-trapping by extending "predatory loans" that force countries to cede key assets to China. However, research indicates that low and middle-income countries are often the ones to approach China after not being able to secure loans from elsewhere.
- In recent years, the BRI seems to have experienced a slowing down as annual Chinese lending to countries under the initiative slimmed from its peak of \$125 billion in 2015 to around \$50 to 55 billion in 2021.

Investments in the Indian neighbourhood:

- The biggest project under BRI is in Pakistan, the China Pakistan Economic Corridor(CPEC). Over time, China pledged \$62 billion in low-interest loans and financing from Chinese state-owned banks and the Asian Development Bank (ADB).
- Bangladesh, which joined the BRI in 2016, has been promised the second-highest belt and road investment by China in South Asia after Pakistan.
- In Sri Lanka, multiple infrastructure projects that were being financed by China came under the fold of the BRI after it was launched in 2013. The island nation in the last couple of years has witnessed competition between India and China in port terminal and energy projects. In 2021, Colombo ejected India and Japan out of a deal to develop the East Container Terminal at the Colombo port and got China to take up the project. Some BRI projects in Sri Lanka have been described as white elephants — such as the Hambantota port.
- Afghanistan has not comprehensively been brought into the BRI, despite a Memorandum of Understanding (MoU) being signed with China in 2016
- One of the most prominent BRI projects undertaken in the Maldives is the two km long China-Maldives Friendship Bridge — a \$200 million four lane bridge.

UNITED NATIONS PEACEKEEPING MISSIONS In News:

Two BSF personnel who were part of the UN Peacekeeping Mission in the Democratic Republic of the Congo (DRC), were among five people killed during a protest in an eastern town near the border with Uganda

Analysis of Background:

- 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.
- Since 1948, UN Peacekeepers have undertaken 71 Field Missions.
- There are approximately 81,820 personnel serving on 13 peace operations led by UNDPO, in four continents currently. This represents a nine-fold increase since 1999.
- A total of 119 countries have contributed military and police personnel to UN peacekeeping. Currently, 72,930 of those serving are troops and military observers, and about 8,890 are police personnel.
- 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, there are around 5,500 troops and police from India who have been deployed to UN Peacekeeping missions, the fifth highest amongst troop-contributing countries.
- India has also provided, and continues to provide, eminent Force Commanders for UN Missions. India is the fifth largest troop contributor (TCC) with 5,323 personnel deployed in 8 out of 13 active UN Peacekeeping Missions, of which 166 are police personnel.
- 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
- The UN entrusted the Indian armed forces with subsequent peace missions in the Middle East, Cyprus, and the Congo (since 1971, Zaire).
- India also served as Chair of the three international commissions for supervision and control for Vietnam, Cambodia, and Laos established by the 1954 Geneva Accords on Indochina.

- India has been sending women personnel on UN Peacekeeping Missions. In 2007, India became the first country to deploy an all-women contingent to a UN Peacekeeping Mission. The Formed Police Unit in Liberia provided 24-hour guard duty and conducted night patrols in the capital Monrovia, and helped to build the capacity of the Liberian police
- In addition to their security role, the members of the Indian Formed Police Unit also organised medical camps for Liberians, many of whom have limited access to health care services.
- Indian veterinarians serving with the UN Mission in South Sudan (UNMISS), stepped up to help cattle herders who were losing much of their stock to malnutrition and disease in the war-torn nation. The Indian contingent in South Sudan has provided vocational training and life-saving medical assistance, as well as carrying out significant road repair work.
- The Indian contingent in the Upper Nile region (includes the Indian Battalion, the Horizontal Mechanical Engineering Company, the Level II hospital, the Petroleum Platoon and the Force Signal Unit) have all received UN Medals of Honour.
- India has provided 17 Force Commanders to various Missions. Besides the Force Commanders, India also had the honour of providing two Military Advisers, one Female Police Adviser, and one Deputy Military Adviser to the Secretary General of the United Nations.
- India was the first country to contribute to the Trust Fund on sexual exploitation and abuse, which was set up in 2016.
- India is of the view that the international community must grasp the rapid changes that are underway in the nature and role of contemporary peacekeeping operations. The Security Council's mandates to UN Peacekeeping operations need to be rooted in ground realities, and co-related with the resources provided for the peacekeeping operation.

Process of Decision Making

- To efficiently attain a particular end or objective, an ordered and cohesive scheme must be established: this is the decision-making process that will lead to the most appropriate plans.
- An Integrated Mission Planning Process is the product of the UN's integrated mission operations.
- Aside from the police component, integrated missions have a military component, a civilian component, and mission support.
- In UN missions there are three planning levels:

- Strategic;
- Operational and,
- Tactical
- The tactical planning is produced within each component, while the strategic and operational planning are connected.
- The concept of maneuver and the associated orders to be carried out by FPU personnel are the result of a methodical analysis of various factors that lead to a decision that is always in accordance with the mission mandate, UN doctrine, the rule of law, and strategic and operational level guidelines and orders.

Principles of Peacekeeping:

These three principles are inter-related and mutually reinforcing:

- Consent of the parties
 - The key parties to a dispute provide their approval for UN peacekeeping forces to be deployed.
 - $_{\circ}$ $\,$ This necessitates the parties' commitment to a political process.
 - Their approval of a peacekeeping mission gives the UN with the essential political and physical independence to carry out its statutory objectives.
- Impartiality
 - Impartiality is essential for retaining the key parties' consent and cooperation, but it should not be confused with neutrality or inaction.
 - Peacekeepers from the United Nations should be impartial while dealing with conflict parties, but not neutral when carrying out their mandate.
- Non-use of force except in self-defence and defence of the mandate
 - UN peacekeeping missions are not intended to be used as a means of enforcing the law.
 - They may, however, employ force at the tactical level with the Security Council's permission if acting in self-defense or to defend the mandate.

Role of India:

- India has participated in 49 UN peacekeeping deployments so far, contributing over 200,000 troops and a large number of police officers.
- With 7,860 people deployed with 10 UN Peacekeeping Missions in 2014, India is the third largest troop contributor nation [TCC], with 995 of them being police officers, including the UN's first female formed police unit.

 The United Nations recently praised Indian peacekeepers for their efforts in avoiding a massacre in the South Sudan conflict, which resulted in the deaths of two Indian soldiers.

BIMSTEC

In News:

The National Security Council Secretariat, Government of India is organizing a two day Meeting of the BIMSTEC Expert Group on Cyber Security Cooperation in New Delhi.

Analysis of Background:

- The Meeting is based on the agreement made during the meeting of the BIMSTEC National Security Chiefs held at Bangkok in March 2019 that the BIMSTEC Expert Group will formulate an Action plan to deal with Cyber Security challenges in the BIMSTEC Region.
- The main objective of this BIMSTEC Expert Group meeting is to formulate the Action Plan which will bolster coordination and collaboration amongst the BIMSTEC Member States for strengthening Cyber Security in the use of ICTs.
- This Action plan will cover the mechanisms for the exchanges of cyber related information, cybercrime, protection of critical information infrastructures, cyber incident response and international developments related to cyber norms.
- The Action Plan has been proposed to be implemented within the time frame of 5 years after which the Experts Group on Cyber Security will review the Action Plan.
- The fifth summit of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), held virtually in Colombo.

Grouping's charter:

- It presents BIMSTEC as "an inter-governmental organization" with "legal personality."
- It defines BIMSTEC's purposes and lists 11 items in the first article. Which includes
 - acceleration of "the economic growth and social progress in the Bay of Bengal region", and
 - promotion of "multidimensional connectivity".

Re-constitution:

- The second element is the decision to re-constitute and reduce the number of sectors of cooperation from the unwieldy 14 to a more manageable seven.
- Each member-state will serve as a lead for a sector:
 - trade, investment and development (Bangladesh);

- environment and climate change (Bhutan);
- security, including energy (India); agriculture and
- food security (Myanmar);
- people-to-people contacts (Nepal);
- o science, technology and innovation (Sri Lanka), and
- connectivity (Thailand).

Master Plan for Transport Connectivity:

- Summit participants adopted the Master Plan for Transport Connectivity applicable for 2018-2028.
- It was devised and backed by the Asian Development Bank (ADB).
- It lists 264 projects entailing a total investment of \$126 billion. Projects worth \$55 billion are under implementation.
- BIMSTEC needs to generate additional funding and push for timely implementation of the projects.

Agreements:

 The package also includes three new agreements, relating to mutual legal assistance in criminal matters, cooperation between diplomatic academies, and the establishment of a technology transfer facility in Colombo.

What need to be done to strengthen BIMSTEC?

- Trade pillar needs support: The pillar of trade, economic and investment cooperation needs greater strengthening and at a faster pace.
- Bridging the bay in quest of a stronger BIMSTEC: Despite signing a framework agreement for a comprehensive Free Trade Agreement (FTA) in 2004, BIMSTEC stands far away from this goal. Of the seven constituent agreements needed for the FTA, only two are in place as of now.
- Need to finalise legal instruments for coastal shipping, road transport and intraregional energy grid connection.
- India was the only country to offer additional funding to the Secretariat and also to support the Secretary General's proposal to establish an Eminent Persons Group (EPG) for producing a vision document. Other countries need to emulate this sincere matching of words with action.

- BIMSTEC should focus more in the future on new areas such as the blue economy, the digital economy, and promotion of exchanges and links among start-ups and Micro, Small and Medium Enterprises (MSMEs).
- The personal touch: personal engagement of the political leadership should be stepped up. The decision taken in Colombo to host a summit every two years is welcome if implemented. But in the medium term, an annual summit should be the goal.
- BIMSTEC needs greater visibility. India's turn to host the G20 leaders' summit in 2023 presents a golden opportunity.
- Simplify the grouping's name: The present name running into 12 words should be changed to four words only — the Bay of Bengal Community (BOBC). It will help the institution immensely.

About BIMSTEC:

- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organisation of seven South Asian and Southeast Asian nations.
- The BIMSTEC provides a unique link between South and South-East Asia with 5 countries Bangladesh, Bhutan, India, Nepal and Sri Lanka from South Asia and two countries Myanmar and Thailandfrom South-East Asia coming together on one platform for cooperation in 14 key economic and social sectors of the economy.
- The BIMSTEC was founded in 1997 with an ambition to pursue mutual trade, connectivity and cultural, technical and economic development in the region.
- It will celebrate its 25th anniversary this year.
- Initially, six sectors- trade, technology, energy, transport, tourism and fisheries were included for sectoral cooperation which was later expanded to 14 areas of cooperation.
- Agriculture is one of the 14 sectors.
- 22 per cent of the global population live in BIMSTEC countries, agriculture & allied activities are central to the economic and social development of the region.
- A BIMSTEC free trade agreement is under negotiation, also referred to as the mini SAARC.
- The BIMSTEC Free Trade Area Framework Agreement (BFTAFA) has been signed by all member nations to stimulate trade and investment in the parties, and attract outsiders to trade with and invest in the BIMSTEC countries at a higher level.

SCO

In News:

Iran and Belarus are likely to be the two newest additions to the China and Russiabacked Shanghai Cooperation Organisation (SCO) grouping

Analysis of Background:

- Expanding the group is among the issues that leaders of the grouping, including Prime Minister Narendra Modi, Russian President Vladimir Putin and Chinese President Xi Jinping 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.
- The expansion of NATO is totally different as the SCO is a cooperative organisation based on non-alignment and not targeting a third party.
- India will host the SCO summit next year, and Varanasi has been selected as the SCO region's first "Tourism and Cultural Capital.

What is SCO?

- It is a Eurasian political, economic, and security alliance.
- The original five nations, with the exclusion of Uzbekistan, were previously members of the Shanghai Five group.
- Since then, the organisation has expanded its membership to eight countries when India and Pakistan joined SCO as full members on 9 June 2017 at a summit in Astana, Kazakhstan.
- The Heads of State Council (HSC) is the supreme decision-making body in the SCO.
- It is the largest regional organisation in the world in terms of geographical coverage and population, covering three-fifths of the Eurasian continent and nearly half of the human population.
- The SCO is widely regarded as the "alliance of the East", due to its growing centrality in Asia-Pacific, and has been the primary security pillar of the region.

• The Regional Anti-Terrorist Structure (RATS), headquartered in Tashkent, Uzbekistan, is a permanent organ of the SCO, which serves to promote cooperation of member states against the three evils of terrorism, separatism and extremism.

Criticisms of the SCO

- It is used by member states to shield each other from international criticism regarding human rights violations.
- Even after 19 years, the SCO is struggling to emerge as a cohesive organisation because it lacks coherence on account of China's pre-pondering influence.

India-SCO:

- It is the only regional grouping in the vast Eurasian space.
- The specific advantage for India lies in the SCO providing a robust platform for connecting with countries of Central Asia, which comprise our extended neighbourhood and with whom India shares millennia of vibrant, multifaceted linkages.
- Central Asia and Afghanistan are vital for India's security, meeting its energy requirements, connectivity, trade and economic progress and growth.
- India through its active participation has strengthened greater trade, economic and cultural cooperation within SCO by putting human beings at the centerof SCO activities.
- It has fostered greater peace and prosperity in the region.
- India's initiatives have emphasised its commitment to expanding its partnership with SCO by playing a proactive, positive and constructive role in the organisation.

INDIA INDONESIA RELATIONS In News:

Indonesian President Joko Widodo is recasting himself as a global peacemaker ahead of the G20 summit in Bali in November this year, where growing tensions between the West and Russia are expected to spill over

Analysis of Background:

- India and Indonesia have shared two millennia of close cultural and commercial contacts.
- The Hindu, Buddhist and later Muslim faith travelled to Indonesia from the shores of India.

Political Relations:

- Owing to struggle against colonial powers, democratic traditions, pluralist culture, and progressive leadership which both countries shared, India and Indonesia developed friendly relations.
- President Sukarno of Indonesia was the Guest of Honour during the first Republic Day of India in 1950.
- Independent India and Indonesia became chief votaries of independence of Asian and African countries, the spirit which led to historic Bandung Conference of 1955 and later formation of Non-Aligned Movement in 1961.
- Since the adoption of India's 'Look East Policy' in 1991, there has been a rapid development of bilateral relations in political, security, defence, commercial and cultural fields.
- The current Government expressed its intent to further deepen the engagement with East Asia and by renaming the policy as "Act East".

Commercial Relations:

- Indonesia has emerged as the second largest trading partner of India in the ASEAN region.
- Bilateral trade has increased from US\$ 4.3 billion in 2005-06 to US\$ 21 billion in 2018-19.
- India is the second largest buyer of coal and crude palm oil from Indonesia and imports minerals, rubber, pulp and paper and hydrocarbons reserves.
- India exports refined petroleum products, commercial vehicles, telecommunication equipment, agriculture commodities, bovine meat, steel products and plastics to Indonesia.
- Defence Cooperation:
- In 2018, during the visit of the Hon'ble Prime Minister, Shri Narendra Modi, a new Defence Cooperation Agreement was signed to reflect the elevation of relationship between the two countries to a Comprehensive Strategic Partnership.
- Activities relating to cooperation in the area of Defence and Security are regularly monitored and new areas discussed during the Biennial Defence Ministers Dialogue, the annual Joint Defence Cooperation Meetings and the service level Staff Talks.

Cultural Relations:

• There is an active cultural exchange between the two countries. Indonesia is a major recipient of ITEC and TCS of Colombo Plan scholarships.

Indian Community in Indonesia:

There are around 120,000 Indonesians of Indian origin in Indonesia mostly concentrated in Greater Jakarta, Medan, Surabaya and Bandung. They are mainly engaged in trade dealing in textiles and sports goods.

INDIA-RUSSIA DEFENCE COOPERATION

In News:

As the war in Ukraine stretches over four months with no end in sight, it has given rise to apprehensions on Russia's ability to adhere to timely deliveries of spares and hardware.

