



**DR. M. MOHAN RAO**  
**IAS (Retd)**  
**CHAIRMAN**

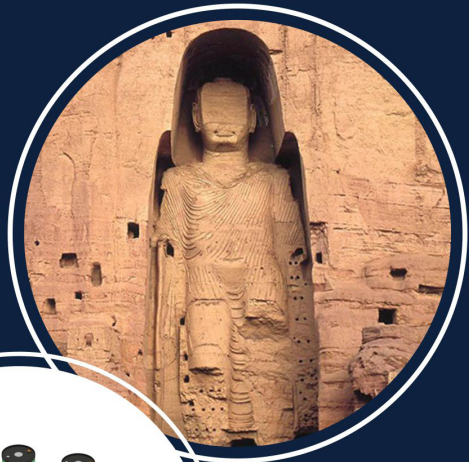


**M. ARUNA MOHAN RAO**  
**IPS (Retd)**  
**DIRECTOR (ACADEMICS)**

**May-2022**

# **CURRENT AFFAIRS MAGAZINE**

- 👉 Economy**
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- 👉 Art and Culture**
- 👉 Science & Technology**
- 👉 International Relations**
- 👉 Government Scheme**
- 👉 Polity and Governance**
- 👉 Environment & Ecology**



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# Current Affairs

May , 2022

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## Hindu New Year festival

### Why in News

The President of India has sent his greetings to fellow citizens on the eve of Hindu New Year festival.

### Important Points

- The President of India, Shri Ram Nath Kovind has sent his greetings to fellow citizens on the eve of Chaitra Sukladi, Ugadi, Gudi Padwa, Cheti Chand, Navreh and Sajibu Cheiraoba.
- Celebrated in diverse ways across the nation to welcome the spring and the beginning of the Indian New Year, these festivals strengthen the bond of our cultural and social unity.
- The joyous festivities strengthen the spirit of harmony and fraternity in our society.

### Navreh

- The word 'Navreh' is believed to be derived from Sanskrit 'Nava Varsha' meaning the New Year.
- Kashmiri Pandits dedicate Navreh festival to their Goddess Sharika and pay homage to her during the festival.

### Cheti Chand

- Cheti Chand marks the beginning of Sindhi new year and the birth anniversary of Ishtadeva Uderolal, popularly known as Jhulelal, the Sindhi saint.
- Sindhis wear new elegant clothes and join the grand Jhulelal procession. The celebration is followed by a cultural programme and langarsaab.

### Ugadi

- Ugadi' the traditional new year day is being celebrated in Andhra Pradesh .

### Chaitra Sukladi

- Telugu new year day is observed on 'Chai-

tra Suddha Padyami' according to the lunar calendar. On this occasion, devotees throng temples to offer prayers.

## Bamiyan Buddhas

### Why in News

The Taliban regime would protect the ancient Buddha statues in Mes Aynak.

### Important Points

- The Taliban regime in Afghanistan has said it would protect the ancient Buddha statues in Mes Aynak, also the site of a copper mine where the Taliban are hoping for Chinese investment.

### The ancient Bamiyan Buddhas

- The Bamiyan valley, in the Hindu Kush mountains and along the river Bamiyan, was a key node of the early Silk Routes, emerging as a hub of both commercial and cultural exchange.
- According to UNESCO, the rise of Bamiyan was closely connected with spread of Buddhism across Central Asia, and that in turn was linked to the political and economic currents of that time.
- The Bamiyan Buddha statues, hewn from sandstone cliffs, are said to have dated back to the 5th century AD, and were once the tallest standing Buddhas in the world.
- In their Roman draperies and with two different mudras, the statues were great examples of a confluence of Gupta, Sassanian and Hellenistic artistic styles.
- Called Salsal and Shamama by the locals, they rose to heights of 55 and 38 metres respectively. Salsal means "light shines through the universe", while Shamama is "Queen Mother".
- The Taliban first announced their intention to destroy the statues on February 27, 2001.

India offered to arrange for a transfer and safeguarding of the artefacts.

- Apart from the Taliban, terrorist group ISIS has also destroyed artifacts dating from the pre-Islamic world due to their “idolatrous” links.
- In 2003, UNESCO included the remains of the Bamiyan Buddhas in its list of world heritage sites.
- It was proposed that the statues should be reconstructed with the pieces that were still available, and restored in their niches, but it was met with opposition.

## Madhavpur Mela

### Why in News

PM calls Madhavpur Mela in Gujarat a unique celebration of India’s cultural diversity and vibrancy

### Important Points

- The Prime Minister of India has shared a



clip from Mann Ki Baat where he elaborated on Madhavpur Mela in Gujarat as unique celebration of India’s cultural diversity and vibrancy.

- From 2018, in collaboration with the Union Ministry of Culture, the Gujarat government started organising side-events like public meetings and cultural evenings at the fair by inviting incumbent chief ministers and artists from North-eastern states.
- Simultaneous similar events were being organised in 20 temples of Gujarat and a number of functions in eight states in the Northeast region of India.
- The government also organises a handicraft

festival featuring products made by artists from the North-eastern states and Gujarat.

### About Mela

- The fair is held in the coastal village of Madhavpur, around 60 kms south of Porbandar, and celebrates the marriage of Hindu deity Lord Krishna with Rukmini.
- It is said that thousands of years ago Lord Krishna was married to Rukmani, a princess from the North East. This marriage took place in Madhavpur, Porbandar and as a symbol of that marriage, even today, Madhavpur fair is held there.
- The Madhavpur fair creates a very beautiful example of Ek Bharat, Shrestha Bharat.
- Madhavpur Mela begins on Ram Navami, the day marking the birth of Lord Rama as per the Hindu lunar calendar. Various rituals of the marriage go till Trayodashi, or the 13th day of the month of Chaitra in the Hindu calendar.

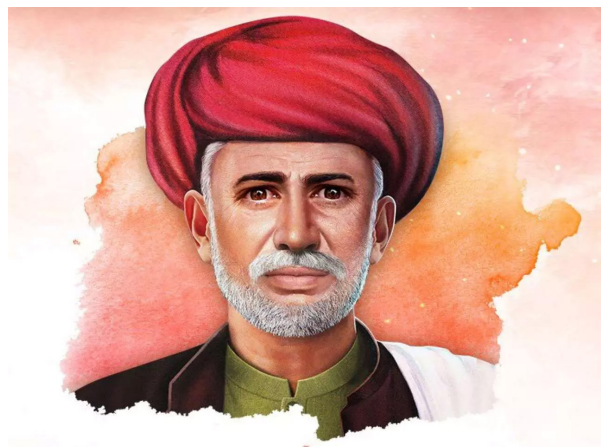
## Mahatma Jyotiba Phule Jayanti

### Why in News

PM pays tribute to Mahatma Jyotiba Phule on his birth anniversary

### Important Points

- The Prime Minister has paid tribute to the great social reformer, philosopher and writer Mahatma Jyotiba Phule on his birth anniversary.
- April 11 is celebrated each year as Jyotiba Phule Jayanti in the country in honour of Jyotirao Govindrao Phule, the social activ-



ist and reformer from Maharashtra.

- Mahatma Phule is widely respected as a champion of social justice and source of hope for countless people and worked tirelessly for social equality, women empowerment and boosting education.
- Phule worked towards the eradication of untouchability and caste system in India. Along With his wife, Savitribai, he sowed seeds for women's education in India.
- A scooter rally was held in Nagpur and various other programmes like lectures and music concerts of inspirational songs on the life of Mahatma Phule are being held in other parts of the district.

#### **About Jyotiba Phule**

- He was born in Satara district of Maharashtra in 1827.
- He belonged to 'mali' caste and their original title was 'Gorhay'.
- In 1841, Jyotirao got admission in the Scottish Mission's High School, Poona, and completed his education in 1847.
- At the age of just thirteen years, Jyotirao was married to Savitribai.
- In 1851, Jyotiba established a girls' school and asked his wife to teach the girls in the school.
- Later, he opened two more schools for the girls and an indigenous school for the lower castes, especially for the Mahars and Mangs.
- In 1873, Jyotiba Phule formed the Satya Shodhak Samaj (Society of Seekers of Truth).
- Jyotirao vehemently condemned the Vedas, the ancient holy scriptures of the Hindus.
- He penned some stories like 'Tritiya Ratna', 'Brahmananche Kasab', 'Ishara'.
- Gulamgiri was written in 1873 by Jyotirao Govindrao Phule or Mahatma Jyotiba Phule

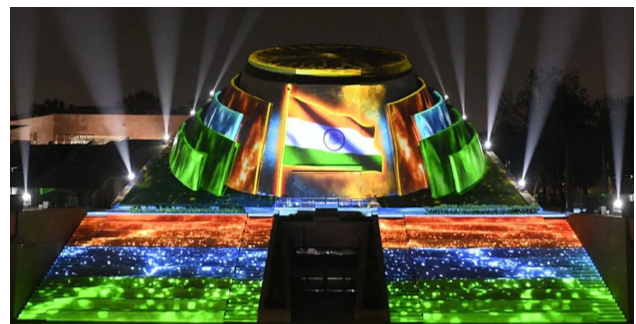
### **Pradhanmantri Sangrahalaya**

#### **Why in News**

PM Modi inaugurates Pradhanmantri Sangrahalaya

#### **Important Points**

- Prime Minister Narendra Modi inaugurated the Pradhanmantri Sangrahalaya, or the Prime Ministers' museum, dedicated to all Prime Ministers of the country since independence.
- The unveiling of the museum, which will be thrown open to the public took place as part of the ongoing Azadi Ka Amrit Mahotsav celebrations.
- On the occasion, PM Modi also purchased the very first entry ticket of the museum.
- The Prime Minister's Office (PMO) described the facility as a 'tribute to every Prime Minister of India.'
- Guided by the vision of PM Modi, the Sangrahalaya honours the contribution to every Prime Minister of India since independence, irrespective of their ideology or tenure in office.
- The Pradhanmantri Sangrahalaya is housed at the repurposed Teen Murti Bhava in Delhi. It was the residence for 16 years of Jawaharlal Nehru, the nation's first premier, until his demise.
- The museum integrates the erstwhile Teen Murti Bhavan designated as Block I, while the newly-constructed building is designated as Block II.
- The Sangrahalaya has employed cutting-edge technology-based interfaces to encompass heterogeneity in content and frequent rotation of the display.
- Holograms, Virtual reality, augmented



reality, multi-touch, multimedia, interactive kiosks, computerized kinetic sculp-



tures, smartphone applications, interactive screens, experiential installations etc. enable the exhibition content to become highly interactive and engaging.