Analysis of Background:

Status of India-Russia defence cooperation:

- When the war began, the Indian armed forces have stocks of spares and supplies for eight to ten months and the expectation was that the war would end quickly.
- However, as it stretches on with no clear endgame, there are apprehensions on Russia's ability to adhere to the timelines for both spares as well as new deliveries.
- Army Chief Manoj Pande acknowledged the Army's dependency on certain weapon systems specially in the area of air defence, rockets, missiles and certain tanks from Russia and Ukraine and said that as far as the immediate impact was concerned "the supply chain of certain spares and ammunition has got impacted to some extent, but we have adequate stocks to last for a reasonable period of time."
- He added that they are also looking at certain alternative mitigation measures and identifying alternate sources from friendly foreign countries while in the long term, this is also an opportunity for the private industry to step up production and meet the requirements.
- Officials have stated that while some timeline lapses and shipping delays were possible, there would not be any dent on the Army's operational preparedness along the borders especially the Line of Actual Control.
- In addition, the armed forces have also made significant emergency procurements in the last two years since the standoff in Eastern Ladakh and have stocked up on spares and ammunition. Therefore, there shouldn't be any immediate urgency for spares and other requirements.
- Russia has assured India that it would adhere to delivery timelines. However, as the war stretches on there are apprehensions that it could have an impact as the Russian industry would be caught up in replenishing the inventories of their own armed forces.

Status of deals underway/new deals pending with Russia:

- The defence trade between India and Russia has crossed \$15 billion since 2018, in the backdrop of some big deals including the \$5.43 billion S-400 long-range air defence systems.
- Other major contracts currently under implementation are the construction of four additional stealth frigates in Russia and India, licensed production of the Mango Armor-piercing fin-stabilised discarding sabot (APFSDS) rounds for the T-90S tanks as also additional T-90S tanks, AK-203 assault rifles among others.
- However, there is some delay. For instance, the delivery of the second regiment of the S-400 is delayed by a few months as also the operationalisation of the agreement for the manufacture of 6.1 lakh AK-203 rifles at Korwa, Amethi in Uttar Pradesh.
- There are also several big ticket deals currently under negotiation but several of them have been deferred by the Defence Ministry as part of the review of all direct import deals.
- This is in conjunction with efforts to push the 'Make in India' scheme in defence. Russian deals have also been deferred including the one for 21 MiG-29 fighter jets for the Indian Air Force (IAF) along with the upgradation of 59 existing Mig-29 jets estimated to cost ₹7,418 crore and the manufacture of 12 SU-30 MKI aircraft at an estimated ₹10,730 crore by Hindustan Aeronautics Limited (HAL).
- Another long pending deal is for the manufacture of 200 K-226T utility helicopters in India
- In addition, a deal for six Ka-31 early warning helicopters and a bigger deal for Igla-S very short range air defence systems have also been deferred though the Army inducted a small number of Igla-S systems brought under emergency procurement.

Status of payments:

- With Russia being shut out of the global SWIFT system for money transfers, India and Russia have agreed to conduct payments through the Rupee-Rouble arrangement.
- With several big ticket deals including the S-400 under implementation, there are large volume of payments to be made.
- The Central banks of the two countries had extensively discussed this issue, and officials recently said that small payments have been resumed and work is on to resolve larger payments. For the two countries, payments by the Rupee-Rouble arrangement is not new.
- For instance, for the S-400 air defence systems signed in October 2018, with the looming threat of U.S. sanctions under CAATSA (Countering America's Adversaries

Through Sanctions Act), the two sides had worked out payments through the Rupee-Rouble exchange.

- In fact, the delivery schedule got slightly delayed as the payment was tied up. However, at that time Russia was within the SWIFT system.
- While India continues to remain Russia's largest arms buyer with a major chunk of legacy hardware from Russia and the Soviet Union, the volume of imports has reduced in the last decade.

Russia-Traditional military supplier:

- Russia has been a traditional military supplier, over 60% of Indian military inventory is of Russian origin, including fighter jets, tanks, helicopters and submarines.
- In 2021, India and Russia signed a ₹5000 crore deal for 6.1 lakh AK-203 assault rifles to be manufactured jointly in Uttar Pradesh.
- Russia is manufacturing two stealth frigates for the Navy. While another two are being manufactured by the Goa Shipyard Limited under technology transfer.
- India is also looking to receive the third Akula class nuclear attack submarine (SSN) sometime in 2025.
- India-Russia military technical cooperation has evolved from a buyer seller framework to one involving joint research, development and production of advanced defence technologies and systems
- BrahMos Missile System as well as the licensed production in India of SU-30 aircraft and T-90 tanks, are examples of such flagship cooperation.
- Furthering this cooperation, an agreement on the cooperation in the production of spare parts for Russian/Soviet military equipment was signed.
- Agreements on supply of S-400 air defence systems, construction of frigates and shareholders agreement on the formation of joint venture to manufacture Ka-226T helicopters in India.
- Production of AK Series Assault Rifles at Ordnance Factory Korwa under the 'Make-in-India' program.
- The two countries also hold exchanges and training exercises between their armed forces annually.
- The first-ever Tri-Services exercise –'INDRA 2017' took place in 2017.

India-Ukraine defence relations:

• India had signed deal with Ukraine for eight Zorya-Mashproekt gas turbine engines for the frigates.

- Ukraine, it is upgrading over 100 An-32 transport aircraft of the IAF under a deal finalised in 2009.
- At the Aero India in 2021, Ukraine signed four agreements worth \$70 mn, which includes sale of new weapons as well as maintenance and the upgrade of the existing ones in service with the Indian military, as reported earlier.

KARAKALPAKS

In News:

At least 18 people were killed during government crackdown on protests in Uzbekistan's autonomous province of Karakalpakstan. The protests had broken out in response to the government's plan to restrict the region's long-held autonomy.

Analysis of Background:

About Karakalpaks:

- 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 and is one of the 7 languages of instruction in Uzbekistan's public schools. 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.

What is the region's history?

- The Karakalpak people settled around the Amu Darya (a river that feeds into the Aral Sea) in the 18th century.
- By 1873, they partly came under Russian rule and by 1920 were completely incorporated into the Soviet Union.
- Their region, Karakalpakstan, was an autonomous area within the Russian Soviet Federative Socialist Republic (Russia during 1917-1922), before it was made a part of Uzbekistan as the Karakalpak Autonomous Socialist Republic (ASSR) in 1936.

- When Uzbekistan declared its independence from the Soviet Union in August 1991, Karakalpak ASSR was re-established as the Republic of Karakalpakstan in December of the same year.
 - 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.

Why triggered the recent protests?

- Violent protests broke out in the impoverished Karakalpakstan after President Shavkat Mirziyoev, who has been in power since 2016, published a draft amendment to the Uzbek constitution, which removed the region's right to secede Uzbekistan by a referendum.
- An environmental crisis, and the health and economic troubles it brought in its wake, has made Karakalpakstan an impoverished region and invoked a sense of neglect among the Karakalpak people.
- At one point in time, Karakalpakstan was one of the most fertile provinces in Uzbekistan, due to its location next to the Aral Sea.
- However, the once 4th largest saline lake in the world, has been steadily shrinking and reducing the arable land in the province.
- The Karakalpaks, who live south of the Aral Sea also face serious health problems, such as increased rates of throat cancer, kidney problems and the highest infant mortality rate in the world.
- This is because the fertilisers and pesticides that were used for cotton farming saturated the surrounding land and were carried across the region by wind blowing across the exposed seabed.

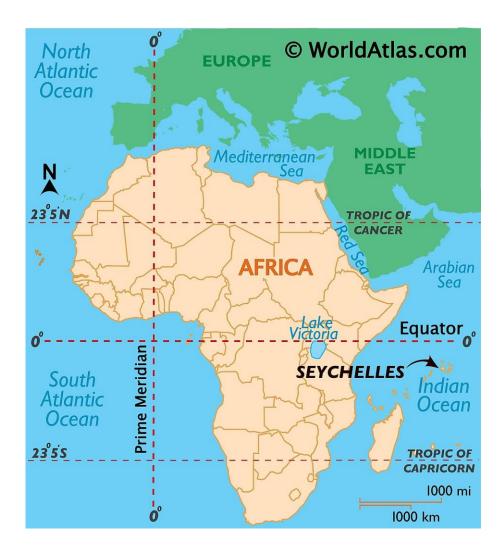
SEYCHELLES

In News:

Indian Navy joined the Seychelles Defence Force and the citizens of Seychelles for their Independence Day celebrations. INS Kolkata, an indigenously built Stealth Guided Missile Destroyer of the Indian Navy, was deployed to Port Victoria of Seychelles to mark the occasion.

Analysis of Background: About Seychelles:

- Seychelles is officially known as the Republic of Seychelles.
- It is an island country consisting of 115 islands in the Indian Ocean at the eastern edge of the Somali Sea.
- Victoria is the capital and also the largest city.
- It is the least populated African country, with an estimated 2020 population of 98,462.
- It has the second-highest Human Development Index of any African country after Mauritius.
- Seychellois culture and society is a mix of French, British, and African influences, with more recent infusions of Chinese and Indian elements.
- Seychelles is among the world's top countries to protect lands for threatened species, assigning 42% of its territory for conservation.



CHINA'S BELT AND ROAD INITIATIVE In News:

At the recently concluded summit of G-7 leaders in Germany, U.S. President Joe Biden and his allies unveiled their \$600 billion plan called the Partnership for Global Infrastructure and Intelligence which is being seen as a counter to China's Belt and Road Initiative (BRI), valued at a trillion U.S. dollars by some experts. Therefore, there is a need to re-visit the various projects under the BRI in different South Asian countries.

Analysis of Background:

- In 2013, Chinese President Xi Jinping, during his visits to Kazakhstan and Indonesia, expressed his vision to build a Silk Road Economic Belt (SERB) and a 21st Century Maritime Silk Road (MSR), to break the "bottleneck" in Asian connectivity. Thus, the Belt and Road initiative was born.
- The initiative envisioned a Chinese-led investment of over \$1 trillion in partner countries by 2025. More than 60 countries have now joined BRI agreements with China, with infrastructure projects under the initiative being planned or under construction in Asia, Africa, Europe, and Latin America.
- To finance BRI projects, China offers huge loans at commercial interest rates that countries have to pay within a fixed number of years.
- The west has accused China of debt-trapping by extending "predatory loans" that force countries to cede key assets to China. However, research indicates that low and middle-income countries are often the ones to approach China after not being able to secure loans from elsewhere.
- In recent years, the BRI seems to have experienced a slowing down as annual Chinese lending to countries under the initiative slimmed from its peak of \$125 billion in 2015 to around \$50 to 55 billion in 2021.

Investments in the Indian neighbourhood:

- The biggest project under BRI is in Pakistan, the China Pakistan Economic Corridor (CPEC). Over time, China pledged \$62 billion in low-interest loans and financing from Chinese state-owned banks and the Asian Development Bank (ADB).
- Bangladesh, which joined the BRI in 2016, has been promised the second-highest belt and road investment by China in South Asia after Pakistan.
- In Sri Lanka, multiple infrastructure projects that were being financed by China came under the fold of the BRI after it was launched in 2013.

- The island nation in the last couple of years has witnessed competition between India and China in port terminal and energy projects. In 2021, Colombo ejected India and Japan out of a deal to develop the East Container Terminal at the Colombo port and got China to take up the project. Some BRI projects in Sri Lanka have been described as white elephants — such as the Hambantota port.
- Afghanistan has not comprehensively been brought into the BRI, despite a Memorandum of Understanding (MoU) being signed with China in 2016
- One of the most prominent BRI projects undertaken in the Maldives is the two km long China-Maldives Friendship Bridge — a \$200 million four lane bridge.

BRICS COMMUNICATIONS MEETING

In News:

The 8thMeeting of BRICS Communications Ministers was held in virtual mode under the presidency of China. The Ministers decided to work in the field of ICTs in areas identified at the 14th BRICS Summit held on 23-24 June 2022. All Ministers appreciated the work-plans finalized for BRICS Institute for Future Networks (BIFN), Digital BRICS Task Force (DBTF) and hoped that these mechanisms will help in deepening Innovative cooperation among BRICS countries.

Analysis of Background:

About BRICS:

- It is an informal group of states comprising the Federative Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and the Republic of South Africa.
- It is actually a forum than a traditional-type organization with rigid membership and regulations.
- Originally the first four were grouped as "BRIC" (or "the BRICs"), before the induction of South Africa in 2010.
- At the Fortaleza Summit (2014), in Brazil, the New Development Bank (NDB) and the Contingent Reserve Arrangement (CRA) were created
- The acronym BRIC was introduced by Goldman Sachs in 2001 to point out the rising power that will, along with the United States, become the world's five major economies in the 21st century.
- In 2006, BRIC countries began their negotiations, and in 2009 they took place at the annual summit of heads of state and government.

 BRICS is a group made up of five main emerging countries – Brazil, Russia, India, China, and South Africa – collectively representing about 42 percent of the world's population, 23% of global GDP, 30% of the territory, and 18% of world trade.

India and BRICS:

- A close examination of India's record in BRICS reveals that New Delhi has used its membership to make a substantial contribution to the international financial architecture, while also making efforts to address glaring gaps in areas such as counterterrorism, the fight against climate change and UNSC reform.
- India is not a free-rider in a system of global governance dominated by the West, and continues to provide a vision of global governance.
- India was the main BRICS country behind the establishment of the NDB and proposed the idea at the fourth BRICS summit in New Delhi.
- While it might be tempting to position the NDB as a challenge to the West, New Delhi seeks reforms in global governance through BRICS and does not have an anti-West agenda.
- India's efforts to seek changes in international financial governance through BRICS have been successful, as China also shares this objective with India.
- BRICS may have raised the issue of UNSC reform but this is more declaratory in nature than a serious attempt to overhaul the UNSC. This reflects that BRICS is interested in selective reform of the system, as its members have developed vested interests in the existing system.
- Climate governance too has been highlighted as an area where BRICS members have a lot of potential to contribute, but so far, that has not happened. Russia has been ambivalent towards climate change and has recently joined the Paris Agreement.
- At a different level, BRICS membership elevates India's global profile. China may still
 not be interested in de-hyphenating India and Pakistan, but India's BRICS membership
 automatically de-hyphenates India and Pakistan, while it casts India and China as
 equals. So, even as challenges abound in the BRICS trajectory, the grouping will
 continue to be of some instrumental value to India in the years ahead.

What challenges BRICS is facing?

- Disagreements between its members.
- Slow progress shown on the ground when it comes to implementation of initiatives make it quite vulnerable to criticism.

- The development trends of the BRICS nations are not very similar, as there is a huge difference in the economic structure of the member countries.
- The members also have differences over the UN Security Council (UNSC) reforms. It will be tough for the member countries to make a consensus on contemporary global issues.
- The burden of the NDB cannot be shared equally, as the size of the economy of each member varies with great magnitude. So, it is inevitable that the disputes will arise in sharing the burden of NDB.

SOUTH SUDAN In News:

United Nations Secretary-General António Guterres has appointed Lt Gen Mohan Subramanian from India as the Force Commander of the United Nations Mission in South Sudan (UNMISS). He served in the Indian Army for over 36 years. Most recently, he served as the General Officer Commanding; he contributed to the Army's operational and logistic preparedness.

Indian Army plays a leading role in UN Peacekeeping with a presence in 8 out of 14 ongoing UN missions worldwide, and over 5,400 Indian military personnel deployed under the UN Mission.

Analysis of Background:

About South Sudan:

- South Sudan is officially known as the Republic of South Sudan.
- It is a landlocked country in Central Africa.
- It is bordered by;
 - Ethiopia
 - Sudan
 - The Central African Republic
 - The Democratic Republic of the Congo
 - Uganda
- Juba is the capital and also the largest city.
- South Sudan gained independence from Sudan in 2011.
- Since its independence, It has suffered ethnic violence and civil war, ethnic massacres and killings of journalists.
- The White Nile passes through the country.

- South Sudan is known for its timber exports.
- It also contains many natural resources such as petroleum, iron ore, copper, chromium ore, zinc, tungsten, mica, silver, gold, diamonds, hardwoods, limestone and hydropower.
- The country's economy is heavily dependent on agriculture.



TOPIC: SOCIAL ISSUES/SOCIETY

EASTERN RAJASTHAN CANAL PROJECT In News:

The Union Government has decided to stop the work on the Eastern Rajasthan Canal project due to the 'lack of consent' by other States. The Project intended to benefit 13 districts of Rajasthan through the interlinking of rivers.