- Also, the facility has as many as 43 galleries, displays on freedom struggle and a framing of the Constitution of India.
- Additionally, it was informed that the Sangrahalaya is an inclusive endeavour led by Prime Minister Narendra Modi, aimed at sensitizing and inspiring the younger generation about the leadership, vision and achievements of all Indian Prime Ministers.
- The design of the museum building is inspired by the story of rising India, shaped and moulded by the hands of its leaders.
- The design incorporates sustainable and energy conservation practices. No tree has been felled or transplanted during the course of work on the project.
- The logo of the Sangrahalaya represents the hands of the people of India holding the Dharma Chakra symbolizing the nation and democracy.
- Starting from displays on the freedom struggle and the framing of the Constitution, the Sangrahalaya goes on to tell the story of how our Prime Ministers navigated the nation through various challenges and ensured the all-round progress of the country.

## Mahavir Jayanti 2022

### Why in News

This year, Mahavir Jayanti falls on April 14

### Important Points

- Mahavir Jayanti marks the birth of the 24th and last Tirthankara, Lord Mahavir, who played an important role in preaching Jainism.
- According to Digambar and Svetambara school of Jainism, Lord Mahavir was born as the son of King Siddhartha and Queen Trishala.
- Jains believe that Jainism is an eternal (sanatan) religion (dharma) with the tirthankaras

guiding every cycle of the Jain cosmology.

- Parasparopagraho Jivānām (the function of souls is to help one another) is the motto of Jainism, while amōkāra mantra is the most common and basic prayer in Jainism.
- At the age of 30, Lord Mahavir is said to have abandoned all worldly possessions in pursuit of spiritual awakening.
- He practiced intense meditation and austerity for 12 years before attaining “Kevala Jnana” or omniscience.
- He is believed to have been a contemporary of Gautam Buddha.
- Mahavir believed in a preached ahimsa or non-violence, satya (truth), asteya (non-stealing), brahmacharya (chastity) and aparigraha (non-attachment).
- Mahavir’s teachings were put together by his main disciple, Indrabhuti Gautama.
- His teachings were compiled by his chief



disciple, Indrabhuti Gautama, as the Jain Agamas.

- Seeking truth and spiritual freedom, he went attained enlightenment (Nirvana) at the age of 72.
- Religious processions (rath yatra) are carried out on Mahavir Jayanti. Jain temples are decorated with flags and offerings are given to the poor and needy.
- Donations are also made in order to contribute towards saving animals from slaughter.

## Fast and Secured Transmission of Electronic Records

### Why in News

Top court launches digital platform for secure transmission of its orders

### Important Points

- The Supreme Court launched a digital platform to ensure that all its orders on bail and the release of prisoners are digitally transmitted straight to jails and concerned high courts through a secured network that will involve no third-party interference.
- The software, called 'Fast and Secured Transmission of Electronic Records' (FASTER), will be used to communicate interim orders, stay orders and bail orders passed by the top court to the concerned authorities through a secured electronic communication channel.
- The orders passed by the Supreme Court or any courts can be now transmitted safely without interference by any party.
- This will ensure confidentiality, safety and security of our orders. In the second phase, it can even transmit records physically.
- Judges of the Supreme Court e-Committee monitored it along with officials of SC registry.
- A total of 73 nodal officers at the level of jails, high courts, and states/UTs were nominated to be point persons for the transmission of communication.
- And a total of 1,887 e-mail IDs were created as part of a secured judicial communication network for transmitting digitally signed orders of the top court through a secured pathway to the concerned authorities.

## Amending the Weapons of Mass Destruction Act

### Why in News

The Weapons of Mass Destruction (WMD) and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill

### Important Points

- The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022 has been unanimously passed in Lok Sabha.
- The Bill seeks to amend The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005, to provide against the financing of proliferation of weapons of mass destruction and their delivery systems in line with India's international obligations.
- The 2005 Act prohibited the manufacturing, transport, and transfer of weapons of mass destruction, and their means of delivery.

### Weapons of Mass Destruction

- The expression "weapon of mass destruction" (WMD) is usually considered to have been used first by the leader of the Church of England, the Archbishop of Canterbury, in 1937 to refer to the aerial bombing of civilians in the Basque town of Guernica by German and Italian fascists in support of General Franco during the Spanish Civil War.
- According to the United States Department of Homeland Security, "A weapon of mass destruction is a nuclear, radiological, chemical, biological, or other device that is intended to harm a large number of people."



- India's 2005 WMD Act defines:
  - Biological weapons as microbial or other biological agents, or toxins of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes; and weapons, equipment or delivery systems specially designed to use such agents or toxins for hostile purposes or in armed conflict.
  - Chemical weapons as toxic chemicals and their precursors except where used for peaceful, protective, and certain specified military and law enforcement purposes; munitions and devices specifically designed to cause death or other harm through the toxic properties of those toxic chemicals; and any equipment specifically designed for use in connection with the employment of these munitions and devices.

#### **Control over use of WMDs**

- The use of chemical, biological, and nuclear weapons is regulated by a number of international treaties and agreements.
- Among them are the Geneva Protocol, 1925, that banned the use of chemical and biological weapons; and the Biological Weapons Convention, 1972, and Chemical Weapons Convention, 1992, which put comprehensive bans on the biological and chemical weapons respectively.
- India has signed and ratified both the 1972 and 1992 treaties. There are very few non-signatory countries to these treaties, even though several countries have been accused of non-compliance.
- The use and proliferation of nuclear weapons is regulated by treaties such as Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Test Ban Treaty (CTBT).

### **GoI–UN Sustainable Development Cooperation Framework 2023–27**

#### **Why in News**

NITI Aayog & UN Hold Workshop on Upcom-

ing GoI–UN Sustainable Development Cooperation Framework 2023–27

#### **Important Points**

- NITI Aayog and United Nations organized a day-long national validation workshop on the upcoming Government of India–UN Sustainable Development Cooperation Framework (UNSDCF) 2023–27.
- This was the first such congregation that saw the participation of officials from 30 Union ministries, heads of 26 UN agencies, and representatives from all states and union territories.
- The previous GoI–UNSDCF 2018–22 was an agenda of cooperation, results and strategies to achieve national development priorities and the Sustainable Development Goals (SDGs).
- The framework is the single most important instrument capturing the entirety of 26 UN entities' plans and programmes in India.
- As the 2018–22 framework entered its final year of implementation, GoI and UN committed to renewing it for another five years, 2023–27.
- The 2023–27 cooperation framework will be signed as India completes 75 years of independence.
- In order to fulfil India's national development priorities, NITI Aayog called for the convergence of the 'whole of Government' and the 'whole of UN' in the next five years.
- NITI Aayog pointed out that the workshop was 'an opportunity to revisit and revitalize the various contours of partnerships between the GoI and UN to make them more robust and relevant to meet the exigencies of the New India'.
- NITI Aayog stressed the need for innovative and futuristic thinking while finalizing the 2023–27 framework.
- NITI Aayog added that 'the success of this workshop will set the tone for the collective work to be done with the UN India team for the next five years'.

- One of the main accomplishments of the 2018–22 framework has been the partnering of the UN agencies with GoI to tackle the Covid-19 pandemic.
- From training frontline workers, delivering essential drugs and medical supplies, facilitating the world's largest vaccination drive to providing policy support and bringing in the best international practices, the UN agencies have played a critical role during the Covid crisis.
- The 2023–27 framework aims to align the four pillars of the 2030 Agenda—People, Prosperity, Planet and Participation—with India's national priorities and provide direction to the efforts of all the UN entities working across the country.

The new framework has identified six outcome areas:

- (i) health and well-being
  - (ii) nutrition and food
  - (iii) quality education
  - (iv) economic growth and decent work
  - (v) environment, climate, wash and resilience
  - (vi) empowering people, communities, and institutions.
- The 2023–27 framework will contain the shared vision and strategies for a more resilient, inclusive, and sustainable India.
  - While NITI Aayog and the line ministries will steer the framework at the Central level, the state governments and union territories will play a crucial role in realizing the vision and implementing the strategies.

## **Protection and Enforcement of Interests in Aircraft Objects Bill, 2022**

### **Why in News**

Recently, the Ministry has sought stakeholders' comments on the draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022.

### **Important Points**

- The Ministry of Civil Aviation has proposed a new law that will help international aircraft leasing companies to repossess and transfer planes out of India in case of a fi-

nancial dispute with an Indian airline at a time many regional airlines have been refused planes on rent.

- Proposed legislation comes more than 14 years after India acceded to Cape Town Convention.
- The Ministry has sought stakeholders' comments on the draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022.
- The Bill implements the provisions of the Convention on International Interests in Mobile Equipment and Protocol on Matters Specific to Aircraft Equipment which was adopted at a conference in Cape Town in 2001.
- India acceded to the two instruments in 2008. These provide default remedies for the creditor and create a legal regime for disputes.
- The Ministry says the draft legislation is necessary because several Indian laws such as the Companies Act, 2013 and the Insolvency and Bankruptcy Code, 2016 are in conflict with the Cape Town Convention and Protocol.
- It says that Indian entities have also suffered as international financial institutions demand an implementing legislation.
- The proposed law provides remedies such as repossession of an aircraft object, or its sale or lease or collection of income from its use as well as de-registration and export of planes.
- It also suggests remedies pending final adjudication of a claim as well as safeguards a debtor's claim during insolvency proceedings against its Indian buyer.
- Many smaller airlines are finding it challenging to get leased aircraft as lessors see a lot of exposure because the cost of recovery of assets is exorbitant and time consuming.
- International leasing companies also faced challenges in repossessing and exporting aircraft when Jet Airways shut down in 2019

and failed to pay its aircraft rentals.

### **Cape Town Convention**

- The Convention on International Interests in Mobile Equipment was concluded in Cape Town on 16 November 2001, as was the Protocol on Matters Specific to Aircraft Equipment .
- The primary aim of the Convention and the Protocol is to resolve the problem of obtaining certain and opposable rights to high-value aviation assets, namely airframes, aircraft engines and helicopters which, by their nature, have no fixed location.
- This problem arises primarily from the fact that legal systems have different approaches to securities, title retention agreements and lease agreements, which creates uncertainty for lending institutions regarding the efficacy of their rights.
- This hampers the provision of financing for such aviation assets and increases the borrowing cost.