Analysis of Background:

Eastern Rajasthan Canal Project:

- The Project intended to benefit 13 districts of Rajasthan through the interlinking of rivers.
- It aims to transfer surplus water available in Southern Rajasthan rivers such as Chambal and its tributaries during the rainy season to the south-eastern districts of the state.
- It will ensure the availability of water for drinking and irrigation purposes.
- It will improve the groundwater table of the state.
- It will promote socio-economic development in the state.
- It will ensure women's empowerment and also improve the standard of living of the people.
- It will help in encouraging investment in the state and also increase the revenue potential of the state.

Chambal River:

- It originates from the northern slopes of the Vindhya mountains in Madhya Pradesh.
- From Madhya Pradesh, it enters Rajasthan and then Uttar Pradesh.
- In UP it joins the Yamuna River in Etawah District.
- Tributaries: Banas, Kali Sindh, Sipra, Parbati, etc.
- The National Chambal Sanctuary is located along the river Chambal.
- It is known for the critically endangered Gharial.

CHILD LABOUR IN INDIA

In News:

Recently the Union Government has stated that the government does not have any data on child labour in India. The Union government has highlighted the lack of budgetary provisions for the National Child Labour Project (NCLP) has negatively affected their work.

Analysis of Background:

- The Labour Ministry mentioned that in 2016 the national Child Labour Project (NCLP) was merged with the Samagra Shiksha Abhiyan, and after that, the Ministry has no records of child labour.
- The currently available data is based on the Census 2011, which highlights that the country has more than a million child labourers.
- The Labour Ministry stated that the nation needs to wait till the next census to make an assessment of the number of child labour in India.
- National Child Labour Project Scheme
- It aims to eliminate all forms of child labour.
- Identify and withdraw all children from child labour.
- Provide education along with vocational training.
- Ensuring the conjunction of services provided by different government departments/agencies for eliminating child labour.
- Raising awareness amongst stakeholders and target communities.
- Creation of a Child Labour Monitoring, Tracking and Reporting System.
- Target Groups;
 - 1. All child workers below the age of 14 years.
 - 2. Adolescent workers below the age of 18 years engaged in hazardous occupations/processes.
 - 3. Families of Child workers in the identified target area.

Child Labour in India:

- The census of 2011 found that the total number of child labourers (aged 5–14) in India is more than 10.1 million.
- A "Child" is defined as any person below the age of 14, and Indian laws prohibit the employment of a Child in any employment.
- Children between the ages (of 14-18) are known as "Adolescents" and the law allows adolescents to be employed except in hazardous occupations and processes which

include mining, inflammable substance and explosives-related work and any other hazardous process

 Various laws in India, such as the Juvenile Justice (care and protection) of Children Act-2000, and the Child Labour (Prohibition and Abolition) Act-1986 provide guidelines to identify prosecute and stop child labour.

MISSION SHAKTI

In News:

The Union Ministry of Women and Child Development has released guidelines for effectively implementing the 'Mission Shakti' scheme. The Union Government of India has launched the scheme as an integrated women empowerment programme to ensure the safety, security and empowerment of women.

Analysis of Background:

About Mission Shakti:

- The Union Ministry of Women and Child Development is the implementing body of the scheme during the 15th Finance Commission period 202I-22 to 2025-26.
- Mission Shakti aims to ensure a lifecycle support system for women through integrated care, safety, protection, rehabilitation and empowerment.
- Mission Shakti has two sub-schemes 'Sambal' and 'Samarthya'.
 - The "Sambal" is a sub-scheme for the safety and security of women.
 - The "Samarthya" is a sub-scheme for the empowerment of women.
- Initiatives under SAMBAL;
 - One-Stop Centre (OSC) to facilitate access to an integrated range of services including medical aid, police assistance, legal aid/ case management, psychosocial counselling and temporary support services to women affected by violence.
 - Beti Bachao Beti Padhao, to address the declining Child Sex Ratio.
 - Mahila Police Volunteers, to report the incidences of violence against women
 - Women's Helpline.
 - Nari Adalats to promote and facilitate alternative dispute resolution and gender justice within families and in society.
- Initiatives under SAMARTHYA;

- Gender Budgeting is a tool for mainstreaming gender perspectives at various stages of planning, budgeting, implementation, impact assessment and revisiting of policy/programme objectives and allocations.
- Swadhar Greh to provide relief and rehabilitation to destitute women and women in distress.
- Working Women Hostels for ensuring safe accommodation for women working away from their place of residence.
- National Creche Scheme to provide daycare facilities to children of the age group of 6 months to 6 years of working women who are employed.
- Pradhan Mantri Matru Vandana Yojana (PMMVY) Provide Cash incentives for improved health and nutrition to pregnant and nursing mothers.
- Umbrella ICDS Scheme is also subsumed in 'Samarthya'.

Present Status of the Schemes:

- Mission Shakti has a total financial cost of Rs 20989 Crore.
- The sub-scheme 'Sambal' will be implemented as a Centrally Sponsored scheme with 100% central funding from the Nirbhaya Fund/ MWCD budget
- The sub-scheme 'Samarthya' will be implemented as a Centrally Sponsored Scheme with a funding ratio of 60:40 between Centre and State Governments / UTs with the legislature, except North East & Special Category States / UTs with legislature where the fund ratio will be 90:10.
 - For UTs without legislature, 100% of funding will be provided by the Central Government.

TOPIC: HEALTH

WORLD HEPATITIS DAY

In News:

Every year on July 28, World Hepatitis Day is observed to raise awareness about viral hepatitis — which causes inflammation of the liver, leading to severe disease and also, liver cancer.

Analysis of Background:

About Hepatitis:

- Hepatitis is an inflammation of the liver that is caused by a variety of infectious viruses and noninfectious agents leading to a range of health problems, some of which can be fatal.
- There are five main strains of the hepatitis virus, referred to as types A, B, C, D and E. While they all cause liver disease, they differ in important ways including modes of transmission, severity of the illness, geographical distribution and prevention methods.
- In particular, types B and C lead to chronic disease in hundreds of millions of people and together are the most common cause of liver cirrhosis, liver cancer and viral hepatitis-related deaths.

| Type of hepatitis | Common route of transmission |
|-------------------|--|
| hepatitis A | exposure to HAV in food or water |
| hepatitis B | contact with HBV in body fluids, such as blood, vaginal secretions, or semen |
| hepatitis C | contact with HCV in body fluids, such as blood, vagina secretions, or semen |
| hepatitis D | contact with blood containing HDV |
| hepatitis E | exposure to HEV in food or water |

Causes of Noninfectious Hepatitis:

Although hepatitis is most commonly the result of an infection, other factors can cause the condition.

Alcohol and other toxins

- Excess alcohol consumption can cause liver damage and inflammation. This may also be referred to as alcoholic hepatitis.
- The alcohol directly injures the cells of your liver. Over time, it can cause permanent damage and lead to thickening or scarring of liver tissue (cirrhosis) and liver failure.
- Other toxic causes of hepatitis include misuse of medications and exposure to toxins.

Autoimmune system response

• In some cases, the immune system mistakes the liver as harmful and attacks it. This causes ongoing inflammation that can range from mild to severe, often hindering liver function. It's three times more common in women than in men.

Common symptoms of hepatitis

If you are living with a chronic form of hepatitis, like hepatitis B and C, you may not show symptoms until the damage affects liver function. By contrast, people with acute hepatitis may present with symptoms shortly after contracting a hepatitis virus.

Common symptoms of infectious hepatitis include:

- Fatigue
- Flu-like symptoms
- Dark urine
- Pale stool
- Abdominal pain
- Loss of appetite
- Unexplained weight loss
- Yellow skin and eyes, which may be signs of jaundice

Treatment and Vaccines

- Safe and effective vaccines are available to prevent hepatitis B virus (HBV). This vaccine also prevents the development of hepatitis D virus (HDV) and given at birth strongly reduces transmission risk from mother to child.
- Chronic hepatitis B infection can be treated with antiviral agents. Treatment can slow the progression of cirrhosis, reduce incidence of liver cancer and improve long term survival.
- A vaccine also exists to prevent infections of hepatitis E (HEV), although it is not currently widely available.
- There are no specific treatments for HBV and HEV and hospitalization is not usually required.
- There is no vaccine for hepatitis C. Antiviral medicines can cure more than 95% of persons with hepatitis C infection, thereby reducing the risk of death from cirrhosis and liver cancer, but access to diagnosis and treatment remains low.
- Hepatitis A virus (HAV) is most common is low- and middle-income countries due to reduced access to clean and reliable water sources and the increased risk of contaminated food. A safe and effective vaccine is available to prevent hepatitis A. Most HAV infections are mild, with the majority of people recovering fully and developing immunity to further infection. However, these infections can also rarely be severe and life threatening due to the risk of liver failure.

HIV

In News:

People living with HIV have been protesting outside offices of the National AIDS Control Organisation (NACO) for five days, demanding that they receive medicines in a timely manner following shortages for nearly five months. Around 50,000 people have been affected due to the shortage, according to the protesters.

Analysis of Background:

About HIV:

- Human immunodeficiency virus or HIV is an infection that attacks the immune system by destroying the body's immune cells called CD4, which help it respond to infection.
- Once HIV attacks the CD4 cells, it starts replicating and destroying the cells, weakening the body's immune system and making it more prone to certain "opportunistic infections" that take advantage of the weak immune system.
- In a nutshell, if HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome).

Transmission

- Bodily fluids such as blood, semen, vaginal fluids, rectal fluids and breastmilk can be carriers for HIV.
- It can be transmitted through unprotected sex, transfusion of contaminated blood, sharing needles and syringes, and from a mother with HIV to her infant during pregnancy.
- Typically, the time between HIV transmission and AIDS diagnosis is 10-15 years, although it may occur sooner.

Prevention:

• There's no vaccine to prevent HIV infection and no cure for AIDS. Protecting oneself from infection is the way ahead.

What medicines are unavailable?

- The main shortage is of dolutegravir, used as part of the first-, second-, and thirdline antiretroviral therapy (ART)
- NACO recommends dolutegravir as the preferred drug for treatment of HIV-positive adults, adolescents and children (aged more than 6 years with bodyweight more than

20 kg)," according to the 2021 guidelines for HIV care and treatment by the organisation.

- There is also a shortage of nevirapine syrup that is given to infants with HIV.
- There is a stockout of at least one or more medicines across 12 states, most facing problems with paediatric and second and third lines of antiretrovirals.

Why is the shortage a concern?

- 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.
- Continued suppression of the virus with the use of ART over time leads to reduction in the progression of HIV, the frequency of opportunistic infections, and increases lifespan and quality of life.
- If medicines are skipped, there is a possibility of the viral replication increasing and taking backwards the progress made in treatment.

MARBURG VIRUS DISEASE

In News:

Ghana has reported its first-ever suspected cases of Marburg virus disease.

Analysis of Background:

Marburg virus disease is a highly virulent disease that causes haemorrhagic fever, with a fatality ratio of up to 88%. It is in the same family as the virus that causes Ebola virus disease i.e family Filoviridae.

Origin:

The virus was initially detected in 1967 after simultaneous outbreaks in Marburg and & Frankfurt in Germany; and in Belgrade, Serbia.

Cause:

 In this there is severe illness of humans and non-human primates caused by either of the two Marburgviruses: Marburg virus (MARV) and Ravn virus (RAVV). MVD is a viral hemorrhagic fever (VHF), and the clinical symptoms are indistinguishable from Ebola virus disease (EVD). Marburgvirions contain non-infectious, linear nonsegmented, single-stranded RNA genomes.

Prevalance:

Marburgviruses are endemic in arid woodlands of equatorial Africa.

Symptoms:

- The common symptoms of a virus are fever, headache, fatigue, abdominal pain and gingival haemorrhage.
- Transmission
- Fruit bats of the Pteropodidae Family are the key carriers of the disease. It typically infects humans following prolonged exposure to mines or caves inhabited by Rousettus bat colonies.
- The home range of the fruit bats includes India, parts of Africa and the Middle-East, South-East Asian countries and some parts of Australia.
- Human-to-human transmission takes place through direct contact with the blood, secretions, organs or other bodily fluids of infected people. Surfaces and materials contaminated with these fluids are other vital sources. Its incubation period ranges from two days to three weeks.

Vaccine and Treatment:

- There are no approved vaccines or antiviral treatments for the virus yet.
- Early supportive care with rehydration and symptomatic treatment improves survival rates.

ANTHRAX

In News:

Surveillance and preventive measures were intensified at Athirappilly in Kerala's Thrissur as anthrax has been confirmed in wild boars found dead in the area.

- Anthrax is an infectious disease caused by gram-positive, rod-shaped bacteria known as Bacillus anthracis.
- The spores that house Anthrax bacteria are naturally present in soils.
- It commonly affects domestic and wild animals around the world.

- People can get sick with anthrax if they come in contact with infected animals or contaminated animal products.
- Anthrax can cause severe illness in both humans and animals.
- There's no evidence that anthrax is transmitted from person to person but it's possible that anthrax skin lesions may be contagious through direct contact.
- Signs and symptoms can include skin sores, vomiting and shock.
- Prompt treatment with antibiotics can cure most anthrax infections.
- Anthrax vaccination is recommended for people at high risk of infection.
- Inhaled anthrax is more difficult to treat and can be fatal. Anthrax is very rare in the developed world. However, the illness remains a concern because the bacteria have been used in bioterrorism attacks in the United States.
- The American disease control arms of the government have categorized Bacillus anthracis as a Category A threat, a rank designated for dangerous elements that pose a hazard to national security.

GENERAL STUDIES – III

TOPIC: ECONOMY

FOREIGN CONTRIBUTION REGULATION ACT (FCRA) In News:

Recently the Ministry of Home Affairs (MHA) removed some critical data from the Foreign Contribution (Regulation) Act (FCRA) website.

Analysis of Background:

- The removed information includes;
 - The annual returns of NGOs.
 - List of NGOs whose licences have been cancelled.
- Earlier the FCRA website was used to maintain detailed data related to:
 - List of NGOs granted licences.
 - List of NGOs granted prior permission for receiving foreign contributions.
 - List of NGOs whose licences have been cancelled.
 - List of NGOs whose licences are expired.
- It also maintains data related to the annual returns of NGOs.
- The Home Ministry has not commented on the action taken, but officials said that the removed data was considered "unnecessary" for public viewing.

Foreign Contribution Regulation Act:

- The FCRA was enacted in 1976 to regulate foreign money into the country through independent organisations.
- The Foreign Contribution Regulation Act was amended by the Indian Parliament in 2010.
 - To effectively regulate the foreign contribution by individuals or associations or companies.
- The Union Minister of Home Affairs introduced the Foreign Contribution (Regulation) Amendment Bill in 2020, which made several changes.
- Foreign Contribution (Regulation) Amendment Act, 2020
- The Act regulates the acceptance and utilisation of foreign contributions by individuals, associations and companies.
 - Foreign contribution is the donation or transfer of any currency, security or article (of beyond a specified value) by a foreign source.

• Prohibition to accept foreign Contributions: Certain persons are prohibited to accept any foreign contribution.

These include:

- Election candidates, editor or publisher of a newspaper, judges, government servants, members of any legislature, and political parties, among others.
- The Bill adds public servants (as defined under the Indian Penal Code) to this list. A public servant includes any person who is in service or paid by the government or remunerated by the government for the performance of any public duty.
- Transfer of foreign Contributions
 - Foreign contribution cannot be transferred to any other person unless such person is also registered to accept foreign contribution (or has obtained prior permission under the Act to obtain foreign contribution).
 - The Act prohibited the transfer of foreign contributions to any other person. The term 'person' under the Act includes an individual, an association, or a registered company.
- Aadhar for registration
 - Any person seeking registration (or renewal of such registration) or prior permission for receiving a foreign contribution must make an application to the central government in the prescribed manner.
 - The Act adds that any person seeking prior permission, registration or renewal of registration must provide the Aadhar number of all its office bearers, directors or key functionaries, as an identification document.
 - In the case of a foreigner, they must provide a copy of their passport or the Overseas Citizen of India card for identification.
- FCRA Account
 - Foreign contributions must be received only in an account designated by the bank as an "FCRA account" in such a branch of the State Bank of India, New Delhi, as notified by the central government.
 - No funds other than the foreign contribution should be received or deposited in this account.
 - The person may open another FCRA account in any scheduled bank of their choice for keeping or utilising the received contribution.
- Restriction in the utilisation of foreign contribution
 - The Government may restrict the usage of unutilised foreign contributions for persons who have been granted prior permission to receive such contributions.
- Renewal of licence

- Every person who has been given a certificate of registration must renew the certificate within 6 months of expiration.
- The Act provides that the government may conduct an inquiry before renewing the certificate.
- Reduction in use of foreign contributions for administrative purposes
 - A person who receives a foreign contribution must use it only for the purpose for which the contribution is received.
 - They must not use more than 20% of the contribution for meeting administrative expenses (earlier it was 50%).
- Suspension of Registration
 - Earlier governments may suspend the registration of a person for a period not exceeding 180 days.
 - The Act adds that such suspension may be extended up to an additional 180 days.