### **Advantages of the Convention and the Protocol**

- **Predictability & enforceability:** By creating an international interest recognized in all of the Contracting States and establishing an international electronic interest registration system, the Convention and Protocol improve



predictability with respect to the opposability of the securities and the interest held by sellers of aviation assets.

- **Cost savings:** The Convention and Protocol are intended to reduce risks for creditors, and consequently, the borrowing costs to debtors, through the resulting improved legal certainty. This promotes the granting of credit for the acquisition of more modern and thus more fuel-efficient aircraft.

### **Four protocols to the convention are specific to four types of movable equipment:**

- Aircraft Equipment (aircraft and aircraft engines; signed in 2001).
- Railway rolling stock (signed in 2007).
- Space assets (signed in 2012).
- Mining Agricultural and Construction Equipment (signed in 2019).

## **Pradhan Mantri Bhartiya Janaushadhi Kendras**

### **Why in News**

Government has set a target to increase the number of JanAushadhi Kendras to 10,000 by March 2024

### **Important Points**

- Pharmaceuticals & Medical Devices Bureau of India (PMBI), the implementing agency of Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) is inviting applications from Individuals, Unemployed Pharmacist, Government nominated agencies, NGO's, Trust, Societies, etc. for opening of Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs).
- The applications have been invited through an online process. Eligible applicants will be given in-principal approval for taking drug license on the name of PMBJP on first come first basis.
- With a vision to provide quality medicines at an affordable rate for the common man especially the poor, Govt. has set a target to increase the number of Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs)

- to 10000 by March 2024.
- Under the PMBJP, all 739 districts of the country have been covered. New applications have been invited to cover 3579 blocks of these 406 districts.
- Residents of small towns and block headquarters can now avail the opportunity to open Jan Aushadhi Kendras.
- The scheme provides for incentive/special incentives for various categories including women, SC/ST, Hill districts, Island districts and North-Eastern States. This will ensure easy reach of affordable medicine to the people in every nook and corner of the country.
- The product basket of PMBJP comprises 1616 medicines and 250 surgical devices which are available for sale through more than 8600 Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs) functional across the country.
- In addition to this, some AYUSH products like Ayuraksha Kit, Balraksha Kit and Ayush-64 tablet as Immunity boosters have been added in the product basket of the Pariyojana which is being made available through selected Kendras.
- The product basket covers all major therapeutic groups such as Cardiovascular, Anti-cancers, Anti-diabetics, Anti-infectives, Anti-allergic, Gastro-intestinal medicines, Nutraceuticals, etc.
- Further, PMBI is working on the launch of Fast-Moving Consumer Goods (FMCG) products and food products under FSSAI and highly demanded ayurvedic products under the PMBJP for expansion of their product basket.

#### **About PMBJP**

- Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) is a campaign launched by the Department of Pharmaceuticals to provide quality medicines at affordable prices to the masses.
- PMBJP stores have been set up to provide

generic drugs, which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.

#### **Mission**

- Create awareness among public regarding generic medicines.
- Create demand for generic medicines through medical practitioners.
- Create awareness through education and awareness program that high price need not be synonymous with high quality.
- Provide all the commonly used generic medicines covering all the therapeutic groups.
- Provide all the related health care products too under the scheme.

#### **Vision**

- To bring down the healthcare budget of every citizen of India through providing Quality generic Medicines at Affordable Prices.

#### **Benefit of PMBJP**

The Jan Aushadhi initiative will make available quality drugs at affordable prices through dedicated stores selling generic medicines which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.

- Promote greater awareness about cost effective drugs and their prescription.
- Make available unbranded quality generic medicines at affordable prices through public-private partnership.
- Encourage doctors, more specifically in government hospital to prescribe generic medicines.
- Enable substantial savings in health care more particularly in the case of poor patients and those suffering from chronic ailments requiring long periods of drug use.

#### **Quota in Promotions**

##### **Why in News**

Union Govt Asks Departments to Collect Data on Representation of SCs, STs



### **Important Points**

- The Union government has asked all departments to collect data on the inadequacy of representation of Scheduled Castes (SCs) and Scheduled Tribes (STs) before implementing the policy of reservation in promotions for employees.
- It has also asked the departments to carefully assess the suitability of officers being considered for promotions.
- In an order, the Department of Personnel and Training (DoPT) cited a January order of the Supreme Court which outlined certain conditions that are to be satisfied by the government for the purpose of implementing the policy of reservation in promotions.
- These conditions include the “collection of quantifiable data regarding inadequacy of representation of Scheduled Castes and Scheduled Tribes”, among others.
- All ministries/departments are required to ensure that the above conditions are complied with before implementing the policy of reservation in promotions and carrying out any promotions based thereon.
- In order to ensure that the efficiency of administration is maintained, the DPC (Departmental Promotion Committee) shall carefully assess the suitability of the officers being considered for promotion.
- The Central Secretariat Service (CSS) Forum had, in January, urged the DoPT to immediately resume long-stalled promotions of its members.
- The CSS Forum is an association of officers of the CSS, whose members form the backbone of the central secretariat’s working.
- According to CSS Forum, an association of government officers, there are 6,210 officers in the rank of section officer, under secretary, deputy secretary, director and joint secretaries in central government offices. Of this total strength, as many as 1,839 positions are vacant as officials have not been promoted.

The Attorney General has opined that three conditions are to be met while implementing the policy of reservation in promotions.

- (i) Collection of quantifiable data regarding inadequacy of representation of Scheduled Castes and Scheduled Tribes;
- (ii) Application of this data to each cadre separately; and
- (iii) If a roster exists, the unit for operation of the roster would be the cadre or which the quantifiable data would have to be collected and applied in regard to the filling up of the vacancies in the roster.

### **Sedition Issue**

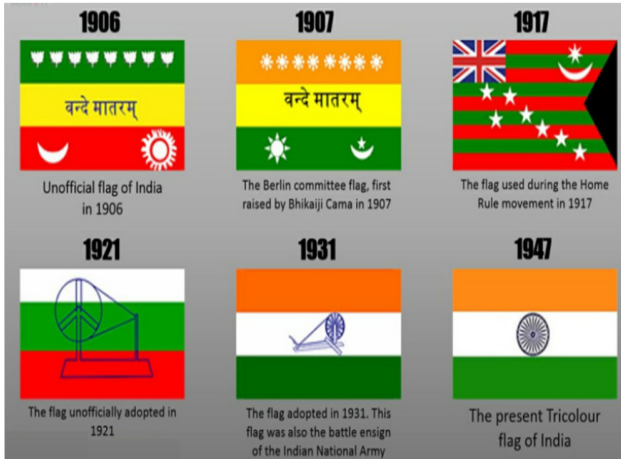
#### **Why in News**

Sharad Pawar recently created a stir with his affidavit before the Bhima Koregaon inquiry commission.

#### **Important Points**

- NCP chief Sharad Pawar created a stir with his affidavit before the Bhima Koregaon inquiry commission.
- He stressed that the archaic sedition law should be repealed. He said there were acts like Unlawful Activities Prevention Act (UAPA) in place that could effectively deal with these activities.
- Section 124A of the Indian Penal Code (IPC) deals with sedition charges for trying to topple the government. The offence is punishable with life imprisonment and the accused has no chances of getting bail even during the trial.
- Pawar emphasised that IPC Section 124A is often misused against people who criticise government, suppressing their liberty, and tends to stifle any voice of dissent raised in a peaceful and democratic way and should be repealed.
- A section of lawyers echo the NCP chief’s sentiments, advocating that the section is being more misused than used these days; anyone and everyone who criticises the government is arrested under the stringent sedition.

- There are different sections to deal with offences covered under the definition of sedition – waging war against the country, causing hatred between communities, inciting people to violence, and others.



- The IPC's sections 124A (sedition) and 153 (promoting animosity between classes) require interpretation, particularly in relation to press and free speech rights.
- Even though it is often argued that the misuse of a law alone does not render it invalid, there is a special case to strike down Section 124A because of its inherent potential for misuse.
- There is a pattern of behaviour among all regimes that indicate a proclivity to invoke it without examining its applicability to the facts of any case.
- Recent cases show that sedition is used for three political reasons: to suppress criticism and protests against particular policies and projects of the government, to criminalise dissenting opinion from human rights defenders, lawyers, activists and journalists, and to settle political scores, sometimes with communal hues.
- It is not to be forgotten that the section was upheld in 1962 by a Constitution Bench mainly by reading down the import of the terms “bring into hatred or contempt”, or “to create disaffection towards the government established by law” and limit its scope to only those instances of speech or writing

that show a pernicious tendency to create public disorder.

- In 2016, the government itself admitted in Parliament that the definition of sedition is too wide and requires reconsideration.
- The Law Commission also released a consultation paper in 2018 that said “In a democracy, singing from the same songbook is not a benchmark of patriotism. People should be at liberty to show their affection towards their country in their own way.”
- While issuing fresh guidelines and safeguards is one way of quelling the potential for its misuse, it will be more helpful if Section 124A is struck down altogether.

## Flag Code

### Why in News

Amendment to Flag Code has khadi activists upset

### Important Points

- Khadi Sanghas, activists write to PM and HM on the move to allow non-khadi material for national flag
- Every time the tricolour fluttered over the Red Fort in New Delhi, the people of North Karnataka had a reason to feel proud, as the hand spun, hand woven khadi flag was made in the country's sole BIS-approved flag manufacturing unit in Hubballi.
- Recently, the Union Government's move to amend the National Flag Code, allowing polyester and imported cloth, has come as a shocker to many.
- Khadi activists are up in arms against the Centre for making an amendment that they consider a “sacrilege”.
- They contend that the move will only dilute the definition of khadi but also undermine the spirit of freedom struggle.
- As per rule 1.2 of part 1 of the Flag code of India 2002, only khadi or hand-spun cloth was the material for the flag.
- Use of other material was punishable. But the recent amendment has changed it to “The National Flag shall be made of hand

spun and hand woven or machine made, cotton, polyester, wool, silk khadi bunting.”

- That means machine made polyester that is made in India or imported from elsewhere can now be used for the tricolour.

#### **Concern**

- Taking strong exception to the move, the Karnataka Khadi Gramodyoga Samyukta Sangha (KKGSS) at Bengeri in Hubballi, which runs the lone BIS-approved flag making unit has already written to Prime Minister and Home Minister of India.
- The amendment will snatch livelihoods of thousands of poor rural women who are engaged in various stages of khadi cloth production, dying, and stitching the flags.

#### **Intricate details**

- There are other intricate details about the making of the flag in the Flag Code. They include the rule that there should be exactly 150 threads per square centimetre, four threads per stitch, and one square foot should weigh exactly 205 gm (or 7.2 oz).
- The code has been amended earlier too. The original flag code of India 1947 was amended in 2002 after a Supreme Court judgment. This expanded the definition of places where the flag could be displayed or hoisted.
- However, part one of the code that deals with the description of the flag had remained untouched.



## NTCA

### Why in News

First ever NTCA meeting outside National Capital held at Arunachal Pradesh

### Important Points

- The 20th Meeting of National Tiger Conservation Authority (NTCA) was held in Pakke tiger reserve in Arunachal Pradesh.
- Arunachal offers a model to emulate with programmes like Hornbill Nest Adoption and Air Gun Surrender Abhiyan.
- Union Minister for Environment Forest and Climate change chairs the 20th NTCA in Arunachal Pradesh.
- The Minister released standard operating procedure for tiger reintroduction and supplementation in wild, forest fire audit protocol for tiger reserves, technical manual on MEE of Tiger reserves in India prepared by NTCA.
- Minister also pressed on active involvement of locals for conservation and better development of forest area and tiger reserve.

### National Tiger Conservation Authority (NTCA)

- NTCA has been constituted under section 38 L (1) of Wildlife (Protection) Act, 1972.
- It is a statutory body under the Ministry of Environment, Forests and Climate Change.
- It was established in 2005 after the recommendations of the Tiger Task Force.
- As per 2018 report, India has as many as 2,967 tigers in the wild, with more than half of them in Madhya Pradesh and Karnataka.

### Pakke tiger reserve

- Pakke Tiger Reserve is located in the East Kameng district of Arunachal Pradesh.

- It is surrounded by the Tenga Reserve Forest to the North, Doimara Reserve Forest on the West, Nameri National Park and Tiger Reserve (Assam) on the South and some agricultural land as well as Papum Reserve Forest on the East.
- It is known for its amazing sightings of four resident hornbill species.
- The Tiger Reserve has also won India Biodiversity Award 2016 in the category of 'Conservation of threatened species' for its Hornbill Nest Adoption Programme.

## Rice fortification

### Why in News

The Union Cabinet announced its approval of supply of fortified rice across three phases.

### Important Points

The Cabinet Committee on Economic Affairs has accorded its approval for supply of fortified rice throughout:

- The Targeted Public Distribution System (TPDS) under the National Food Security Act (NFSA)
- Integrated Child Development Services (ICDS)
- Pradhan Mantri Poshan Shakti Nirman-PM POSHAN
- And Other Welfare Schemes (OWS) of Government of India in all States and Union Territories (UTs) by 2024 in a phased manner.

The entire cost of rice fortification (around Rs. 2,700 crore per annum) would be borne by the Govt. of India as part of food subsidy till its full implementation upto June, 2024.

The following three phases are envisaged for full implementation of the initiative:

**Phase-I:** Covering ICDS and PM POSHAN in India all over by March, 2022 which is under implementation.

**Phase-II:** Phase I above plus TPDS and OWS in all Aspirational and High Burden Districts on stunting (total 291 districts) by March 2023.

**Phase-III:** Phase II above plus covering the remaining districts of the country by March 2024.

- Earlier, the Centrally Sponsored Pilot Scheme on "Fortification of Rice and its Distribution under Public Distribution System" was implemented for a period of 3 years beginning from 2019-20.
- The Union Cabinet also approved the continuation of Atal Innovation Mission (AIM), till March 2023.
- Eleven (11) States- Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu, Chhattisgarh, Uttar Pradesh, Odisha, Telangana, Madhya Pradesh, Uttarakhand and Jharkhand successfully distributed the fortified rice in their identified districts (one district per State) under the pilot scheme.

**Rice fortification**

- The Food Safety and Standards Authority of India (FSSAI) defines fortification as “deliberately increasing the content of essential micronutrients in a food so as to improve the nutritional quality of food and to provide public health benefit with minimal risk to health”.
- Rice fortification is a process of adding micronutrients to regular rice. The micronutrients are added keeping in mind dietary requirements.
- Various technologies are available for rice fortification, such as coating and dusting. For rice fortification in India, ‘extrusion’ is considered to be the best technology. This involves the production of fortified rice kernels (FRKs) from a mixture using an extruder machine.

**Bengal coast faces most erosion**

**Why in News**

About 34% of Indian coastline is under varying

degrees of the threat, says Earth Sciences Ministry.

**Important Points**

- The Ministry of Earth Sciences, in a response to a question, informed the Lok Sabha that of the 6,907.18 km long Indian coastline of the mainland, about 34% is under varying degrees of erosion, while 26% is of the coastline is of an accreting nature, and the remaining 40% is in a stable state.
- The National Centre for Coastal Research (NCCR), Chennai, an attached office of the Ministry of Earth Sciences (MoES) is monitoring shoreline erosion since 1990 using remote sensing data and GIS mapping techniques.
- About 6,907.18 km long Indian coastline of mainland has been analysed from 1990 to 2018.
- In terms of percentage, West Bengal, located on the eastern coast of the country, with a 534.35 km-long coastline, suffered erosion along about 60.5% of the coast (323.07 km) over the period from 1990 to 2018.
- This is followed by Kerala on the west coast, which has 592.96 km of coastline and 46.4% of it (275.33 km) faced erosion. Tamil Nadu, with a long coastline of

State	Coast Length(km)	Erosion (km)	Percentage
Gujarat	1945.60	537.5	27.6 %
Daman & Diu	31.83	11.02	34.6 %
Maharashtra	739.57	188.26	25.5 %
Goa	139.64	26.82	19.2 %
Karnataka	313.02	74.34	23.7 %
Kerala	592.96	275.33	46.4 %
Tamil Nadu	991.47	422.94	42.7 %
Puducherry	41.66	23.42	56.2%

991.47 km, recorded erosion along 42.7% of it (422.94 km).

- Gujarat, with the longest coastline of 1,945.60 km, recorded erosion along 27.06% (537.5 km) of it. In the Union Ter-

territory of Puducherry, with a 41.66 km-long coastline, about 56.2% of its coast (23.42 km) recorded erosion.

- Another organisation under the MoES, the Indian National Centre for Ocean Information Services (INCOIS), has prepared and published an atlas of Coastal Vulnerability Index (CVI) maps for the entire coastline of India at a 1:100000 scale using data on sea level rise, coastal slope, shoreline change rate, coastal elevation, coastal geomorphology, tidal range and significant wave height, the Ministry informed the Parliament.
- A report on 'National Assessment of Shoreline Changes along Indian Coast' was released in July, 2018 and shared with various Central and State government Agencies and Stakeholders for implementing shore line protection measures.
- The digital and hard copy of all the Maps is released on 25th March, 2022. Ministry through its institutes is also providing technical solutions and advice to the State Governments and UTs [Union Territories] to deal with coastal erosion threats

## Aurora

### Why in News

Stunning aurora glow above Iceland after 'dead' sunspot erupts

### Important Points

- A sunspot that "awoke from the dead" last week and erupted with a medium-size solar flare, along with a mass ejection of plasma, also lit up the northern skies in glowing lights.
- One stunning image of the effect showed the aurora seeming to rain through the clouds above Iceland.
- The shining northern lights were generated by a moderate-sized solar storm, associated with an explosion of solar particles witnessed by satellites.
- The sunspot that exploded was poetically dubbed "dead" because it had recently erupted and become part of a quiet solar

patch.

- Even so, as those solar particles interacted with Earth's magnetic field lines, air molecules high up in the atmosphere were excited, producing the incredible sky show.

### Aurora:

- An aurora is a natural phenomenon which is characterised by a display of a natural-coloured (green, red, yellow or white) light in the sky.
- It is a light show which is caused when electrically-charged particles from the sun collide with particles from gases such as oxygen and nitrogen present in the Earth's atmosphere.
- It is sometimes referred to as 'polar light'. It is predominantly seen in the regions of high altitudes like the Arctic and Antarctic.
- They generally occur in a band known as 'auroral zone'. The auroral zone is 3 to 6 degrees wide in latitude. It lies between 10 and 20 degrees from the geomagnetic poles.

### Different Types:

- Auroras can appear in various forms like streamers, patches, arcs, scattered light, diffused light etc. This natural light effect is known as 'aurora borealis' in northern altitudes, while the effect in the southern latitudes is known as 'aurora australis'.
- Auroras that occur in Northern hemisphere are known as aurora borealis and auroras that take place in Southern hemisphere are known as aurora australis.
- Aurora borealis is also known as 'Northern lights'. Similarly, aurora australis is also known as 'Southern lights'.

### Effect:

- Auroras affect communication lines, radio lines and power lines.

## Hydrogen plant in Assam

### Why in News

OIL commissions India's first pure green hydrogen plant in Assam

### Important Points

- Exploration and production major Oil In-

dia Limited (OIL) has commissioned In-



dia's first 99.999% pure green hydrogen plant in Assam.

- Green hydrogen, which has the potential to replace fossil fuels, is the name given to hydrogen gas produced using renewable energy such as wind or solar power that do not entail greenhouse gas emissions.
- The green hydrogen pilot plant set up in central Assam's Jorhat has an installed capacity for producing 10 kg of hydrogen per day. The plant was commissioned within three months.
- The plant is also the first in India to use the anion exchange membrane (AEM) technology, he said. Green hydrogen is being produced from the electricity generated by a 500-kW solar plant using a 100-kW AEM electrolyser array.
- OIL has initiated a detailed study with the Indian Institute of Technology (IIT)-Guwahati on blending green hydrogen with natural gas for commercial applications of the blended fuel.
- Hydrogen gas, which does not emit carbon dioxide when burned, can be used as a fuel in transportation, power generation, and industrial activities.
- In a fuel cell that converts the energy of a chemical into electricity, hydrogen gas reacts with oxygen to produce electricity and water vapour, thus making it a potential clean alternative to fossil fuels.

#### **About Green hydrogen**

- Green hydrogen is hydrogen generated by renewable energy or from low-carbon pow-

er.

- Green hydrogen has significantly lower carbon emissions than grey hydrogen, which is produced by steam reforming of natural gas, which makes up the bulk of the hydrogen market.
- The technology is based on the generation of hydrogen — a universal, light and highly reactive fuel — through a chemical process known as electrolysis.
- This method uses an electrical current to separate the hydrogen from the oxygen in water. If this electricity is obtained from renewable sources we will, therefore, produce energy without emitting carbon dioxide into the atmosphere.