PURCHASING MANAGERS' INDEX

In News:

- India's services firms saw growth in new business and output accelerate to a 11-year high in June, as per the survey-based S&P Global India Services Purchasing Managers Index (PMI).
- The index rose to 59.2 last month, from 58.9 in May, signaling a strengthening in demand across the services sector, which had borne the brunt of the COVID-19 pandemic.

Analysis of Background:

About PMI:

- PMI or a Purchasing Managers' Index (PMI) is an indicator of business activity-- both in the manufacturing and services sectors.
- It is a survey-based measurethat asks the respondents about changes in their perception of some key business variables from the month before.
- It is calculated separately for the manufacturing and services sectors and then a composite index is constructed.
- Started in 1948 by the US-based Institute of Supply Management, the Purchasing Managers' Index, or PMI, has now become one of the most closely watched indicators of business activity across the world.

How is the PMI derived?

- The PMI is derived from a series of qualitative questions.
- Executives from a reasonably big sample, running into hundreds of firms, are asked whether key indicators such as output, new orders, business expectations and employment were stronger than the month before and are asked to rate them.

How does one read the PMI?

- A figure above 50 denotes expansion in business activity.
- Anything below 50 denotes contraction.
- Higher the difference from this mid-point greater the expansion or contraction.
- The rate of expansion can also be judged by comparing the PMI with that of the previous month data.
- If the figure is higher than the previous month's then the economy is expanding at a faster rate. If it is lower than the previous month then it is growing at a lower rate.
- What are its implications for the economy?
- The PMI is usually released at the start of the month, much before most of the official data on industrial output, manufacturing and GDP growth becomes available.
- It is, therefore, considered a good leading indicator of economic activity. Economists consider the manufacturing growth measured by the PMI as a good indicator of industrial output, for which official statistics are released later.
- Central banks of many countries also use the index to help make decisions on interest rates.

What does it mean for financial markets?

- The PMI also gives an indication of corporate earning sand is closely watched by investors as well as the bond markets.
- A good reading enhances the attractiveness of an economy vis-a-vis another competing economy.
- For instance, India's manufacturing activity as measured by the PMI expanded, while for China/XYZ country it dipped.

FEMA and PMLA

In News:

An increasing number of cases registered by the Enforcement Directorate (ED) under the Foreign Exchange Management Act, 1999 (FEMA) and the Prevention of Money Laundering Act, 2002 (PMLA). According to data shared by the Union Minister of State for Finance in the Lok Sabha, the ED registered 14,143 cases under FEMA and PMLA between 2019-20 and 2021-22, as compared to 4,913 cases from 2014-15 to 2016-17 — an increase of over 187%.

Analysis of Background:

Foreign Exchange Management Act (FEMA)

- The Foreign Exchange Management Act, 1999 (FEMA) was enacted by the Indian parliament to consolidate and amend the law relating to foreign exchange.
- The objective was:
 - To facilitate external trade and payments.
 - Development and maintenance of the foreign exchange market in India.
- It replaced the Foreign Exchange Regulation Act (FERA).
 - Under the Foreign Exchange Regulation Act (FERA) of 1973, everything was prohibited unless specifically permitted.
 - It required imprisonment even for minor offences.
 - Under FERA, a person was presumed guilty unless he proved himself innocent.
- Under FEMA, the general principle is that all current account transactions are permitted unless expressly prohibited and all Capital account transactions are prohibited unless expressly permitted.
- It also paved the way for the introduction of the Prevention of Money Laundering Act, 2002, which came into effect on 1 July 2005.

Prevention of Money Laundering Act, 2002

- Prevention of Money Laundering Act, 2002 was passed by the Indian parliament to prevent money laundering and to provide for confiscation of property derived from money laundering.
- PMLA came into effect on July 1, 2005.
- The Act prescribes that any person found guilty of money laundering shall be jailed from 3 years to 7 years; the maximum punishment may extend to 10 years instead of 7 years.
- The Director or officer above the rank of Deputy Director with the authority of the Director can attach property believed to be "proceeds of crime" for 180 days.
- The Adjudicating Authority is the authority appointed by the central government to exercise jurisdiction, powers and authority conferred under PMLA.

- The Adjudicating Authority shall not be bound by the procedure laid down by the Code of Civil Procedure,1908, but shall be guided by the principles of natural justice and subject to the other provisions of PMLA.
- A person, who is accused of having committed the offence of money laundering, has to prove that alleged proceeds of crime are lawful property.
- An Appellate Tribunal is the body appointed by Union Government.
- It has the power to hear appeals against the orders of the Adjudicating Authority and any other authority under the Act.

FOREX RESERVES

In News:

India's foreign exchange reserves have dipped \$70 bn in 10 months.

Analysis of Background:

About Foreign Exchange Reserves:

- Foreign-exchange reserves (also called forex reserves or FX reserves) are money or other assets held by a central bank or other monetary authority.
- The assets are held so that it can pay its liabilities (if needed), such as the currency issued by the central bank, various bank reserves deposited with the central bank by the government and other financial institutions.
- Reserves are held in one or more reserve currency, mostly the United States dollar and to a lesser extent the EU's euro, the British pound sterling, and the Japanese yen.
- Foreign exchange reserves should ideally include foreign bank notes, foreign bank deposits, foreign treasury bills, and short and long-term foreign government securities.
- However, they also include gold reserves, special drawing rights (SDRs), and International Monetary Fund (IMF) reserve positions.
- This broader figure, along with SDR's, gold reserves and IMF reserve positions is more readily used.

Thus, in a nutshell, Foreign Exchange Reserves include-

- 1. Reserves held in US Dollars, The Euro, The British Pound or the Japanese Yen
- 2. Foreign bank notes, foreign bank deposits, foreign treasury bills and short term and long term foreign government securities
- 3. Gold reserves
- 4. Special Drawing Rights and International Monetary Fund reserve positions

• Foreign-exchange reserves are called reserve assets in the balance of payments and are located in the capital account. Hence, form an important part of the international investment position of a country.

Importance of Forex reserves:

- Forex reserves give comfort to the government and the RBI in managing India's external and internal financial issues at a time of major contraction in economic growth.
- It serves as a cushion in the event of a crisis on the economic front, and is enough to cover the import bill of the country for a year.
- Forex Reserves helps the rupee to strengthen against the dollar. The foreign exchange reserves to GDP ratio is around 15 per cent.
- Reserves provide a level of confidence to markets that a country can meet its external obligations, demonstrate the backing of domestic currency by external assets, assist the government in meeting its foreign exchange needs and external debt obligations and maintain a reserve for national disasters or emergencies.

What does the RBI do with the forex reserves at its disposal?

- The Reserve Bank functions as the custodian and manager of forex reserves, and operates within the overall policy framework agreed upon with the government.
- The RBI allocates the dollars for specific purposes. For example, under the Liberalised Remittances Scheme, individuals are allowed to remit up to \$250,000 every year.
- The RBI uses its forex kitty for the orderly movement of the rupee.
- It sells the dollar when the rupee weakens and buys the dollar when the rupee strengthens.
- When the RBI mops up dollars, it releases an equal amount in rupees. This excess liquidity is sterilised through the issue of bonds and securities and LAF operations.

Why have the reserves declined recently?

- From a peak of \$642.45 billion on September 3, India's foreign exchange reserves have dipped to \$572.71 billion as of July 15. That's a fall of almost \$70 billion in just over 10 months.
- The reserves declined due to selling of dollars by RBI.
- When the rupee value fell well below after the Russia-Ukraine war intensified and crude oil prices flared up, the Reserve Bank of India (RBI) sold dollars to prevent a further slide in value.
- The RBI's intervention dollar sales through PSU banks.

• When the central bank sells dollars, it takes out an equivalent amount in rupees, thus reducing the rupee liquidity in the system.

Why did the foreign currency assets fall?

- The main components of forex reserves are foreign currency assets (FCA), gold holdings and SDRs (special drawing rights) of the International Monetary Fund.
- The RBI sold dollars from its foreign currency assets (FCA), kept in global central banks, foreign banks and foreign securities to strengthen the rupee.

ONE NATION ONE RATION CARD

In News:

Consumer Affairs Minister Piyush Goyal has said Migrant workers benefited very significantly from 'One Nation, One Ration Card':

Analysis of Background:

Details about one nation one ration card:

- The Union Government launched the 'One Nation, One Ration Card' scheme on a pilot basis in four states in 2019.
- This scheme aims to ensure all beneficiaries, especially migrants get ration (wheat, rice and other food grains) across the nation from any Public Distribution System (PDS) shop of their own choice.
- Under the erstwhile system, a ration cardholder could buy food grains only from the PDS in the locality where he or she lives. This will change once the 'One Nation, One Ration Card' system becomes operational nationally.
- It was also launched with the purpose that no poor person should be deprived of getting subsidised food grains under the food security scheme when they shift from one place to another. It aims to reduce instances of corruption by middlemen and fraudulence in ration cards to avail benefits from different states.

Broad Objective

- The objective of this beneficiary centric high-impact program is to empower all NFSA beneficiaries to become AtmaNirbhar for their food security anywhere in the country, through portability of their existing ration cards enabling them to seamlessly lift their entitled subsidized foodgrains (in part or full) from any Fair Price Shop of their choice.
- This also enables their family members to lift balance/required amount of foodgrains on the same ration card at their native/ any place from the FPS of their choice.

Other Benefits

- Under the ONORC, all the beneficiaries from one state can get their share of rations in other states where the ration card was originally issued. Any recipient can use their ration cards at any PDS shop across the country. ONORC is aimed at providing universal access to PDS food grains for migrant workers.
- Apart from this, ONORC will also give the beneficiaries the opportunity to choose their own dealer. With many cases of misallocation, the beneficiary can switch to another FPS shop instantly, if there is any case of foul play.
- This scheme will be beneficial for women and other groups, since social identity and other contextual factors will provide them with a strong backdrop in accessing PDS.
- The ONORC will also help achieve the target set under SDG 2: Ending hunger by 2030.
 It also aims to address the poor state of hunger in India, where India has been ranked 102 out of 117 countries in the Global Hunger Index.

Who is eligible for One Nation One Ration Card?

- Any citizen, who is declared under Below Poverty Line (BPL) category will be eligible to get the benefit of this scheme across the country.
- The beneficiaries will be identified on the basis of their Aadhar based identification through the electronic point of sale (PoS) device. All the PDS shops will have the facility of electronic PoS devices.
- One Nation One Ration Card' scheme is also aimed at reducing the incidents of hunger deaths in the country, to further improve rankings in the Global Hunger Index.

How will the eligible beneficiary benefit from it?

- Ration cardholders can buy up to 5 kg of rice at Rs 3/kg, wheat at Rs 2/kg, and coarse grains at Rs 1/kg per month, as mandated under the National Food Security Act passed in 2013.
- Under the previous process, migrants had to apply for new ration cards at their new locations if they want to buy subsidised food grain, as the cards are linked to their residing places.
- However, the new system helps the large migratory population to avail the benefits anywhere across the country.

How does ONORC work?

- ONORC is based on technology that involves details of beneficiaries' ration card, Aadhaar number, and electronic Points of Sale (ePoS). The system identifies a beneficiary through biometric authentication on ePoS devices at fair price shops. The system runs with the support of two portals —Integrated Management of Public Distribution System (IM-PDS) (impds.nic.in) and Annavitran (annavitran.nic.in), which host all the relevant data.
- When a ration card holder goes to a fair price shop, he or she identifies himself or herself through biometric authentication on ePoS, which is matched real time with details on the Annavitaran portal. Once the ration card details are verified, the dealer hands out the beneficiary's entitlements. While the Annavitaran portal maintains a record of intra-state transactions — inter-district and intra-district — the IM-PDS portal records the inter-state transactions.

Status:

- As of now, the ONORC plan has been successfully implemented in all the 36 states/UTs, making food security portable throughout the country.
- During the last two years of COVID-19 pandemic, ONORC plan has significantly contributed in ensuring subsidized foodgrains to NFSA (National Food Security Act) beneficiaries, especially migrant beneficiaries.
- Since its inception in August 2019, about 71 Crore portable transactions have taken place under ONORC, delivering foodgrains equivalent to about Rs. 40,000 Crore in food subsidy through portability.
- Presently a monthly average of about 3 Crore portable transactions are being recorded, delivering the subsidised NFSA and free PMGKAY foodgrains with anywhere flexibility to the beneficiaries.
- Also, 'MERA RATION' mobile application is providing a host of useful real time information to the beneficiaries and is available in 13 languages.

WINDFALL TAX

In News:

With global oil prices easing, the Centre slashed the windfall tax levied on crude oil producers, reduced the export tax on Aviation Turbine Fuel (ATF) and diesel and scrapped the duty on petrol exports.

Analysis of Background: About Windfall Tax:

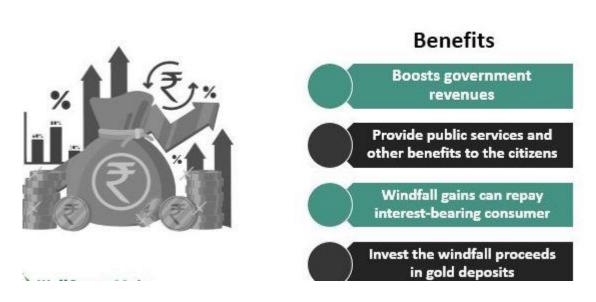
A windfall tax is a one-off tax imposed by a government on a company. It is levied on an unforeseen or unexpectedly large profit, especially unfairly obtained.

Why did Government Implement Windfall Taxes?

The central government slapped export duties on petrol and ATF (Rs 6 per litre or USD 12 per barrel) and diesel (Rs 13 a lire or USD 26 a barrel) and imposed a windfall tax on domestic crude production (Rs 23,250 per tonne or USD 40 per bbl). The aim was to garner more revenue and limit export to address the fuel shortage in the country.

Example

- Three of Indian upstream oil companies ONGC, Oil India and GAIL. All three declared all-time high net profit in the fiscal year 2021-22. ONGC said its net profit grew by 258 per cent to reach Rs 40,306 crore. Oil India announced net profit of Rs 3,887.31 crore, which is 123 per cent higher than in the preceding year. GAIL reported a 112 per cent surge in its net profit, at Rs 10,364 crore. This was possible as crude oil and gas prices shot up due to the Russia-Ukraine conflict.
- Governments, typically, levy a one-time tax over and above the normal rates of tax on such profits and that is called windfall tax.



Windfall Tax

Will such a tax increase price of fuel?

Very unlikely, as this tax is not part of the input or output cost, but levied only on profit.

OPIUM PRODUCTION IN INDIA

In News:

India has opened up the highly regulated sector of producing and processing opium to private players.

Analysis of Background:

- India has been growing poppy at least since the 15th century, as per historical records. The British East India Company assumed monopoly on the cultivation of poppy when the Mughal Empire was on the decline, and the entire trade was brought under government control by 1873.
- After India gained independence, the cultivation and trade of opium passed on to the Indian government, with the activity being controlled by The Opium Act, 1857, The Opium Act, 1878, and The Dangerous Drugs Act, 1930. At present, the cultivation and processing of poppy and opium is controlled by the provisions of The Narcotic Drugs and Psychotropic Substances (NDPS) Act and Rules.

What is the process of growing and processing opium in India?

- Due to the potential for illicit trade and risk of addiction, the cultivation of opium poppy is strictly regulated in the country, with the crops being allowed to be sown only in tracts of land notified by the central government in 22 districts in the states of Madhya Pradesh, Uttar Pradesh, and Rajasthan.
- The government announces the licensing policy for opium cultivation every year, providing details on minimum qualifying yield, the maximum area that can be cultivated by a single cultivator, and the maximum benefit that is allowed to cultivators for damage to the crop due to natural causes.
- The cultivation of opium poppy is strictly monitored the government uses satellite images to check for illicit cultivation. Once the crop is ready, they have a formula on how much the yield should be. This entire quantity is then bought by the government and processed in its own factories.
- The opium produced in the country is currently processed entirely at the Government Opium and Alkaloid Factories in Uttar Pradesh's Ghazipur and Madhya Pradesh's Neemuch. Products such as morphine, codeine, thebaine, and oxycodone are produced.