#### **Advantages**

- 100 % sustainable: green hydrogen does not emit polluting gases either during combustion or during production.
- Storable: hydrogen is easy to store, which allows it to be used subsequently for other purposes and at times other than immediately after its production.
- Versatile: green hydrogen can be transformed into electricity or synthetic gas and used for domestic, commercial, industrial or mobility purposes.
- Transportable: it can be mixed with natural gas at ratios of up to 20 % and travel through the same gas pipes and infrastructure - increasing this percentage would require changing different elements in the existing gas networks to make them compatible.

#### **Disadvantage**

- High cost: energy from renewable sources, which are key to generating green hydrogen through electrolysis, is more expensive to generate, which in turn makes hydrogen more expensive to obtain.
- High energy consumption: the production of hydrogen in general and

green hydrogen in particular requires more energy than other fuels.

- Safety issues: hydrogen is a highly volatile and flammable element and extensive safety measures are therefore required to prevent leakage and explosions.

## **Invasive species**

### **Why in News**

Invasive species threatens wildlife habitats of Western Ghats

### **Important Points**

- The dearth of effective steps to arrest the rampant growth of invasive plants, especially *Senna spectabilis*, in the forest areas of the Nilgiri Biosphere Reserve (NBR), including the Wayanad Wildlife Sanctuary, is a matter of serious concern to the conservation of wildlife habitats of the Western Ghats.
- Invasive alien plant species are non-native species that spread and interfere in a new ecosystem by posing a serious threat to the native biodiversity, leading to economic loss.
- Invasive species don't allow local species to grow and wildlife to move through. A resin-like substance that oozes from such alien species makes the soil acidic, preventing the growth of any other plant species.
- The invasive species has now spread through the most iconic wildlife habitats of the Western Ghats, destroying habitats of elephants, deer, gaur and tigers by pushing out native flora.
- The allelopathic traits of the species prevent other plants from growing under it. It is a form of chemical warfare where the shed leaves decompose and change the chemical composition of the soil, rendering it unsuitable for the growth of other plant species.
- This drastically affects primary productivity at the ground level. The forest floor is almost bare under the invasive species. Grasses and herbs get completely wiped out and herbivores are deprived of their forage.

- The invasive species found its way to Wayanad in the 1980s, when the seedlings of the plant were first raised in the nurseries of the social forestry wing, and planted as avenue trees. It was noticed regenerating profusely about 25 years after its introduction in Wayanad.
- Over the period, it got established in the Bandipur and Nagarhole Tiger Reserves of Karnataka, and the Mudumalai and Sathyamangalam Tiger Reserves in Tamil Nadu as well.
- The Forest Departments of Karnataka and Kerala realised that the tree is a threat to native biodiversity nearly 10 years ago and initiated actions to contain its spread.
- The study found around 23% of the area of Wayanad Wildlife Sanctuary is infested by *Senna spectabilis*. The study says 1,305 trees were found in one hectare in the most affected areas of the sanctuary. The species are spreading at almost the same rate in the adjacent Tiger Reserves.
- The Kerala Forest Department attempted to remove the trees by uprooting, girdling, cutting, chopping the tree branches, and even testing the application of chemicals. However, all the efforts were in vain. Instead, multiple coppice shoots started growing from each cut tree stump.

## **Long period average**

### **Why in News**

IMD expects normal monsoon rainfall for fourth straight year

### **Important Points**

- The country is likely to receive a normal monsoon for the fourth consecutive year, the India Meteorological Department (IMD) said in its first Long Range Forecast (LRF) for this year released.
- Rainfall in the four-month June-September southwest monsoon season was in the normal range in 2019, 2020, and 2021 as well.
- The IMD predicts a "normal", "below nor-



mal”, or “above normal” monsoon in relation to a benchmark “long period average” (LPA).

- According to the IMD, the “LPA of rainfall is the rainfall recorded over a particular region for a given interval (like month or season) average over a long period like 30 years, 50 years, etc.
- The IMD’s prediction of a normal monsoon was based on the LPA of the 1971-2020 period, during which India received 87 cm of rain for the entire country on average.
- The IMD has in the past calculated the LPA at 88 cm for the 1961-2010 period, and at 89 cm for the period 1951-2000.
- While this quantitative benchmark refers to the average rainfall recorded from June to September for the entire country, the amount of rain that falls every year varies from region to region and from month to month.
- IMD also maintains LPAs for every meteorological region of the country — this number ranges from around 61 cm for the drier Northwest India to more than 143 cm for the wetter East and Northeast India.
- The IMD records rainfall data at more than 2,400 locations and 3,500 rain-gauge stations.
- Because annual rainfall can vary greatly not just from region to region and from month to month, but also from year to year within a particular region or month, an LPA is needed to smooth out trends so that a reasonably accurate prediction can be made.
- A 50-year LPA covers for large variations in either direction caused by freak years of unusually high or low rainfall (as a result of events such as El Nino or La Nina), as well as for the periodic drought years and the increasingly common extreme weather events caused by climate change.

The IMD maintains five rainfall distribution categories on an all-India scale. These are:

- Normal or near normal, when the percent-

age departure of actual rainfall is +/-10% of LPA, that is, between 96-104% of LPA;

- Below normal, when departure of actual rainfall is less than 10% of LPA, that is 90-96% of LPA;
- Above normal, when actual rainfall is 104-110% of LPA;
- Deficient, when departure of actual rainfall is less than 90% of LPA; and
- Excess, when the departure of actual rainfall is more than 110% of LPA.

## South Indian Coastline

### Why in News

Coastline of Kochi, Thiruvananthapuram may be under water by 2050

### Important Points

- As per a study by RMSI, a Noida-based IT consulting firm, on Intergovernmental Panel on Climate Change (IPCC) reports for key coastal cities, due to the rising sea levels by 2050, a significant number of population, property, and infrastructure in Kochi and Thiruvananthapuram along four other cities — Mumbai, Chennai, Vizag, Mangaluru — will be under water.
- The IPCC assessment report indicates that India’s sea level will rise significantly by 2050.
- Sea-level rise in the North Indian Ocean (NIO) occurred at a rate of 1.06–1.75 mm per year from 1874 to 2004 and has accelerated to 3.3 mm per year in the past two-and-a-half decades (1993–2017).
- RMSI used its coastal flood modeling capabilities to map the cities’ inundation (submergence) levels based on various sea-level rise forecast studies.
- Based on inundation, it conducted an analysis to identify the number of buildings and key infrastructure that could be potentially submerged in each of these cities.

## Kerala

In Thiruvananthapuram, due to the potential new coastline and coastline with high tide, 349 and 387 buildings respectively are likely to be impacted. These

buildings comprise approximately 60% residential and 40% commercial buildings. Similarly, approximately three km of road length is identified to be affected.

#### **About IPCC**

- The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.
- The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place.
- It also produces Special Reports on topics agreed to by its member governments, as well as Methodology Reports that provide guidelines for the preparation of greenhouse gas inventories.
- The IPCC is working on the Sixth Assessment Report which consists of three Working Group contributions and a Synthesis Report.
- The Working Group I contribution was finalized in August 2021 and the Working Group II contribution in February 2022.

### **Report on Sundarbans**

#### **Why in News**

CAG report highlights gross environmental violations in Ramsar sites, EKW, Sunderbans

#### **Important Points**

- A recent audit report of Comptroller and Auditor General (CAG) has pointed out illegal constructions and violations of environmental norms in two Ramsar sites in West Bengal, East Kolkata Wetlands (EKW) and Sunderbans.
- There were illegal constructions in the EKW and Coastal Regulation Zone area in Sunderbans.
- However, such violations even in these ecologically fragile areas were rarely found to

have been penalised; on a couple of rare occasions, (when) they were done, it was in compliance with Kolkata High Court orders.

- EKW, a unique peri-urban ecosystem that lies on the eastern fringes of Kolkata, covers an area of about 12,500 hectares, spread over 37 mouzas of the State's South and North 24 Parganas district.

#### **The CAG report pointed out that**

- The failure to delineate boundaries of the EKW and uncontrolled transfer of land resulted in the change of character of EKW and lack of effective action by EKWMA (East Kolkata Wetland Management Authority).
- In absence of effective measures by EKWMA, water bodies were dried up and filled illegally. Since 2007, EKWMA has identified 357 cases of violation, out of which 101 cases were identified between December 2015 and March 2020.
- It further adds that on scrutiny of show cause notices issued to 101 violators.
- 51 cases were of construction of unauthorized two/three storied buildings, marble godowns, motorbike and car showrooms, 23 cases of drying up and filling of water bodies and 27 cases of construction of boundary walls in the EKW area; these altered the ecological character of the wetlands and therefore were in gross violation of the EKW Act.
- Violations by a religious authority and encroachment of wetlands by plastic industries has also been discussed in the report. The report points out that change in land use pattern was observed in Bhagabanpur Mouza where "areas under full water bodies and embankments decreased from 522.94 ha in 2002 to 116.07 ha in 2016 due to encroachment.
- The study further revealed that in the mouza, out of 47 bheries (fish ponds) functional in 1998, only 10 bheries were left in 2017.



- Thus EKWMA had failed to preserve the wetlands in the Bhagabanpur mouza”.
- The CAG has pointed out that the State Wetland Authority had not constituted the Wetland Mitra (citizen’s network) till March 2020.

**Eco projects destroying biodiversity**

- The CAG report has highlighted serious violations of CRZ norms in Sundarbans particularly for an ecotourism project at Jharkhali.
- “GoWB had undertaken (October 2015) a project of an eco-tourism hub at Jharkhali in Sundarbans after clearing 69 acres of mangrove. Even the river channel, breeding place of crocodiles, was claimed by the project.”

**Supreme Court panel on Kaziranga animal corridors**

**Why in News**

Supreme Court panel flays Assam on Kaziranga animal corridors invasion

**Important Points**

- A Supreme Court panel has prodded the Assam government for laxity in checking illegal construction activities on the animal corridors of Kaziranga National Park and Tiger Reserve.
- The 1,300 sq. km wildlife habitat, a UNESCO World Heritage Site and the best-known address of the world’s one-horned rhinos, has nine notified animal corridors.
- Seven of these \_ Amguri, Bagori, Chirang, Deosur, Harmati, Hatidandi and Kanchanjuri \_ are in Nagaon district while Haldibari and Panbari are in the adjoining Golaghat district.
- The Supreme Court’s Central Empowered Committee (CEC) had in a meeting directed the Chief Secretary and other representatives of the Assam government to provide an action-taken report on the encroachment of and illegal constructions on the animal corridors as soon as possible.
- The illegal activities are in violation of a Su-

preme Court order of April 12, 2019, which barred new construction on private lands that are within the corridors that the animals of Kaziranga use to move in and out of the flood-prone park.