What is opium used for?

- Opium is a natural substance obtained from poppy seeds and its derivatives are mainly used for pain management.
- The extracts from opium poppy such as morphine are potent painkillers and are mainly prescribed to cancer patients. The opium product codeine is helpful in cough suppression.
- It is used illicitly for smoking, drinking, or even eating as pills. The addictive properties of opium are the reason that the cultivation of poppy is highly regulated around the world. Only 12 countries including India allow its cultivation legally for medicinal use.

How does the involvement of private players help?

The involvement of the private sector might boost the domestic production of various alkaloids such as morphine and codeine, bring in modern technology, and reduce imports. Despite being one of the few global cultivators of poppy, India still imports these active pharmaceutical ingredients as well as poppy seeds, which is also consumed as a food item in the country.

INDIA INTERNATIONAL BULLION EXCHANGE (IIBX)

In News:

Prime Minister Narendra Modi launched the India International Bullion Exchange (IIBX), a first in the country at Gandhinagar's GIFT city.

Analysis of Background:

About IIBX:

- The exchange, which was announced in Budget 2020, will sell physical gold and silver.
- For the first time in India, since the liberalization of gold imports through nominated banks and agencies in the 1990s, the eligible qualified jewellers in India, as notified by International Financial Services Centres Authority (IFSCA), have been allowed to directly import gold through IIBX.
- This reform permits direct participation of qualified jewellers on IIBX for the purpose of importing gold.
- Infrastructural arrangements to store these precious metals have already been made.

Eligibility:

- The exchange will be open for jewellers with a net worth of Rs 25 crore and above to participate.
- NRIs and institutes will also be eligible to participate in the exchange after registering with the International Financial Services Centre Association (IFSCA).

How will IIBX work?

- Registered jewellers and traders will be able to sell and buy physical gold and silver in the exchange. For this, they will have to become a trading partner or a client of an existing trading member.
- A branch or a subsidiary needs to be opened with IFSC for the same. The jewellers who do not have a physical presence in India will also be able to transact the metals, but they will not be allowed to connect with a client under them.
- The exchange is expected to bring transparency to the price-setting mechanism and provide standardization to the financialisation of the bullion in India. It shall also work as a standard-setting tool for the quality of the bullion.

What will be traded at the exchange initially?

In the early stage, gold 1 kg with 995 purity and gold 100 grams with 999 purity will be traded with a settlement period of T+0. Further, the exchange is expected to extend the settlement period to T+2 days.

Significance of IIBX:

- India is a leading importer of the metal and imported 1,069 tonnes of gold in 2021, up from 430 tonnes a year ago. The yellow metal is tightly regulated in the country and currently only nominated banks and agencies approved by the Reserve Bank of India can import gold and sell to dealers and jewellers across the country.
- India is the world's second biggest consumer of gold and the move to set up the IIBX is seen as India's effort to bring transparency to the market for the precious metal. Moreover, setting up of IIBX could lead to standard gold pricing in the country and make it easier for small bullion dealers and jewellers to trade in the precious metal.
- IIIBX will facilitate efficient price discovery with the assurance of responsible sourcing and quality, apart from giving impetus to the financialisation of gold in India. It will empower

India to gain its rightful place in the global bullion market and serve the global value chain with integrity and quality.

TOPIC: ENVIRONMENT

AGASTHYAMALA BIOSPHERE RESERVE

In News:

The Shendurney Wildlife Sanctuary derives its name from Gluta travancorica, a species endemic to the Agasthyamala Biosphere Reserve known as 'Chenkurinji' in local parlance. Belonging to the Anacardiaceae family, the tree was once abundant in the hills on the southern parts of Aryankavu Pass but its presence has been fast receding from the area over the years.

Analysis of Background:

- Gluta travancorica is very susceptible to climate change and the present condition of the species is quite bad with low regeneration performance
- Though there are seemingly enough number of the trees, most are not productive, generating a negative trend in its population.
- Though the flowering of Gluta travancorica usually happens in January, of late, the species has reported a tendency to extend the process due to climate change
- Though the tree is also seen inside the shola forests near Ponmudi, effective pollination hardly takes place in the habitat.
- It's reported to have medicinal properties and is used to lower blood pressure and treat arthritis. The heartwood is quite sturdy with deep red colour, and several trees were felled for wood during earlier days

About the Biosphere reserve:

- Located in the Western Ghats in the south of the country, the Agasthyamala Biosphere Reserve has peaks reaching 1,868 m above sea level.
- Consisting mostly of tropical forest, the site is home to 2,254 species of higher plants including about 400 that are endemic.
- It is also a unique genetic reservoir of cultivated plants, in particular cardamom, jamune, nutmeg, pepper and plantain.
- Three wildlife sanctuaries, Shendurney, Peppara and Neyyar, are located in the site, as well as the Kalakad Mundanthurai Tiger reserve.
- Core area(s): 113,500 ha, Buffer zone(s): 144,500 ha, Transition zone(s): 92,000 ha

- It covers 3,500 km2 and encompasses tropical forest ecosystems that fall within the Tirunelveli and Kanniyakumari districts of Tamil Nadu and the Thiruvananthapuram and Kollam districts of Kerala, Southern India.
- It hosts one of the most diverse ecosystems in peninsular India and constitutes an important biogeographical 'hot spot' within the Western Ghats.
- The reserve is home to Kani tribes from both Tamil Nadu and Kerala, which number in total approximately 30,000 inhabitants.
- In particular, its prominence in the epic Ramayana has made it a famous site for Hindu pilgrimages.

WORLD OVERSHOOT DAY

In News:

This year's Earth Overshoot Day was observed July 28, a day before it was celebrated last year July 29 and nearly a month earlier than it was celebrated in 2020 August 22.

- The day, hosted and calculated by Global Footprint Network, an international research organisation, falls earlier every year, to indicate that humanity's demand for natural resources exceeds what the Earth can provide.
- Moving the date of exhaustion communicates to the world that the time to act and save the planet is running out.
- The Global Footprint Network said on the occasion that "the greatest potential for large-scale change lies with governments and businesses when they align their policies and strategies with the possibilities of the planet."
- The organisation listed five ways to "turn around our natural consumption trends" to restore the Earth's "ecological debt":
 - Take care of the planet's biodiversity and let nature thrive
 - Design and manage cities sustainably
 - Use our energy resources judiciously
 - Control the population
 - Choose how we feed ourselves
- The WWF has launched the "Good for You, Good for the Planet" campaign to guide people towards eating a planet friendly diet.

- A new study by WWF and Tesco revealed that food waste amounts to 10 per cent of GHG, a jump from previous estimates of eight per cent. This amounts to twice the yearly carbon emissions from automobiles in the United States and Europe. The report said 1.2 billion tones of food was left wasted on farms and additionally, 931 million tonnes was left wasted in retail and consumption too.
- Overall, 2.5 billion tonnes of food goes uneaten globally. The report said approximately 40 per cent of all food grows uneaten worldwide, up from the previous estimated figure of 33 per cent.

SNOW LEOPARD

In News:

A recent study by the Zoological Survey of India (ZSI) on snow leopard (Panthera uncia) has thrown up interesting insights on the elusive mountain cat and its prey species. The study under National Mission on Himalayan Studies revealed a strong link between habitat use by Snow Leopard and its prey species Siberian ibex and blue sheep.

- The elusive and charismatic snow leopard feeds on hoofed animals (ungulates) including the Siberian ibex, blue sheep, urial and argali in the Himalayas.
- The snow leopard detection probability was high if the site was used by its prey species, i.e., ibex and blue sheep.
- Whereas, in the case of the prey species, the probability of detection was low when the predator (snow leopard) was present and detected.
- Snow leopards use rugged mountainous areas or non-forested areas covering an altitude between 3200m-5200m.
- 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 (IUCN) Red list and listed in Schedule-I species of the Indian Wildlife (Protection) Act, 1972, snow leopards are elusive mountain cats whose survival depends on depends primarily on wild ungulates.
- Higher up in the mountains, predators such as snow leopards regulated the populations of herbivores such as the blue sheep and Siberian ibex, thereby safeguarding the health of grasslands and a long-term absence of snow leopards could

cause trophic cascades as ungulate populations would likely increase, leading to depletion of vegetation cover.

- Snow leopards have a vast but fragmented distribution across the mountainous landscape of central Asia, which covers different parts of the Himalayas such as Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim.
- This charismatic species is largely threatened because of the loss of natural prey species, retaliatory killing due to conflict with humans and illegal trade of its fur and bones.

RAMSAR SITES

In News:

India has added five more Ramsar sites, or wetlands of international importance, bringing the number of such sites in the country to 54, Environment Minister Bhupendra Yadav said.

- These are the Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest and Pichavaram Mangrove in Tamil Nadu, the Sakhya Sagar in Madhya Pradesh and the Pala Wetlands in Mizoram.
- 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.
- Being designated a Ramsar site does not necessarily invite extra international funds, but the States — and the Centre — must ensure that these tracts of land are conserved and spared from encroachment.
- Acquiring this label also helps with a locale's tourism potential and its international visibility.
- Until 1981, India had 41 Ramsar sites, though the past decade has seen the sharpest rise —13 in designating new sites.
- Wetlands, according to the Environment Ministry, are an "area of marsh, fen, peatland or water; whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of

which at low tide does not exceed six metres, but does not include river channels, paddy fields, human-made water bodies/ tanks specifically constructed for drinking water purposes and structures specifically constructed for aquaculture, salt production, recreation and irrigation purposes."

- To be Ramsar site, however, it must meet at least one of nine criteria as defined by the Ramsar Convention of 1961, such as supporting vulnerable, endangered, or critically endangered species or threatened ecological communities or, if it regularly supports 20,000 or more waterbirds or, is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks are dependent upon.
- The National Wetland Inventory and Assessment compiled by the ISRO estimates India's wetlands to span around 1,52,600 square kilometres.

About Ramsar Convention :

- Any wetland site which has been listed under the Ramsar Convention that aims to conserve it and promote sustainable use of its natural resources is called a Ramsar Site.
- Ramsar Convention is known as the Convention of Wetlands. It was established in 1971 by UNESCO and came into force in 1975.
- India is a party to the Ramsar Convention. India signed under it on 1st February 1982.
- There are 49 Ramsar Sites in India
- Sundarbans is the largest Ramsar Site of India
- Chilika Lake (Orissa) and Keoladeo National Park (Rajasthan) were recognized as the first Ramsar Sites of India
- Uttar Pradesh has the most number of Ramsar Sites in India.
- Renuka Wetland in Himachal Pradesh is the smallest wetland of India.

| Ramsar Sites in India | Location |
|------------------------------|---------------|
| Khijadia Wildlife Sanctuary | Gujarat |
| Bakhira Wildlife Sanctuary | Uttar Pradesh |
| Haiderpur Wetland | Uttar Pradesh |
| Sultanpur National Park | Haryana |
| Bhindawas Wildlife Sanctuary | Haryana |
| Thol Lake Wildlife Sanctuary | Gujarat |
| Wadhvana Wetland | Gujarat |
| Ashtamudi Wetland | Kerala |
| Beas Conservation Reserve | Punjab |
| Bhitarkanika Mangroves | Odisha |

| Bhoj Wetlands | Madhya Pradesh |
|--|------------------|
| Chandra Taal | Himachal Pradesh |
| Chilika Lake | Odisha |
| Deepor Beel | Assam |
| East Kolkata Wetlands | West Bengal |
| Harike Wetlands | Punjab |
| Hokera Wetland | Jammu & Kashmir |
| Kanjli Wetland | Punjab |
| Keoladeo National Park | Rajasthan |
| Keshopur-Miani Community Reserve | Punjab |
| Kolleru lake | Andhra Pradesh |
| Loktak lake | Manipur |
| Nalsarovar Bird sanctuary | Gujarat |
| Nandur Madhameshwar | Maharashtra |
| Nangal Wildlife Sanctuary | Punjab |
| Nawabganj Bird Sanctuary | Uttar Pradesh |
| Parvati Agra Bird Sanctuary | Uttar Pradesh |
| Point Calimere Wildlife and Bird Sanctuary | Tamil Nadu |
| Pong Dam lake | Himachal Pradesh |
| Renuka lake | Himachal Pradesh |
| Ropar Wetland | Punjab |
| Rudrasagar Lake | Tripura |
| Saman Bird Sanctuary | Uttar Pradesh |
| Samaspur Bird Sanctuary | Uttar Pradesh |
| Sambhar lake | Rajasthan |
| Sandi Bird Sanctuary | Uttar Pradesh |
| Sarsai Nawar Jheel | Uttar Pradesh |
| Sasthamkotta lake | Kerala |
| Surinsar- Mansar lakes | Jammu & Kashmir |
| Tsomoriri | Ladakh |
| Upper Ganga river | Uttar Pradesh |
| Vembanad Kol Wetland | Kerala |
| Wular lake | Jammu & Kashmir |
| Sunderban Wetland | West Bengal |
| Asan Barrage | Uttarakhand |

| Kanwar Lake or Kabal Taal | Bihar |
|---------------------------|---------------|
| Lonar Lake | Maharashtra |
| Sur Sarovar | Uttar Pradesh |
| Tso Kar Wetland Complex | Ladakh |

BIOECONOMY

In News:

Union Minister Dr Jitendra Singh says, Bioeconomy will be key to India's future economy over the next 25 years.

Analysis of Background:

About Bioeconomy:

 According to the United Nations Food and Agriculture Organisation (FAO), the bioeconomy is "the production, use and conservation of biological resources, including related knowledge, science, technology, and innovation to provide information, products, processes and services to all economic sectors with the aim of moving towards a sustainable economy".

How to boost the Bioeconomy?

- An appropriate bioeconomic strategy requires the development of an action plan involving local governments, national governments and supranational organisations. In order to promote such a plan, a political framework that promotes multilateralism and enables joint efforts is needed.
- Increased investment in research, innovation and training. Research on bioeconomy issues and its application tend to be disconnected. To avoid this, public-private partnerships should be promoted.
- Strengthening policy coordination and engagement. Increasing synergies and coherence between bioeconomy-related policies, initiatives and economic sectors is essential.
- Improving markets and competitiveness. This consists of providing the knowledge base needed to make the different sectors of the bioeconomy more sustainable, as well as boosting the development of clean energy.

The bioeconomy, the 2030 Agenda and the SDGs:

The 2030 Agenda was adopted by the United Nations (UN) in 2015. This action plan encompasses the 17 Sustainable Development Goals (SDGs) and although all of these goals

can benefit from the application of the bioeconomy, an FAO study has found four related areas:

- 1. The bioeconomy influences the achievement of the end of poverty, zero hunger and the reduction of inequalities.
- 2. The bioeconomy relates to the goals of clean water and sanitation, sustainable cities and communities and responsible consumption and production.
- 3. The bioeconomy drives sustainable industry and infrastructure, as well as promoting economic growth and decent work.
- 4. The bioeconomy promotes health and well-being and climate action, which benefits underwater life and the life of terrestrial ecosystem life.

The Advantages of the Bio economy:

The bio-economy provides solutions to the main challenges facing humanity today, almost all of which are linked to climate change:

- Ensure food security and reduce hydric stress.
- Sustainable management of natural resources to avoid overexploitation.
- Reduce dependence on fossil fuels and promote renewable energies.
- Develop actions aimed at mitigating and adapting to climate change.
- Create green jobs and maintain productivity and competitiveness.
- Reduce GHG emissions and improve public health.

Transforming India into a Bio-economy:

- The use of multiple feed-stock to produce a diverse range of bio-products has created a golden opportunity to revive the Indian economy, as India stands as one of the leading producers of biomass energy. Around 18 GW of energy produced in India comes from biomass.
- This is an opportunity to reconcile with our environment and secure a sustainable and profitable future for the Indian economy. A simple change in the mind-set will foster an evergreen future across all industries and domains. To implement this effectively, it needs to be done at a fundamental level. So, ushering a bio-economy in India means working closely with India's existing environmental protection initiatives and developmental programs launched by the Government.
- The idea of Bio-economy needs to have a deep-rooted foundation in the political environment as well. The idea needs to flourish at the policy-making level.