- The minutes of the meeting said the Assam government was made to assure the CEC that it would also provide photographs of the constructions undertaken on the animal corridors, before and after their delineation, in violation of the Supreme Court order.
- The State government also assured the CEC of providing the names and designations of the officers who granted permission for the construction activities in violation of the court order along with relevant documents and copies of the notices issued for the removal or demolition of the illegal structures.
- Among other reports the State government has been asked to provide is the action taken against the encroachment of the eco-sensitive zone of Kaziranga together with the list of construction activities that did not have the approval of a sub-committee of the National Board of Wildlife.
- The CEC has been writing to the Assam government since 2020 for action against the illegal activities on the animal corridors. The latter has gone slow as a few MLAs are allegedly involved in such activities.

**Air quality database**

**Why in News**

World Health Organisation (WHO) has released Air Quality Database 2022

**Important Points**

- The World Health Organisation (WHO), in a report last week, revealed that nearly 99% of the global population is breathing air that contains pollutants beyond the accepted air quality limits.
- The WHO made the observation after the 2022 update to its air quality database.
- More than 6,000 cities spread across 117 countries are monitoring air quality and

people living in low- and middle-income countries suffer the most exposure to unhealthy levels of fine particulate matter and nitrogen dioxide, the global health body said in its report. It also highlighted the need to reduce usage of fossil fuels and other steps for reducing air pollution.

#### **Air quality database**

- The air quality database is a compilation of data on air quality and the concentrations of particulate matters in the air.
- It was started in 2011 and has since then been periodically updated.
- The database intends to help in studies about diseases due to air pollution by providing robust estimates of population exposure, according to the WHO.
- Each year, the WHO has been publishing the database with ground measurements of air quality and particularly the concentration of particulate matters PM 2.5 and PM 10. In 2011, observations from almost 1,100 cities across 91 countries were represented by the database for the period of 2003 to 2010.

#### **Current update**

- Following the fifth update to the database this year, for the first time, the database contains the ground measurements of annual mean concentrations of nitrogen di-

oxide, which the WHO calls “a common urban pollutant and precursor of particulate matter and ozone.”

- However, this data was not recorded in the previous versions of the database in 2011, 2014, 2016 and 2018.
- Also, close to 2,000 more cities/human settlements were recording the data for PM 2.5 and PM 10 since the last update in 2018.
- The fifth and current update to the database makes it most extensive yet in its coverage of air pollution exposure on the ground.
- Thus, the 2022 version will contain data about the annual means for PM 2.5, PM 10 and nitrogen dioxide for the years between 2010 and 2019 from 6,743 human settlements in 117 countries.
- The averages in the database are usually for a whole city/town and not at individual monitoring stations.

## Minimum Support Price (MSP)

### Why in News

The Cabinet Committee on Economic Affairs has approved the Minimum Support Price (MSP) for Raw Jute for the 2022-23 season.

### Important Points

- Minimum Support Price (MSP) for Raw Jute for the 2022-23 season has been fixed at Rs 4,750 per quintal for 2022-23 with an increase of Rs 250 over the previous year.
- The announced MSP of raw jute for the 2022-23 season is in line with the principle of fixing the MSP at a level of at least 1.5 times all India weighted average cost of production as announced by the Government in the Budget 2018-19.
- Jute is considered the second most important fibre after cotton in terms of consumption, production, usage and availability. The jute industry is responsible for employing more than 3,70,000 workers and over four million farmers.
- The Jute Corporation of India (JCI) will continue as the central government nodal agency to undertake the price support operation. In case of any losses in the operation, they would be fully reimbursed by the central government.

### Minimum Support Price (MSP)

- MSP for a crop is the price at which the government is supposed to procure/buy that crop from farmers if the market price falls below it.
- MSPs provide a floor for market prices, and ensure that farmers receive a certain “minimum” remuneration so that their costs of cultivation (and some profit) can be recovered.

- The MSPs are announced by the Union government and as such, it is the government’s decision.
- But the government largely bases its decision on the recommendations of the Commission for Agricultural Costs and Prices (CACP).

### Crops covered by MSPs include:

- 7 types of cereals (paddy, wheat, maize, bajra, jowar, ragi and barley),
- 5 types of pulses (chana, arhar/tur, urad, moong and masur),
- 7 oilseeds (rapeseed-mustard, groundnut, soyabean, sunflower, sesamum, safflower, nigerseed),
- 4 commercial crops (cotton, sugarcane, copra, raw jute)

### While recommending MSPs, the CACP looks at the following factors:

- The demand and supply of a commodity;
- Its cost of production;
- The market price trends (both domestic and international);
- Inter-crop price parity;
- The terms of trade between agriculture and non-agriculture (that is, the ratio of prices of farm inputs and farm outputs);
- A minimum of 50 per cent as the margin over the cost of production; and
- The likely implications of an MSP on consumers of that product.

## Domestic patent filing

### Why in News

Domestic patent filing surpasses international patents for first time in 11 years

### Important Points

- India achieved yet another milestone in the context of the Intellectual Property (IP) innovation ecosystem. This is a significant milestone in the context of the IP innovation ecosystem, according to a statement from the Ministry of Commerce and Industry.
- Domestic patent filing surpassed international patent filing at the Indian patent office during the January-March quarter for the first time in 11 years.
- Of the total 19,796 patent applications filed, 10,706 were filed by Indian applicants compared to 9,090 by non-Indian applicants.
- The coordinated effort by DPIIT and IP office has led to increased IP awareness among all strata of society. This effort has on the one hand led to an increase in the number of IPR filings and on the other has reduced the pendency of patent application at IP offices.
- Some of the key initiatives taken by the government over the years that have bolstered India's IP regime includes provisions on expedited examination for Startups and MSMEs along with other categories.
- The Ministry of Commerce and Industry said that the filing of patents has increased from 42,763 in 2014-15 to 66,440 in 2021-22. This is a 50 per cent increase in seven years.
- It also witnessed five times increase in the grant of patents in 2021-22 (30,074) as compared to 2014-15 (5978).
- The government further informed that there has been a reduction in time of patent examination from 72 months in Dec 2016 to 5-23 months at present, while India's ranking in Global Innovation Index has increased to 46th in 2021 (+35 ranks) from 81st in 2015-16.
- The Ministry highlighted some of the key initiatives taken by the government over the years which include fee concessions such as a 10 per cent rebate on online filing, 80 per cent fee concession for startups, small enti-

ties and educational institutions, and provisions for expedited examination for startups and MSMEs.

### **About DPIIT**

Department of Industrial Policy & Promotion (DIPP) renamed to the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry

### **DPIIT will include:**

- the promotion of internal trade (including retail trade),
- the welfare of traders and their employees,
- matters relating to facilitating Ease of Doing Business,
- matters relating to start-ups.

## **Urban Development in Nagaland**

### **Why in News**

ADB Financing to Support Urban Development in Nagaland

### **Important Points**

- The Government of India and the Asian Development Bank signed a \$2 million Project Readiness Financing (PRF) Loan for designing climate resilient urban infrastructure, strengthening institutional capacity and improving municipal resource mobilization in 16 district headquarter towns (DHTs) in Nagaland.
- The ADB financing will ensure high readiness of the ensuing project through preparing an urban sector strategy, undertaking feasibility studies and detailed engineering designs of selected subprojects and building capacity of state level agencies in project implementation, resource mobilization and anchoring reforms.
- Nagaland's towns and cities face the long-term challenges of climate change, lack of basic amenities, poor connectivity.
- Major transport routes around urban areas are severely affected by landslides during the monsoon season. Urban roads are in poor condition without proper stormwater drainage.
- Most cities face acute water shortage and except Dimapur have inadequate sewerage

or septage management system. All these issues constrain economic development of the state.

- The PRF loan will help design water supply, sanitation, solid waste management and urban roads in 16 DTHs with climate resilient features and improved access to poor and vulnerable.
- Capacity building of state agencies will help augment own-resource mobilization by urban local bodies (ULBs), improve their readiness for implementing the ensuing project and initiating sector and institutional reforms.

## **Longevity Hub at GIFT-IFSC**

### **Why in News**

Expert Committee on Longevity Finance recommends setting up of Longevity Hub at GIFT-IFSC

### **Important Points**

- International Finance Services Centres Authority (IFSCA) constituted Expert Committee on Longevity Finance.
- The committee examined emerging trends in Longevity Economy globally and observed that people over 60 years are still very much a highly productive demographic group in terms of purchasing power and make up the wealthiest part of financial system with a global spending power of \$15 trillion.
- Highlighting the critical role of financial services sector for the growth of Longevity industry, the Committee recommended the setting up of first Global Longevity Hub (GLH) in GIFT-IFSC.
- Committee also suggested that the hub should focus on developing the longevity economy by offering various longevity finance solutions in coordination with leading corporates and financial institutions such as Banks, Pension Funds, Asset Management Funds, Insurance Companies, etc.
- The long-term vision of building a strong longevity finance hub at IFSC can open-up opportunities in wealth management, insurance, pension, silver entrepreneurship and medial tourism.
- This will help GIFT IFSC emerge as a global leader in longevity finance, immediately addressing the requirements of baby boomers, Gen X & Gen Y cohorts, and setting the path for millennials.
- The committee members comprised of leaders from the entire longevity finance ecosystem including from areas such as banking, insurance, wealth management, FinTech, legal, compliance and management consultancy.

### **GIFT-IFSC**

- Gujarat International Finance Tech-city (GIFT) SEZ is India's first International Financial Services Centre (IFSC) under Special Economic Zone Act, 2005 ("SEZ Act 2005").
- It is being developed as a global financial services hub. GIFT IFSC is a Multi Services Special Economic Zone with 105 hectares of land and commenced its business in April 2015.
- Government of India operationalized International Financial Services Centre (IFSC) at GIFT Multi Services SEZ in April 2015.
- The Union Budget 2016 provided competitive tax regime for the IFSC at GIFT SEZ.

### **The GIFT SEZ Advantage**

- Creation of an estimated 500,000 direct jobs and an equal number of indirect jobs.
- Providing financial incentives, regulatory freedom and world-class infrastructure.
- World class infrastructure and unparalleled connectivity and transportation access.
- Strict adherence to environmental norms, with built-in technologies for a sustainable ecosystem.
- National and international hub of IT and ITeS companies, finance companies, commodity exchange, global trading, insurance, offshore banking and data centers among others.



## Mineral Production

### Why in News

Mineral Production Records 13.2 per cent Cumulative Growth

### Important Points

As per the provisional statistics of the Indian Bureau of Mines, the cumulative growth for the period April- February, 2021-22 over the corresponding period of the previous year has increased 13.2 per cent.

The index of mineral production of mining and quarrying sector for the month of February this year was 4.5 percent higher as compared to February last year.

The production level of important minerals in February this year were - Coal 795 lakh tonnes, Lignite 47 lakh tonnes, Petroleum (crude) 23 lakh tonnes, Chromite 373 thousand tonnes and Gold 125 kilogram.

Cumulative growth

- Cumulative growth is a term used to describe a percentage of increase over a set period of time.
- Cumulative growth can be used to measure growth in the past and, thereby, to plan for population growth, estimate organic cell growth, measure sales growth, and so on.
- It is a useful descriptive tool in figuring out how growth has developed over time or how growth will continue to develop.
- CAGR requires three inputs: an investment's beginning value, its ending value and the time period (expressed in years).

## Digital Banking Units

### Why in News

Finance Minister reiterated her Budget announcement on setting up 75 digital banking units.

### Important Points

- Finance Minister Nirmala Sitharaman reiterated her Budget announcement on setting up 75 digital banking units in 75 districts of the country this year. This is to take forward the government's agenda of digital financial inclusion.
- In the Budget for 2022-23, the Finance Minister said that the digital banking, dig-

ital payments and fintech innovations have grown at a rapid pace in the country.

- Government is continuously encouraging these sectors to ensure that the benefits of digital banking reach every nook and corner of the country in a consumer-friendly manner.
- Taking forward this agenda, and to mark 75 years of our independence, it is proposed to set up 75 Digital Banking Units (DBUs) in 75 districts of the country by Scheduled Commercial Banks.
- Recently, the Reserve Bank of India announced the guidelines for DBUs, following the report of a working group of the Indian Banks Association.

### What are DBUs?

- A digital banking unit is a specialised fixed point business unit or hub housing certain minimum digital infrastructure for delivering digital banking products and services as well as servicing existing financial products and services digitally in self-service mode at any time.

### Who will set up these DBUs?

- Commercial banks (other than regional rural banks, payment banks and local area banks) with past digital banking experience are permitted to open DBUs in tier 1 to tier 6 centres, unless otherwise specifically restricted, without having the need to take permission from the RBI in each case.

### Services provided by DBUs

- As per the RBI, each DBU must offer certain minimum digital banking products and services.
- Such products should be on both liabilities and assets side of the balance sheet of the digital banking segment. Digitally value-added services to conventional products would also qualify as such.
- The services include savings bank accounts under various schemes, current accounts, fixed deposits and recurring deposit accounts, digital kit for

customers, mobile banking, Internet banking, debit cards, credit cards, and mass transit system cards, digital kit for merchants, UPI QR code, BHIM Aadhaar and point of sale (PoS).

- Other services include making applications for and onboarding of customers for identified retail, MSME or schematic loans. This may also include end-to-end digital processing of such loans, starting from online application to disbursement and identified government sponsored schemes that are covered under the national portal.

Currently, fintechs operating as neobanks offer digital banking services but they do so in partnership with non-banking financial companies (NBFCs). Some of the neobanks offering services in India are Jupiter, Fi Money, Niyoy, Razorpay X.

## **India Posts Payments Bank**

### **Why in News**

The union cabinet has approved financial support for India Post Payments Bank

### **Important Points**

- India Posts Payments Bank (IPPB) has recently crossed its 5 crore customers mark in just three of commencement of operations to become one of the fastest growing digital payments bank in the country.
- The union cabinet has approved Rs820 crore financial support for India Post Payments Bank.
- IPPB opened up these five crore accounts in digital and paperless mode through its 1.36 lakh post offices, out of which 1.20 lakh are in rural areas with the help of about 1.47 lakh doorstep banking service providers.
- Out of the total account holders, around 48% were women account holders, while 52% were male that indicated the Bank's focus on bringing the women customers under the banking network.
- About 98% of accounts of women were opened at the doorsteps and over 68% of women were availing DBT benefits.
- IPPB revealed that it attracted youths to

avail digital banking services. Over 41% of account holders were in the age group of 18 to 35 years.

- IPPB has been able to leverage upon its parental strength of Department of Posts and is steadily transforming and reshaping the financial inclusion landscape across the country.
- In the near future, IPPB endeavour is to build a unified service platform offering various citizen-centric financial services, including credit, at the doorstep by leveraging India stack such as JAM, Sahmati etc.

### **About IPPB**

- The India Post Payments Bank is a public sector company under the department of posts and ministry of communication where the Indian government holds 100 per cent equity. The payments bank will be governed by Reserve Bank of India.
- IPPB will offer a range of products such as savings and current accounts, money transfer, direct benefit transfers, bill and utility payments, and enterprise and merchant payments.
- These products, and related services, will be offered across multiple channels (counter services, micro-ATM, mobile banking app, SMS and IVR), using the bank's state-of-the-art technology platform.
- The IPPB will not offer any ATM debit card. Instead, it will provide its customers a QR Code-based biometric card. It has already tied up with PNB Metlife and Bajaj Allianz to sell insurance products and hopes to enter into more financial service partnerships.

## **India-UAE Comprehensive Economic Partnership Agreement (CEPA)**

### **Why in News**

Biggest bilateral trade pact between India, UAE comes into force

### **Important Points**

- The India-UAE Comprehensive Economic Partnership Agreement (CEPA), the biggest bilateral trade pact between the two



- major economies, was activated.
- India is negotiating trade agreements at a very fast pace with complementary econ-



- omies, including the UK, Canada and the EU.
- The agreement was signed on February 18 between the two sides.
- Coinciding with the important occasion, Secretary, Department of Commerce, B.V.R. Subrahmanyam flagged off the first consignment of goods consisting of jewellery items from India to the UAE under the India-UAE CEPA.
- Mr Subrahmanyam handed over “Certificates of Origin” to three exporters from the Gems and Jewellery sector.
- Under the new customs system, the consignment will attract “zero customs duty”.
- The aforementioned consignment which will now attract zero customs duty under this Agreement is expected to reach Dubai.
- The India-UAE CEPA is the first of the major bilateral trade pacts that India has been negotiating to kickstart international trade in the post-COVID-19 scenario.

**The salient features of India-UAE CEPA are as follows:**

- The India-UAE CEPA is the first deep and full free trade Agreement to be signed by India with any country in the past decade.
- The Agreement is a comprehensive agreement, which will cover Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures, Dispute Settlement, Movement of Natural Persons,

Telecom, Customs Procedures, Pharmaceutical products, Government Procurement, IPR, Investment, Digital Trade and Cooperation in other Areas.

**Impact or benefits:**

- CEPA provides for an institutional mechanism to encourage and improve trade between the two countries.
- The CEPA between India and the UAE covers almost all the tariff lines dealt in by India (11,908 tariff lines) and the UAE (7581 tariff lines) respectively.
- India will benefit from preferential market access provided by the UAE on over 97 % of its tariff lines which account for 99% of Indian exports to the UAE in value terms, especially for all labour-intensive sectors such as Gems and Jewellery, Textiles, leather, footwear, sports goods, plastics, furniture, agricultural and wood products, engineering products, medical devices, and Automobiles.
- India will also be offering preferential access to the UAE on over 90% of its tariff lines, including lines of export interest to the UAE.
- As regards trade in services, India has offered market access to the UAE in around 100 sub-sectors, while Indian service providers will have access to around 111 sub-sectors from the 11 broad service sectors.
- Sectors include ‘business services’, ‘communication services’, ‘construction and related engineering services’, ‘distribution services’, ‘educational services’, ‘environmental services’, ‘financial services’, ‘health related and social services’, ‘tourism and travel related services’, ‘recreational cultural and sporting services’ and ‘transport services’.
- Both sides have also agreed to a separate Annex on Pharmaceuticals to facilitate access of Indian pharmaceuticals products, especially automatic registration and marketing authorisation in 90 days for products meeting specified criteria.

## GSLV-F10

### Why in News

Panel pinpoints reason for GSLV mission failure

### Important Points

- GSLV-F10/EOS-03 mission was aborted after a normal lift-off in August last year
- The GSLV-F10/EOS-03 mission, which lifted off from Sriharikota on August last year failed due to 'deviation in the performance' of the cryogenic upper stage (CUS) of the launch vehicle, a national-level Failure Analysis Committee (FAC) constituted in the aftermath has found.
- Although the Geosynchronous Satellite Launch Vehicle (GSLV) had a normal lift-off after a 26-hour countdown, the mission had to be aborted much to the dismay of the Indian Space Research Organisation (ISRO).
- The FAC, which consisted of experts from the space agency and the academia, submitted its findings recently.
- The FAC has concluded that a leak in a Vent and Relief Valve (VRV), probably triggered

by damage in the soft seal, resulted in lower pressure in the LH2 (Liquid Hydrogen, the propellant) tank when the CUS engine ignited.

- This caused the Fuel Booster Turbo Pump (FBTP) to malfunction, ultimately leading to the failure of the mission.

### Recommendations

- According to ISRO, the FAC has made comprehensive recommendations for "enhancing the robustness" of the CUS for future GSLV missions.
- Recommendations include the incorporation of an active LH2 tank pressurisation system for guaranteeing sufficient pressure in the tank before the engine burns. Other recommendations include strengthening the VRV and associated fluid circuits to avoid leakage.

The GSLV Mission had aboard it the EOS-03, an earth observation satellite which was to be placed in a Geosynchronous Transfer Orbit (GTO). It marked the eighth flight with an indigenously-built cryogenic engine and the 14th flight of the GSLV. Initial investigations conducted immediately after the failed launch had pointed to an anomaly in the CUS as the villain.