BLUE FLAG STANDARDS In News:

Under the Integrated Coastal Zone Management Project, the Ministry of Environment, Forest & Climate Change (MoEFCC) has piloted Beach Environment & Aesthetic Management Service (BEAMS) Programme.

Analysis of Background:

- Under this programme, various activities related to pollution abatement, beach awareness, aesthetics, safety, surveillances services and environment education, etc., have been done at identified beaches aimed to achieve international standards for Blue Flag Beach Certification.
- Total 10 beaches situated in 6 States and 3 Union Territories have been developed at par with best international beaches with safety and ecologically sustainable infrastructure, acceptable bathing water quality, self-sustaining energy supply and environmentally sound services/management measures.
- Beaches that have been conferred with internationally recognized Blue Flag Certification are:
 - 1. Shivrajpur, Devbhumi Dwarka District, Gujarat
 - 2. Ghoghla (Diu) Dadara Nagar Haveli and Daman & Diu
 - 3. Padubidri, Udupi District, Karnataka
 - 4. Kasarkod, Karwar District, Karnataka
 - 5. Kappad, Kozhikode District, Kerala
 - 6. Kovalam, Kanchipuram District, Tamil Nadu
 - 7. Eden, Puducherry District, Puducherry
 - 8. Rushikonda, Vishakhapatnam District, Andhra Pradesh
 - 9. Golden, Puri District, Odisha
 - 10.Radhanagar (Havelock), Andaman & Nicobar Islands

BEAMS

This was launched by the Society of Integrated Coastal Management (SICOM) and the Union Ministry of Environment, Forest and Climate Change (MoEFCC).

The objectives of BEAMS program are to:

- Abate pollution in coastal waters,
- Promote sustainable development of beach facilities,
- Protect & conserve coastal ecosystems & natural resources,
- Strive and maintain high standards of cleanliness,

Hygiene & safety for beachgoers in accordance with coastal environment & regulations.

BLUE FLAG

- It is an internationally recognised eco-label that is accorded based on 33 criterias. These criterias are divided into 4 major heads namely, Environmental education and information, Bathing water quality, Environmental management, Conservation and safety services in the beaches
- Blue Flag beaches are considered the cleanest beaches of the world
- It is accorded by the international jury composed of eminent members United Nations Environment Programme (UNEP), United Nations World Tourism Organisation (UNWTO), Denmark-based NGO Foundation for Environmental Education (FEE) and International Union for Conservation of Nature (IUCN).

CHEETAHS IN INDIA

In News:

Officials are trying to complete the first transfer to Madhya Pradesh's Kuno National Park before August 15

- The cheetah is the only large carnivore that got completely wiped out from India, mainly due to over-hunting and habitat loss.
- India came one step closer to bringing back the world's fastest animal, which has been extinct in the country since 1952, with an agreement that was signed in Delhi on between the government and the visiting Namibian Deputy Prime Minister and Minister of International Relations, Netumbo Nandi Ndaitwah.
- The agreement, which has been negotiated for some years, will prepare the ground for the relocation of the first batch of cheetahs from southern Africa to Madhya Pradesh's Kuno National Park, with officials trying to complete the first transfer before August 15.
- While the current carrying capacity for the Kuno National Park is a maximum of 21 cheetahs, once restored the larger landscape can hold about 36 cheetahs
- The carrying capacity could be further enhanced by expanding the area to other parts of the Kuno wildlife division.

- Kuno had earlier been identified for the translocation of Gujarat's Gir lions, but the State government has refused to allow the Gir's lions to be transferred out, despite a Supreme Court order rejecting its pleas.
- The project for the cheetah was put back on track in 2020 when the Supreme Court lifted a stay on the original proposal to introduce African cheetahs from Namibia into the Indian habitat on an experimental basis.
- In May 2012, the court had stalled the plan to initiate the foreign cheetahs into the Kuno sanctuary in Madhya Pradesh fearing they would come into conflict with the plan for bringing lions into the same sanctuary.
- The court had also expressed concerns about whether the African cheetahs would find the sanctuary a favourable climate.
- The government said special programmes were being conducted to educate local villagers in Kuno including outreaches to sarpanches, local leaders, teachers, social workers, religious figures and NGOs, with a local mascot named "Chintu Cheetah" to sensitise populations to the importance of the project and guidelines for the cheetahhuman interface.

Need of re-introduction:

- Cheetah became the only large carnivore to have gone extinct in India in the 1950sdue to hunting and loss of habitat.
- Action Plan for Introduction of Cheetah in India', is an effort to bring the world's fastest cat backto the country after 70 years.

Relocation details:

- Source:Wildlife Institute of India and the Wildlife Trust of India, are translocating around 8-12 cheetahs from South Africa, Namibia and Botswana which have the world's largest populations of the animal.
- Destination: The big cats will live at Kuno Palpur National Park in Madhya Pradesh as it is most suitable for cheetah translocation in terms of habitat and an adequate prey base.

Kuno national park:

- Located in: Madhya Pradesh, India.
- Also known as Kuno-Palpur and Palpur-Kuno Wildlife Sanctuary.

Action Plan for Introduction of Cheetah in India' details:

- A cohort will be imported from Namibia and each of them will be fitted with a satellite-GPS-very high frequency radio-collar.
- The animals'lineage and condition shall be checked in the host country to ensure that they are not from an excessively inbred stock and are in the ideal age group, so as to conform to the needs of a founding population.
- Ministry of environment and the Cheetah Task Force, will create a formal framework to collaborate with governments of Namibia and/or South Africa, through the ministry of external affairs.

About Cheetah:

- The cheetah (Acinonyx jubatus) is a large cat native to Africa and central Iran.
- It is the fastest land animal, capable of running at 80 to 128 km/h.
- Habitat: The cheetah occurs in a variety of habitats such as savannahs in the Serengeti, arid mountain ranges in the Sahara and hilly desert terrain in Iran.
- Threats: Habitat loss, conflict with humans, poaching and high susceptibility to diseases.
- Protection status: It is listed as Vulnerable on the IUCN Red List.
- Re-introduction: Cheetah was declared extinct from India in 1952 and is considered the only large mammal that has gone extinct since the country's independence. If the cheetah is reintroduced, India would become probably the only country in Asia to have all the major big cats in the wild (lions, tigers and leopards included).

KISAN CREDIT CARD

In News:

Union Minister of Fisheries, Animal Husbandry and Dairying attended a meeting to review the progress in issuance of Kisan Credit Card to poor farmers from Animal Husbandry, Dairying & Fisheries Sector with Banks & RRBs.

- Kisan Credit Card Yojana is a scheme that offers short-term, revolving credit to farmers across India.
- It was launched in August 1998 by Indian public sector banks in a bid to mitigate any financial shortcoming experienced by farmers during crop cultivation, harvesting, and maintenance of their produce.

- Issue of Kisan Credit Cards to farmers is on the basis of their holdings for uniform adoption by the banks so that farmers may use them to readily purchase agriculture inputs such as seeds, fertilizers, pesticides etc. and draw cash for their production needs.
- The scheme was further extended for the investment credit requirement of farmers viz. allied and non-farm activities in the year 2004.

Establishment:

 This model scheme was prepared by the National Bank for Agriculture and Rural Development (NABARD) on the recommendations of the R. V. Gupta Committee to provide advances for agricultural needs.

Objectives/ Purpose:

- Kisan Credit Card (KCC) scheme meets the financial requirements of farmers at various stages of farming.
- The scheme aims at providing adequate and timely credit support from the banking system under a single window with flexible and simplified procedure to the farmers for their cultivation and other needs as indicated below:
 - 1. To meet the short-term credit requirements for cultivation of crops;
 - 2. Post-harvest expenses;
 - 3. Produce marketing loan;
 - 4. Consumption requirements of farmer household;
 - 5. Working capital for maintenance of farm assets and activities allied to agriculture;
 - 6. Investment credit requirement for agriculture and allied activities.

Eligibility

- All Farmers Individuals / Joint borrowers who are owner cultivators
- Tenant Farmers, Oral Lessees & Share Croppers
- Self Help Groups (SHGs) or Joint Liability Groups of Farmers including tenant farmers, share croppers etc.
- Kisan Credit Card is available for both individual and communal farmers and fish farmers, marine fishermen, poultry or small ruminant owners, dairy farmers, and women groups. Its wide acceptability and borrower-friendly terms make it a viable option for everyone.

Beneficiaries

- The farmers eligible under the KCC scheme include small farmers, marginal farmers, share croppers, oral lessee and tenant farmers. The Self Help Groups (SHGs) or Joint Liability Groups (JLGs) are also eligible for availing benefits under the said scheme.
- alient Features of Kisan Credit Card Scheme
- The KCC scheme provides the facility of ATM enabled RuPay Card, one-time documentation, built-in cost escalation in the limit and any number of drawals within the limit.
- KCC covers post-harvest expenses, produce marketing loan, consumption requirements of farmer household, working capital for maintenance of farm assets and activities allied to agriculture, investment credit requirement for agriculture and allied activities.
- The Kisan Credit Card Scheme is implemented by Commercial Banks, RRBs, Small Finance Banks and Cooperatives.

SYDNEY ENERGY FORUM

In News:

India has achieved clean energy targets nine years ahead of schedule Power Minister said at the Sydney Energy Forum. India has installed 162 GW (1 GW is a 1000 MW) of renewable energy capacity which is 41% of the 402 GW of electricity installed.

Analysis of Background:

- This target was reached in November 2021 and in Glasgow (at the UN COP-21) Prime Minister committed to installing 500 GW of renewable energy by 2030, which would then be 50% of the installed capacity.
- Despite having among the lowest per capita emissions in the world, India has invested in this energy transition because its traditions teach it to respect and care for the environment.
- 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).

About the forum:

• Theme: Securing Clean Energy Supply Chains for the Indo-Pacific

- Co-hosted by the Australian Government and the International Energy Agency, with the support of the Business Council of Australia as a Forum partner.
- 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."
- The energy crisis that has gripped the world has been "sometime in the making" and not only due to the Russia-Ukraine war but because of the "cartelisation in the fossil fuel industry."
- Renewable energy promised to break these cartels though it was possible that there would be newer such cartel forming in manufacturing and the equipment and the world would have to take steps to ensure that these don't coalesce.

NATIONAL AGRICULTURE MARKET (e-NAM)

In News:

The government on Thursday announced integration of trading, transportation, logistics, ware-housing, assaying, packaging, weather forecast and fintech services provided by 41 private entities with its electronic National Agriculture Market (e-NAM).

Analysis of Background:

About National Agriculture Market (eNAM):

- It is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
- Small Farmers Agribusiness Consortium (SFAC) is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare, Government of India.
- Launched on April 14, 2016, by PM Narendra Modi for digital transformation of mandi operations to achieve "One Nation One Market", for the trading of agricultural commodities in India.
- A robust mobile app & website is available in 12 languages and equipped with a GPSbased mandi locator for searching mandis within 100 km radius.
- Features:
 - Farmers can track the progress of bids for their lot through mobile.

- They can also get real-time information about prevailing commodity prices in nearby mandis.
- It is also enabled with advanced gate entry, sampling and assaying reports.
- Weighbridges & electronic weighing scales have been integrated with e-NAM to ensure transparency and error-free weighing of commodities.
- Payment to farmers by traders can also be made electronically.
- Traders can use advanced features like viewing quality certificates, push notification, bunching of invoices, shopping carts, etc.
- A360-degree image of the commodity lots via mobile is made available for better decision making.
- Business intelligence dashboard is also available for better monitoring and decision making for the APMC officials.
- Currently, 1,000 mandis in 22 states and Union territories are integrated into the e-NAM platform, which was launched in April 2016.
- SFAC has empaneled private banks such as Axis Bank, Kotak Mahindra Bank, HDFC Bank, Indusind Bank and ICICI Bank for provisioning of payment and settlement services for e-NAM transactions.

Latest development—e-NAM platform linked to private agri-services providers:

- Entities whose digital platforms which have been integrated with eNAMinclude Star Agrobazaar Technology, Kisan Network, FPO Bazaar, Arya collateral, Aryadhan, Intello Lab, Bijak and Warehousing Development Regulatory Authority.
- The aim behind this integration of platforms by private players under e-NAM is to make available end-to-end services to farmers along with providing a platform for price discovery.
- Farmers, farmer producer organisations (FPOs), traders, commission agents and other stakeholders registered with the eNAM platform can avail these services provided by these private enterprises.
- Integration of embedded fintech platforms with eNAM will also enable access to finance for historically excluded small farmers and strengthen them socioeconomically.

Integration of Negotiable Warehouse Receipt System (e-NWRs) Module with e-NAM

 It will enable small and marginal farmers to directly trade their stored produce from selected Warehousing Development and Regulatory Authority (WDRA) registered warehouses which are declared deemed market by the State.

FPO trading Module:

- It will enable Farmer Producers' Organisations (FPOs) to upload the picture of their produce and quality parameters from their premise/collection centres for bidding.
- Launch of Logistic Module
- A provision has been made for linking large logistic aggregator platforms providing choices to users.

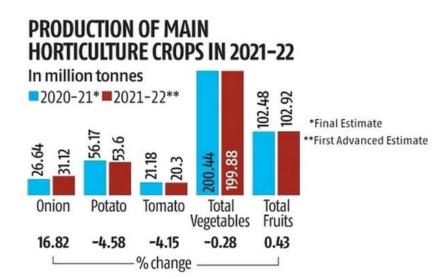
HORTICULTURE PRODUCTION

In News:

The total horticulture production in 2021-22 is estimated to be 341.63 million tonnes (MT), an increase of 21% over the 2020-21 figure-Union Agriculture Ministry.

Analysis of Background:

- India's position in production of horticulture crops
- It ranks second in fruits and vegetables production in the world, after China.
- Its horticulture production has increased by 30 per cent in the last five years.
- India is the second largest producer of fruits and vegetables in the world with first rank in the production of Banana, Mango, Lime & Lemon, Papaya and Okra.



• 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.

Challenges in the Horticulture Sector:

- Minimum Support Price (MSP) is not applicable to this sector.
- Lack of machinery and equipment.

- High price fluctuations.
- Lack of good cold chain storage and transport networks.

Initiatives taken:

- Horticulture Area Production Information System (HAPIS) -a web enabled information system by which data from the states/districts is reported. This minimizes the time-lag and maximizes the coverage area.
- Coordinated programme on Horticulture Assessment and MANagement using geoinformatics (CHAMAN)- to develop scientific methodology for estimation of area & production under horticulture crops. Method used: Remote Sensing and Sample Survey Techniques.
- Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector. Under MIDH, Government of India (GOI) contributes 60%, of total outlay for developmental programmes in all the states except states in North East and Himalayas, 40% share is contributed by State Governments.
- In the case of North Eastern States and Himalayan States, GOI contributes 90%. Schemes under it are: National Horticulture Mission (NHM); Horticulture Mission for North East and Himalayan States (HMNEH); National Horticulture Board (NHB); Coconut Development Board (CDB) & Central Institute of Horticulture (CIH), Nagaland.

SUSTAINABLE USE OF WILD SPECIES: IPBES REPORT

In News:

According to a recent report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), 50,000 wild species meet the needs of billions of people around the world.

- People use approximately 7,500 species of wild fish and aquatic invertebrates, 31,100 species of wild plants, 7,400 of which are trees, 1,500 species of fungi, 1,700 species of wild terrestrial invertebrates, and 7,500 species of wild amphibians, reptiles, birds, and mammals.
- An estimated one in every five people worldwide rely on wild plants, algae and fungi for food, nutritional diversity and income.

- Trade in wild plants, algae and fungi for food, medicine, hygiene, energy and ornamental use is increasing.
- The report shows that humans rely on 50,000 wild species (of plants and animals) for a variety of reasons. This includes food, energy, medicine, materials and other necessities.
- The over-exploitation of wild species is one of the primary causes of biodiversity loss. For example, Unsustainable fishing is the main cause for the increased extinction risk of sharks and rays over the past half century.
- The accelerating global biodiversity crisis, which threatens the extinction of a million plant and animal species, jeopardizes these contributions to people.

About Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES):

- The IPBES is an independent intergovernmental body established in Panama City, in 2012. At present, it comprises 139 member Governments and is often described as the "IPCC for biodiversity."
- It aims to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.
- It is not a United Nations body, the UNEP provides secretariat services to IPBES.

RED PANDAS

In News:

Darjeeling zoo to release Red Panda in Singalila National Park.

- Darjeeling Zoo has initiated an ambitious programme to expand the wild red panda population.
- The Padmaja Naidu Himalayan Zoological Park in Darjeeling will release 20 Red Pandas into the forests.
- In recent decades, the number of red pandas has declined in the wild.
- Singalila and Neora Valley National Parks in West Bengal are the two protected areas where the red panda is found, even in these protected areas the panda population has declined.
- According to recent studies, there are 38 of them in Singalila and 32 in Neora.

- The Padmaja Naidu Park is at a height of about 2,000 metres above sea level, is one of the high-altitude zoos in the country and has been quite successful in captive breeding of the Panda.
- Red pandas are categorized as an endangered species as per the IUCN Red List of Threatened Species.
- Red pandas are shy, solitary and arboreal animals and are regarded as an important indicator species for ecological change.

Singalila National Park;

- Singalila National Park is located on the Singalila Ridge at an altitude of more than 7000 feet above sea level.
- It is in the Darjeeling district of West Bengal.
- It is bordered on the north by Sikkim and on the west by Nepal.
- The park is part of the Eastern Himalayas.
- The Singalila Ridge runs roughly North to South and it separates Himalayan West Bengal from the other Eastern Himalayan ranges.
- The two highest peaks of West Bengal: Sandakphu (3630 m) and Phalut (3600 m), are located inside the park.
- Rammam River and Srikhola River flow through the park.
- Flora Thick bamboo, oak, magnolia, rhododendron and numerous orchids.
- Sandakphu is also known as the "mountain of poisonous plants" due to the presence of large numbers of Himalayan cobra lilies (Arisaema).
- Fauna Red panda, leopard cat, barking deer, wild boar, pangolin, Himalayan black bear, leopard, clouded leopard, Tigers, Himalayan Vulture, scarlet minivet, parrotbills, golden-breasted fulvetta, etc.

Neora Valley National Parks

- Neora Valley National Park is in Kalimpong district, West Bengal.
- Place of Virgin natural forests, dense bamboo groves, the colourful canopy of Rhododendron trees, lush green valley.
- It has a unique ecosystem where tropical, sub-tropical, sub-temperate, and temperate vegetative systems are found.
- Flora Mixed species like rhododendron, bamboo, oak, ferns, sal, etc. Numerous species of orchids.

 Fauna - Red panda, leopard, Asiatic black bear, sloth bear, Asian golden cat, wild boar, leopard cat, goral, barking deer, sambar deer, flying squirrel and tahr, clouded leopard, etc.

LISBON DECLARATION

In News:

The second United Nations Oceans Conference took place in Lisbon, focusing on the protection of life under water, as dictated by U.N. Sustainable Development Goal No. 14 which aims to protect life below water.

Analysis of Background:

- Lisbon Declaration is a suite of science-based and innovative actions, taking into account the capacity challenges facing developing countries, in particular, Small Island Developing States and Least Developing Countries, at the frontline of the devastating impacts of the ocean emergency
- Conference has been co-hosted by Portugal and Kenya.
- More than 100 nations pledged to protect 30% of their oceans by 2030 by joining the High Ambition Coalition for Nature and People. There were announcements about new and expanded marine protected areas (MPAs), including in Colombia, Guatemala, Portugal, Uruguay and more
- Goal of protecting 30% of the world's land and sea area by the decade's end is also a target under the N. Convention on Biological Diversity (CBD) under 30 by 30 target.
- Participants formed several new alliances at the UNOC, including an alliance of nations calling for a moratorium on deep-sea mining, A coalition of NGOs unveiled a new atlas to track illegal trawling in protected regions of the Mediterranean.
- Norway announced it would become the first European country to share its vesseltracking data with Global Fishing Watch, a website launched in September 2016 by Google in partnership with Oceana and SkyTruth "to provide the world's first global view of commercial fishing activities."

The High Ambition Coalition (HAC) for Nature and People:

- It is an intergovernmental group of more than 100 countries co-chaired by Costa Rica and France and by the United Kingdom as Ocean co-chair, championing a global deal for nature and people with the central goal of protecting at least 30 percent of world's land and ocean by 2030.
- The High Ambition Coalition for Nature and People was officially launched in January 2021 at the One Planet Summit on biodiversity, led by Costa Rica and France at the United

Nations Framework Convention on Climate Change (UNFCCC) pre-COP25 in San José in 2019. The coalition is currently co-chaired by Costa Rica, France, and the United Kingdom as ocean co-chair.

30×30 Target:

- It is a global target which aims to halt the accelerating loss of species, and protect vital ecosystems that are the source of our economic security.is a worldwide initiative for governments to designate 30% of Earth's land and oceanarea as protected areas by 2030.
- The target was proposed by a 2019 article in Science Advances"A Global Deal for Nature: Guiding principles, milestones, and targets", highlighting the need for expanded nature conservation efforts to mitigate climate change.Launched by the High Ambition Coalition for Nature and People in 2020, more than 50 nations had agreed to the initiative by January 2021, which increased to more than 95 countries by June 2022. 30 by 30 was promoted at the COP15 meeting of the Convention on Biological Diversity.This includes the G7and European Union.
- \$5b funding called the "Protecting Our Planet Challenge" was announced for the initiative in September 2021.
- The initiative has attracted controversy over indigenous rightsissues

The Marine Protection Atlas (MPAtlas):

- It is building a comprehensive global database of marine protection to identify, monitor, and advocate for fully and highly protected areas. It supports international progress toward effective marine conservation by integrating the latest available data on marine protected areas with science-based assessments that determine their stage of establishment and level of protection.
- MPAtlas combines self-reported data submitted by countries to the official World Database on Protected Areas (WDPA) with standardized, science-based assessments that categorize MPA zones in terms of expected outcomes and conservation benefits.
- Blue Parks* aim to unite a global ocean refuge system of effective MPAs that covers 30% of the ocean to safeguard marine biodiversity.
- Reports published SeaStates2021

Why 2022 is important for Ocean?

2022 has also become a super year for the ocean with a number of key breakthroughs with the Ocean Conference introducing a new chapter on ocean action. The UN Environment Assembly in March consensually agreed to begin negotiations for a binding global treaty to end plastic pollution. While last month, the World Trade Organization succeeded in reaching general consensus on banning harmful fisheries subsidies. This year's Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction could also lead to strengthening governance of the high seas. Later this year, the Conference of the Parties to the Convention on Biological Diversity (COP 15) is an opportunity to achieve a new target to protect 30 per cent of the planet's lands and seas by 2030. UNFCCC COP 27, to take place in November, will see a focus on climate adaptation measures and financing required to build ocean resilience.

TOPIC: SCIENCE AND TECH

NA-ION BATTERIES In News:

Scientists have used nano-materials to develop Na-ion-based batteries and supercapacitors which can be rapidly charged and have integrated them in e-cycles.

Analysis of Background:

About Sodium-ion battery:

- The sodium-ion battery (NIB or SIB) is a type of rechargeable battery analogous to the lithium-ion battery (LIB) but using sodium ions (Na+) as the charge carriers.
- A typical sodium-ion battery consists of anode, cathode, electrolyte (nonaqueous/aqueous), and a separator. The operation is similar to that of LIBs. In NIBs, the sodium ion is shuttled between positive cathode to negative anode during discharging/charging.

Advantages of Sodium-ion battery over Lithium Ion Batteries:

- The low-cost Na-ion-based technologies would be cheap and are expected to reduce the cost of the e-cycles.
- High natural abundance of sodium. This would make commercial production of sodium-ion batteries less costly than lithium-ion batteries.
- Sodium-ion batteries have slightly lower energy density, better safety characteristics, and similar power delivery characteristics.
- Sodium-ion batteries do not require many high cost elements required for lithium-ion batteries. Chief among these are lithium, cobalt, copper and nickel.
- So, sodium ion offers a genuine alternative to lithium solutions and will replace leadacid batteries.

| Properties | Li-ion Batteries | Aqueous symmetric Na-ion Battery |
|---------------------------|--|-------------------------------------|
| Toxicity of Materials | Toxic electrolyte materials | Non-Toxic materials |
| | | Environmental-Friendly |
| Flammability | Flammable | Non-Flammable |
| | (Case of EVs catching fire) | |
| Explosiveness | Explosive | Nonexplosive |
| | (Case of cell phone batteries explode) | |
| Cost | Expensive | Cheap |
| Complexity of Fabrication | Complex | Easy |
| Cycle Life | Long | Longer |
| - | (dendrite growth) | (no dendrite growth) |

WENTIAN LAB MODULE

In News:

China successfully launched its space station lab module Wentian, the largest spacecraft ever developed by the country, into orbit.

Analysis of Background:

About Wentian lab module:

- Wentian officially the Wentian laboratory cabin module is a major module of the Tiangong space station.
- Wentian features an airlock cabin that is to be the main exit-entry point for extravehicular activities when the Tiangoing Space station is completed.
- It has the same astronaut living facilities as the Tianhe core module, including three sleeping areas, a toilet and a kitchen.
- A small robotic arm half the weight and length of the existing robotic arm on the space station's core module is aboard the Wentian module. The small robotic arm will have similar missions to its predecessor, including assisting astronauts during extravehicular activities and carrying out inspections of extravehicular conditions.

Dimensions:

• With a length of 17.9 meters, a maximum diameter of 4.2 meters and a takeoff weight of 23 tonnes, the Wentian module is the largest and heaviest spacecraft China has developed.

Purpose:

- The Wentian laboratory module provides additional navigation avionics, propulsion and orientation control as backup functions for the Tianhe Core Module (TCM).
- The lab module will provide a bigger platform for scientific experiments in space. It is mainly for space life science research. The module is equipped with laboratory cabinets for life ecology, biotechnology and variable gravity science.
- It provides a pressurized environment for researchers to conduct science experiments in freefall or zero gravity which could not be conducted on Earth for more than a few minutes.
- Experiments can also be placed on the outside of the modules, for exposure to the space environment, cosmic rays, vacuum, and solar winds.

ADITYA L-1

In News:

Students from institutions and universities across India were exposed to the basic processes happening on the Sun, Aditya-L1 mission, and observational data analysis, as well as the current open problems that young researchers on the subject can address, at a workshop conducted by the Aditya-L1 Science Support Cell (AL1SSC).

Analysis of Background:

About Aditya L-1:

- Aditya-L1 is a spacecraft mission to study the Sun.
- It will be built in collaboration between the Indian Space Research Organisation (ISRO) and various Indian research institutes.
- It is planned to be launched on the It is India's first solar mission.

Details:

- The Aditya-L1 mission will be inserted in a halo orbit around the L1 point, which is about 1.5 million km from Earth.
- Lagrange Points Spots beyond the High Earth Orbits
- Other orbital "sweet spots," just beyond high Earth orbit, are the Lagrange points. At the Lagrange points, the pull of gravity from the Earth cancels out the pull of gravity from the Sun. Anything placed at these points will feel equally pulled toward the Earth and the Sun and will revolve with the Earth around the Sun.

Of the five Lagrange points in the Sun-Earth system, only the last two, called L4 and L5, are stable. A satellite at the other three points is like a ball balanced at the peak of a steep hill: any slight perturbation will push the satellite out of the Lagrange point like the ball rolling down the hill. Satellites at these three points need constant adjustments to stay balanced and in place.

L-1

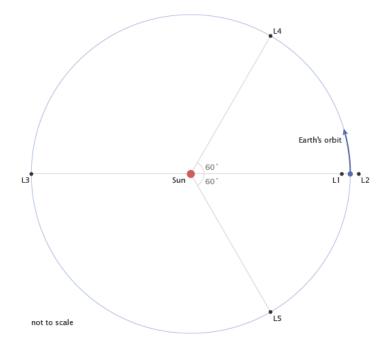
The first Lagrange point is located between the Earth and the Sun, giving satellites at this point a constant view of the Sun. The Solar and Heliospheric Observatory (SOHO), a NASA and European Space Agency satellite which is tasked to monitor the Sun, orbits the first Lagrange point, about 1.5 million kilometers away from Earth.

L-2

The second Lagrange point is about the same distance from the Earth, but is located behind the Earth. Earth is always between the second Lagrange point and the Sun. Since the Sun and Earth are in a single line, satellites at this location only need one heat shield to block heat and light from the Sun and Earth. It is a good location for space telescopes.

L-3

The third Lagrange point is opposite the Earth on the other side of the Sun so that the Sun is always between it and Earth. A satellite in this position would not be able to communicate with Earth. The extremely stable fourth and fifth Lagrange points are in Earth's orbital path around the Sun, 60 degrees ahead of and behind Earth.



Lagrange points are special locations where a satellite will stay stationary relative to the Earth as the satellite and the Earth revolve around the Sun. L1 and L2 are positioned above the day and night sides of the Earth, respectively. L3 is on the other side of the Sun, opposite the Earth. L4 and L5 are 60° ahead and behind the Earth in the same orbit.

Objective of Aditya L-1 Mission

- To research the Sun's corona (Visible and Near infrared rays), photosphere (soft and hard X-ray), chromosphere (Ultra Violet rays), solar emissions, solar winds and flares, and Coronal Mass Ejections (CMEs), as well as conduct round-the-clock imaging of the Sun.
- Coronal Mass Ejections (CMEs) are large expulsions of plasma and magnetic field from the Sun's corona.

GENOMICS

In News:

Access to genomic technologies needs to be expanded, especially for low- and middleincome countries (LMIC), according to a report by the World Health Organization's Science Council.

Analysis of Background:

- Genomics is the study of all of a person's genes (the genome), including interactions of those genes with each other and with the person's environment.
- The field of genomics uses biochemistry, genetics and molecular biology methods to understand and use biological information in deoxyribonucleic acid (DNA) and ribonucleic acid (RNA).
- This information benefits medicine and public health especially during the COVID-19 pandemic — as well as agriculture, biological research and more.

Findings of the Report:

- The council issued its first report on accelerating access to genomics for global health.
- The report argued that it is not ethically or scientifically justifiable for countries with fewer resources to gain late access to such technologies.

- The report said that shortfalls in financing, laboratory infrastructure, materials and highly trained personnel need to be addressed to expand access to genomic technologies.
- Genomics can make enormous contributions to human health, from surveying populations for infectious agents such as the virus that causes COVID-19 to predicting and treating a wide variety of diseases, such as cancers and developmental disorders.
- There are several tools to make genomic technologies more affordable, like tiered pricing, sharing of intellectual property rights for low-cost versions and cross-subsidisation, whereby profits in one area are used to fund another are some of them.
- The report recommended addressing four themes: Advocacy, implementation, collaboration and associated ethical, legal and social issues.

RISE AND FALL OF CHOLERA-CAUSING BACTERIA LINEAGE

In News:

Researchers identify the decline of antimicrobial resistance in O139 as a key determining factor in its downfall

Analysis of Background:

About Cholera:

- It is a life-threatening infectious disease and a public health hazard.
- It is caused by a comma-shaped bacterium known as Vibrio cholerae.
- More than two hundred serogroups of this bacterium are known, of which only O1 and O139 are known to cause such infection that leads to epidemics and pandemics. Most of the serogroups only cause mild cholera-like diarrhea and food-associated outbreaks.
- Of these two serogroups, O1 was responsible for seven pandemic waves, only to be temporarily displaced by O139. This emerged late and came up around 1992. It was first spotted in Chennai (then Madras).
- It was anticipated that this would cause the eighth round of pandemic but it subsided as mysteriously as it had originated.
- A rapid dipstick test is available to determine the presence of V. cholera
- The World Health Organization (WHO) has three prequalified oral cholera vaccines (OCVs): Dukoral, Sanchol, and Euvichol.

TOPIC: DEFENSE AND SECURITY

INDIGENOUS AIRCRAFT CARRIER VIKRANT In News:

The fourth phase of Sea Trials for IAC has been successfully completed. The ship's delivery is being targeted in end July 22, followed by commissioning of the ship in August 22 to commemorate 'Azadi ka Amrit Mahotsav'.

Analysis of Background:

- The Indigenous design and construction of Aircraft Carrier by Indian Navy and Cochin Shipyard Ltd is a shining example in the Nation's quest for 'AatmaNirbhar Bharat' and 'Make in India Initiative' with more than 76% indigenous content.
- This has led to growth in indigenous design and construction capabilities, besides development of large number of ancillary industries, with employment opportunities for over 2000 CSL personnel and about 12000 employees in ancillary industries.

About Vikrant:

- It is country's maiden indigenous aircraft carrier (IAC-1).
- Built by:Cochin Shipyard Ltd.
- The IAC would be commissioned as INS Vikrant in the first half of 2022, which would be the most potent sea-based asset.
- Capabilities: can project Air Power over long distances, including Air Interdiction, Anti-Surface Warfare, offensive and defensive Counter-Air, Airborne Anti-Submarine Warfare and Airborne Early Warning.
- It has a STOBAR (short take off but arrested recovery) system of aircraft launch and recovery on the flight deck.
- It is armed with the Barak LR-SAM(long range surface-to-air missile) air defence and AK-630 close-in weapon system besides a slew of advanced sensors and an electronic warfare suite.

Other specifications:

- It is expected to have a top speed of 30 knots (approximately 55 kmph) and is propelled by four gas turbines.
- Its endurance is 7,500 nautical miles at 18 knots (32 kmph) speed.
- The vessel can carry up to 1,500 personnel and has 2,300 compartments.

- The ship shall operate MiG-29K fighter aircraft, Kamov-31 Air Early Warning Helicopters, the soon to be inducted MH-60R multi-role helicopter and the indigenously manufactured Advanced Light Helicopters.
- Italian, Russian help: While the design was done with help from the Italian firm Fincantieri, the Russians collaborated in designing and developing the aviation complex.

Significance of IAC:

- Shining example of 'AatmaNirbhar Bharat' as it has nearly 75 per cent indigenous content from design to steel used in construction to key weapons and sensors.
- It help secure India's interests in maritime domain.
- It will help to realize the vision of SAGAR(Security and Growth for All in the Region) and the wider goal of a free, open and inclusive Indo-Pacific to ensure peace and stability in the region.

SINDHUDHVAJ

In News:

The Navy's Kilo-class submarine 'INS Sindhudhvaj' was decommissioned from service after 35 years in service. Now, the Navy has 15 conventional submarines in service.

- The traditional ceremony was conducted at Vishakhapatnam, Andhra Pradesh.
- INS Sindhudhvaj was part of many historical achievements including;
 - Operationalisation of the indigenised sonar USHUS.
 - Indigenised satellite communication systems Rukmani and MSS.
 - Inertial navigation system.
 - Indigenised torpedo fire control system.
- It was the only submarine to be awarded the Chief of Naval Staff (CNS) rolling trophy for Innovation by the Prime Minister of India.
- The Submarine was commissioned into the Navy in 1987, It was acquired from Russia.



INFORMATION TECHNOLOGY ACT's SECTION 69A

In News:

- Social media platform 'Twitter' has filed a petition in the Karnataka High Court to get relaxation from the multiple orders from the Union government to impose a blanket ban on individual accounts instead of specific content.
- According to Twitter, the blocking orders issued by the Union Government were "procedurally and substantially" non-compliant with Section 69A of the Information Technology Act (IT Act).

Analysis of Background:

- Social Media Platforms had been communicating to the Ministry of Electronics and Information Technology about a reconsideration of some of the blocking orders.
- However, the Ministry has issued a notification about complying with the government orders or facing serious consequences for non-compliance.
- Twitter filed a writ petition challenging several of the blocking orders by the Union Government.
- The Minister of State for Information and Technology has said that all foreign intermediaries have the right to judicial review, but they have the obligation to comply with Indian laws.

Section 69A of the IT Act 2000:

- Section 69A of the Information Technology (IT) Act empowers the government to restrict access to any online content to protect the interest of;
 - Sovereignty and Integrity of the Nation.
 - Security of the State.

- Friendly relations with foreign states.
- Public order.
- All orders to restrict information or content must be recorded in writing.
- Social media intermediaries failing to comply with the rules and regulations are liable to be monetarily penalized along with an imprisonment term which may extend up to 7 years.
- The procedures for executing the provisions of the act are mentioned in the Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009.
- Step 1: It mentioned that an officer along with an examination committee review the content in question within 48 hours of receiving the takedown request.
- Step 2: Provide an opportunity to the author or originator of the content for clarifications.
- Step 3: The recommendations are then sent to the Secretary of the Dept of Information Technology for approval and then a request is forwarded to the social media intermediary for restricting access.
- Emergency provisions specify that clarification is required within 48 hours after the content has been blocked for specified reasons.
- Blocking Orders can be revoked after review or examination.
- Rule 16 of the act states that strict confidentiality should be maintained on all requests and actions taken, but without compromising transparency and accountability.
- The Act complies with Article 19 of the Indian Constitution which guarantees freedom of speech and expression. However, Clause 2 of the article allows the state to impose reasonable restrictions for the same reasons as those for Section 69A.

INDIA'S DEFENCE EXPORTS In News:

India's defence imports have decreased by about 21% in the past four or five years and this has happened in a short time, Prime Minister Narendra Modi said while stating that the country is moving fast from being the "biggest defence importer to a big exporter".

Analysis of Background:

• Defence exports have increased seven times in the last eight years.

- Very recently, India had achieved defence exports worth ₹13,000 crore and of this, 70% was from the private sector," Mr. Modi said at the Naval Innovation and Indigenisation Organisation (NIIO) seminar 'Swavlamban'.
- In the past eight years, the government had not only increased the defence budget, but also ensured that it was utilised for the development of defence manufacturing within the country.
- PM unveiled 'SPRINT Challenges' aimed at the development of 75 indigenous technologies/products by the industry for induction into the Navy.
- He also witnessed the demonstration of an electric human-carrying drone, which was described as the country's first such drone.
- 39 ships and submarines were now under construction in India and Navy was currently hand-holding 40 start-ups that were developing a range of niche technologies.
- The U.S. was a major buyer, as also nations in Southeast Asia, West Asia and Africa.

In Details:

- 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 2022, India signed a USD 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.
- India has imposed a phased import ban on 310 different weapons and systems during the last two years, which helped boost export.
- Over 30 Indian defence companies have exported arms and equipment to countries like Italy, Maldives, Sri Lanka, Russia, France, Nepal, Mauritius, Sri Lanka, Israel, Egypt, UAE, Bhutan, Ethiopia, Saudi Arabia, Philippines, Poland, Spain and Chile
- The exports include personal protective items, defence electronics systems, engineering mechanical equipment, offshore patrol vessels, advanced light helicopters, avionics suits, radio systems and radar systems.
- The Stockholm International Peace Research Institute (SIPRI) ranked India at number 23 in the list of major arms exporters for 2015-2019.
- India has set a target of clocking defence exports worth USD 5 billion by 2024.
- Defence Production and Export Promotion Policy 2020 is envisaged as an overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.

- The DPP 2016 came out with a new category called Indian IDDM (Indigenously Designed, Developed and Manufactured).
- A strategic partnership model allows Indian companies to collaborate with foreign OEMs and get transfer of technology, get the capability to build, manufacture India and sustain those projects in India.
- There are two positive indigenization lists of 101 items and 108 items that range from platforms to weapon systems to sensors to the entire plethora of items.

TOPIC: INDEX/REPORT

GENDER GAP INDEX

In News:

India ranked 135 among 146 countries in the recently released Global Gender Gap Index 2022. In 2021, India ranked 140 out of 156 nations.

Iceland ranked at the top and it is the only country to have closed more than 90% of its Gender gap. Global Gender Gap Index was released by the World Economic Forum (WEF).

- In the sub-index of "health and survival", India has ranked (146th) as the worst performer in the world.
- According to the report, India will take more than 132 years to reach gender equality.
- India has ranked poorly among its neighbours and it is behind:
 - 1. Bangladesh (71)
 - 2. Nepal (96)
 - 3. Sri Lanka (110)
 - 4. Maldives (117)
 - 5. Bhutan (126).
- In South Asia, only the performance of Iran (143), Pakistan (145) and Afghanistan (146) was worse than India.
- India's scored 0.629 (out of 1), and this was the 7th-highest score in the past 16 years.
- The report mentioned that the labour force participation shrunk for both men (by 9.5%) and women (3%).

Global Gender Gap Index:

- It is released by the World Economic Forum (WEF).
- The Global Gender Gap Index measure gender equality across 4 key dimensions:
 - Economic Participation and Opportunity.
 - Educational Attainment.
 - Health and Survival.
 - Political Empowerment.
- It measures scores on a 0-to-100 scale, and the score can be interpreted as the distance covered towards achieving gender equality.

| The gender so gender parity out of 146 Gender Gap Report 2022 Forum. A look at India's r based on which the overa | countries, acco released by th anking in the f | ording to the Global ne World Economic our sub-indexes |
|---|--|--|
| India | Rank 2022* | |
| Global gender gap index | 135 | |
| Economic participation and opportunity | 143 | |
| Educational attainment | 107 | |
| Health and survival | 146 | |
| Political empowerment | 48 | |
| out of 146 countries | | |

Important Reports released by World Economic Forum

- Travel and Tourism Competitive Report.
- Global Competitiveness Report.
- Global Gender Gap Report.
- Global Risks Report.
- Global Social Mobility Index.
- Energy Transition Index

INDIA INNOVATION INDEX, 2022

In News:

Karnataka has bagged the top rank in NITI Aayog's India Innovation Index, 2022.

Analysis of Background:

Prepared by NITI Aayog and the Institute for Competitiveness, the India Innovation Index is a comprehensive tool for the evaluation and development of the country's innovation ecosystem. It ranks the states and the union territories on their innovation performance to build healthy competition amongst them.

2022 Report:

- 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 has held first position, under the Major States category, in all three editions of the Index so far.
- Karnataka was followed by Telangana, Haryana, Maharashtra and Tamil Nadu. Chhattisgarh, Odisha, Bihar and Gujarat were at the bottom of the index.
- Pointing out that India's average innovation score is insufficient, given the country's ambitious targets to be named among the top 25 nations in the Global Innovation Index, the report has recommended some 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.
- Finding: 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%.
- Therefore, GDERD needs considerable improvement and should touch at least 2%, which would play an instrumental role in India achieving the goal of 5 trillion economy. The private sector needs to pick up pace in R&D.
- Public expenditure is productive up to some extent; once the growth follows a trajectory, it is desirable to shift to R&D mostly drive by the private sector. Therefore, it is important for India to find that inflexion point after which private sector takes over the government sector.

NSO'S REPORT In News:

The National Statistical Office said that the proportion of employed persons working part-time in the 46-59 years age group at all India level was more than 10% between 2017-20 while in the age group of above 60 years, the proportion of employed persons working part-time was more than 15%.

- In India, the proportion of employed persons working part time is more among females than males irrespective of the age-groups.
- As per the paper, the Employment Rate of Employed Worker living in a household with no child under age three years, rose to 61.2% in FY20 from 58.37% in FY18 in the 26-49 years age group.
- The proportion of employed persons who are employer in the above 15 age group, has been estimated at 1.91%, 2.17% and 2.02%, respectively for 2017-18, 2018-19 and 2019-20.
- The NSO sought public comments to develop three labour indicators:
 - 1. "Proportion of Employed working Part-time, by sex",
 - 2. "Proportion of Employed who are Employer, by sex" and
 - 3. "Employment Rate of persons age 25-49 living in a household with at least one child under age 3 years and with no children under age 3 years living in the household, by sex" from the Periodic Labour Force Survey (PLFS) data available in "Person level data of first visit schedule"
- The International Labour Organization (ILO) is custodian agency for these indicators. It
 has considered part-time employed worker as proportion of those working less than 30
 hours a week.
- There has been rapid growth in part-time work in the past few decades in developed economies, adding that this trend is related to the increase in female labour force participation. It also results from policies attempting to raise labour market flexibility in reaction to changing work organization within industries and to the growth of the services sector.
- It cautioned that of concern to policy-makers in the apparent move towards more flexible working arrangements is the risk that such working arrangements may be less economically secure and less stable than full- time employment. Part-time employment has been seen as an instrument to increase labour supply.

 Indeed, as part-time work may offer the chance of a better balance between working life and family responsibilities, and suits workers who prefer shorter working hours and more time for their private life, it may allow more working-age persons to actually join the labour force.

National Statistical Commission (NSC):

- The National Statistical Commission (NSC) of India is an autonomous body which formed in June 2005 under the recommendation of Rangarajan commission.
- The Chairperson of the Commission enjoys the status of a Minister of State and the Members of the Commission have the status equivalent to the Secretary to the Government of India. The Chairperson and the Members also enjoy a relative security of tenure as once they assume office, they can be removed only by the President after the Supreme Court of India has on inquiry held in accordance with the procedure Article 145 of the Constitution of India reported that they ought to be removed
- The objective of its constitution is to reduce the problems faced by statistical agencies in the country in relation to collection of data.
- Statistical agencies like the Central Statistics Office (CSO) and the National Sample Survey Organisation (NSSO) face numerous problems in collecting data from State and Central government departments, but an autonomous body like the NSC is thought to be more able to coordinate things as a statutory status would lend it teeth.

NATIONAL INSTITUTIONAL RANKING FRAMEWORK In News:

The Union Minister of Education has recently released the National Institutional Ranking Framework (NIRF) on their official website 'nirfindia.org'. Indian Institute of Technology, Madras (IIT-M) has again topped the list in the overall educational institutes and engineering categories. All India Institute of Medical Science in Delhi emerged as the best medical college in India.

Analysis of Background:

About National Institutional Ranking Framework (NIRF):

- The National Institutional Ranking Framework (NIRF) is a methodology adopted by the Union Ministry of Human Resource Development (Now Ministry of Education).
- It was started in 2015 to rank institutions of higher education in India.

• The Union Ministry of Education has released the National Institutional Ranking Framework (NIRF) Ranking 2022 for 11 categories, this includes:

- \circ Overall
- o University
- Management
- \circ College
- $_{\circ}$ Pharmacy
- $_{\circ}$ Medical
- $_{\circ}$ Engineering
- Architecture
- o ARIIA (Atal Ranking of Institutions on Innovation Achievements)
- Law Institutions
- Research institutions.
- The ranking framework analyses institutions under 5 broad categories of parameters;
 - Teaching, Learning and Resources.
 - Research and Professional Practice.
 - Graduation Outcomes.
 - Outreach and Inclusivity.
- Ranks are allocated based on the sum of marks assigned for each of these 5 categories of parameters.
- The ranking helps in assessing the institution, this also promotes a sense of competition among the institution, which encourages them to take more steps to promote quality education and education-related services to perform better in the next ranking.

TOPIC: ENERGY

WIND POWER

In News:

Ministry of New and Renewable Energy (MNRE) said it would be doing away with the practice of reverse auctions — when companies bid to offer the lowest price — while awarding contracts for setting up wind-energy projects. However, wind industry experts say this alone will not necessarily improve the sector's fortunes.

Analysis of Background:

- India has committed to installing 60,000 MW of wind power projects by 2022, but has met only two-thirds of the target.
- There were complaints from the industry that e-reverse auctions are leading to tariffs being artificially lowered leading to unhealthy competition
- 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 rockbottom 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 reverse auction system replaced a system of feed-in tariffs where companies placed closed bids for a chance to develop a wind power project at a site in return for a fixed revenue for a fixed period.
- While this led to a boom in the sector in Tamil Nadu and Gujarat, per-unit prices for wind power varied widely from State to State.
- Frequently, those who bid for wind power projects wouldn't know the sites at which their potential projects would be located and once they began developing the sites, they would encounter challenges. This would lead to projects being abandoned that ultimately hindered the development of the sector
- Experts said that the existing policy for wind power projects is a "disaster" for entrepreneurs. Regions that had suitable sites for developing wind farms are usually unconnected to the electricity grid and there are substantial costs involved in ensuring that electricity from the wind farm made it to the grid.

Reason for dip in health:

• Cost of large tracts of land required to install wind turbines is among the reasons cited for the dwindling health of the sector.

 The other reasons are limited availability of prime sites that are favourable for costefficient wind power projects and the poor financial health of State electricity distribution companies, which pay wind power project developers for every unit of power sold to them, are among the reasons cited for the dwindling health of the sector.