### ISRO Future Mission

Mission name	Expected launch	Spacecraft
Gaganyaan 1	June 2022	Uncrewed spacecraft flight test
Aditya-L1	Mid 2022	Solar observation
Chandrayaan-3	August 2022	Lunar lander, rover
Gaganyaan 2	2022-2023	Uncrewed spacecraft flight test

**ISRO GSLV MK II**  
MARCH 5TH, 2020  
7:13 AM EST (12:13 UTC)

**HEIGHT**  
49.13 m / 161.2 ft

**DIAMETER**  
2.8 m / 9.2 ft

**ROCKET**  
GSLV Mk II

**MANUFACTURER**  
INDIAN SPACE RESEARCH ORGANISATION (ISRO)

**DESTINATION ORBIT**  
GEOSTATIONARY TRANSFER ORBIT

**LAUNCHING FROM**  
SATISH DHAWAN SPACE CENTER, SRIHARIKOTA, INDIA, EARTH

**MISSION**  
GISAT-I IS AN INDIAN EARTH OBSERVATION SATELLITE TO BE LAUNCHED IN GEOSTATIONARY ORBIT. IT IS TASKED WITH CONTINUOUS OBSERVATION OF INDIAN SUB-CONTINENT AND QUICK MONITORING OF NATURAL HAZARDS AND DISASTER. GISAT CARRIES AN IMAGING PAYLOAD CONSISTING OF MULTI-SPECTRAL, MULTI-RESOLUTION FROM 50 M TO 1.5 KM. IT WILL PROVIDE PICTURES OF THE AREA OF INTEREST ON NEAR REAL TIME BASIS INCLUDING BORDER AREAS.

**PAYLOAD**  
GISAT-I

**MASS**  
2100 KG / 4630 LBS

## Genome Sequencing

### Why in News

Two decades after most of the human genome was mapped, scientists have now filled in the gaps that remained.

### Important Points

- Nearly two decades ago, when scientists published the map of the human genome for the first time, it was hailed as a breakthrough.
- That was incomplete, however: about 8% of the human DNA was left unsequenced.
- Now, in a series of papers published in Science, a large team has accounted for that 8%, completing the picture of the human genome for the first time.

### Importance of Genome Sequencing

- A complete human genome makes it easier to study genetic variation between individuals or between populations.
- A genome refers to all of the genetic material in an organism, and the human genome is mostly the same in all people, but a very small part of the DNA does vary between one individual and another.
- By constructing a complete human genome, scientists can use it for reference while studying the genome of various individuals, which would help them understand which variations, if any, might be responsible for disease.

### Human Genome Project

- The genetic sequence made available in 2003 from the Human Genome Project, an International collaboration between 1990 and 2003, contained information from a region of the human genome known as the euchromatin.
- Here, the chromosome is rich in genes, and the DNA encodes for protein.
- The 8% that was left out was in the area called heterochromatin. This is a smaller portion of the genome, and does not produce protein.

There were at least two key reasons why heterochromatin was given lower priority.

- This part of the genome was thought to be “junk DNA”, because it had no clear function. Besides, the euchromatin contained more genes that were simpler to sequence

with the tools available at the time.

- The fully sequenced genome is the result of the efforts of a global collaboration called the Telomere-2-Telomere (T2T) project.
- The invention of new methods of DNA sequencing and computational analysis helped complete the reading of the remaining 8% of the genome.

### What's in the 8%?

- The new reference genome, called T2T-CHM13, includes highly repetitive DNA sequences found in and around the telomeres (structures at the ends of chromosomes) and the centromeres (at the middle section of each chromosome).
- The new sequence also reveals long stretches of DNA that are duplicated in the genome and are known to play important roles in evolution and disease.

## Indigenous Intelligent Transportation Systems (ITS)

### Why in News

Indigenous Intelligent Transportation Systems (ITS) Solutions for Indian Traffic Scenario launched under InTranSE -II Program.

### Important Points

- An indigenous Onboard Driver Assistance and Warning System – ODAWS, Bus Signal Priority System and Common Smart IoT Connectiv (CoSMiC) software have been launched under Intelligent Transportation System Endeavor for Indian Cities Phase-II initiative of Ministry of Electronics and Information Technology (MeitY).
- The product was developed as a joint initiative by Centre for Development of Advanced Computing (CDAC) and Indian Institute of Technology Madras (IIT-M). Mahindra and Mahindra was the industrial collaborator for the project.

### 1. Onboard Driver Assistance and Warning System – ODAWS:

- ODAWS incorporates vehicle-borne sensors for monitoring driver propensity and vehicle surroundings to deliver acoustic and visual alerts for driver assistance.
- The project involves the development of sub-modules such as the navigational unit, driver assistance console, and mmWave radar sensor.

- The positional and dynamic characteristics of surrounding vehicles are probed using mmWave radar sensors.
- The navigational sensor provides a precise geo-spatial orientation of the vehicle as well as trends in driving behaviour.
- The ODAWS algorithm is used to interpret sensor data and offer real-time notifications to the driver, boosting road safety.

## 2. **Bus Signal Priority System:**

- Bus signal priority System is an operational strategy that modifies normal traffic signal operations to better accommodate in-service public buses at signal-controlled intersections.
- Unlike a blind priority that is given for emergency vehicles, here it is a conditional priority, which is given only when there is an overall reduction in delay for all vehicles.
- The developed system will enable to minimize person delay by providing priority to public transport buses, either through Green extension or Red truncation, considering all vehicles approaching a signalized intersection.

## 3. **Common SMart iot Connectiv (CoSMiC):**

- It is a middleware software providing standard based deployment of IoT adhering to oneM2M based global standard.
- It facilitates users and application service providers in various vertical domains to use application agnostic open standards and open interfaces for end to end communication with well-defined common service functionalities complying with oneM2M standard.
- The CoSMiC platform also provides Interworking Proxy Entity (IPE) APIs for connecting non-oneM2M (NoDN) devices or third-party applications to get connected to the CoSMiC platform.
- CoSMiC provides a Dashboard page showing IoT units, products, applications, and its live data in a Geographical Information System (GIS) map.

## **Global warming challenge**

### **Why in News**

New materials and processes for carbon could show new light on global warming challenge

## **Important Points**

- A group of scientists from Indian Institute of Chemical Technology, IICT, Hyderabad have designed a hybrid material that can absorb greenhouse gas methane and convert it to clean hydrogen.
- They have simulated a process of capturing carbon dioxide and converting it to high purity hydrogen from non-fuel grade bioethanol.
- These scientists have also designed a facility that can test such materials and help further carbon capture research at the institute.
- Ministry of Science and Technology said that these new materials and processes for carbon capture and utilization could show new light on global warming challenge.
- The researchers have also fabricated a facility that can further carbon capture and conversion research at the institute.
- The facility, a dual operational fixed cum fluidized bed reactor system (FBR) can carry out sorption enhanced steam methane reforming (SESMR) for high purity H<sub>2</sub> production based on the modelling and preliminary experimental studies.
- The FBR facility has been successfully commissioned recently in Jan 2022 at CSIR-IICT, Hyderabad, under a Mission Innovation Project supported by Department of Science and Technology to IICT Hyderabad.
- It is unique and available for the first time in the country to test the performance of dual functional materials for SESMR in fluidized bed reactor system.
- SESMR offers specific advantages of in-situ CO<sub>2</sub> removal through sorbents and thereby overcomes the equilibrium limitations of steam reforming and leads to high purity H<sub>2</sub> production.
- Potential dual functional materials identified from theoretical predictions are now being synthesized and simultaneously FBR operating conditions are being optimized for existing sorbent/catalyst materials for meeting increasing challenges of carbon capture and utilization and associated research.



## Shrimp cultivation

### Why in News

Newly patented diagnostic tool for aquaculture pathogen to boost shrimp cultivation

### Important Points

- Scientists have developed a handy diagnostic tool that detects an aquaculture pathogen known as the White Spot Syndrome Virus (WSSV).
- The peptide-based diagnostic tool by scientists of Agharkar Research Institute (ARI), an autonomous institute of the Department of Science and Technology (DST) has been granted patent on 31 March 2022 as an alternative biorecognition element.
- Infection caused by the WSSV to the shrimp *Penaeus vannamei* results in huge loss of crop.
- This high value super-food is susceptible to a wide range of viral and bacterial pathogens and the probability of occurrence of infections is rather high.
- Improved nutrition, probiotics, disease resistance, quality control of water, seed and feed, immuno-stimulants and affordable vaccines play an important role in enhancing the production.
- Technologies for early and rapid detection of pathogens on the field will help fish and shell-fish farming which provides significant export revenue to the country which is a leading supplier of shrimp to the USA.
- To provide a handy, self-use diagnostic for WSSV, scientist developed a lateral flow assay using gold nanoparticles for easy visualization of the results.
- Instead of using poly-/mono-clonal antibodies in assay development, the ARI scientists selected twelve amino acid containing peptides from a phage display library by biopanning.
- This was a time- and cost-saving approach, eliminating the need for immunization of laboratory animals to obtain the antisera. With the use of peptides, cold-chain requirements for storage are reduced and the assay becomes production friendly.

### White Spot Syndrome Virus (WSSV)

- White spot disease (WSD) is a highly contagious viral infection of decapod crusta-

ceans that can cause high levels of mortality in cultured shrimp.

- Since its first outbreak in 1992–93, this disease has caused serious economic losses.
- The causative agent of WSD is white spot syndrome virus (WSSV), which is a large, nonoccluded, enveloped, rod-shaped to elliptical DNA virus with a tail-like extension at one end.
- WSSV multiplies in the nucleus and has a very broad host range among crustaceans.
- The disease is associated with a group of viruses that appear to be similar in genetic composition and are widely dispersed geographically.

## Portable Solar Rooftop

### Why in News

Gujarat Gets India's First Portable Solar Rooftop System.

### Important Points

- Citing the need for renewable resources to bring down the carbon footprint in India, the first portable solar rooftop system has now been installed in Gandhinagar, Gujarat.
- The new 10 PV Port system is designed to be highly cost-effective, requires low maintenance, and can be installed by a single person.
- The 10 PV Port system, developed by a German development agency named Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), has been installed at the Swaminarayan Akshardham temple complex in Gandhinagar.
- It is taken care by the Union Ministry of New and Renewable Energy's initiative. The PV Port systems are standard plug-and-play photovoltaic systems, consisting of a minimum of 2kWp, that come with or without battery storage.
- The PV Port systems have been designed for 100% self-consumption. This means that no power is fed into the grid.
- The systems are designed to utilize the space beneath the solar panels to deliver more power and higher efficiency. One of these systems can help an Indian household save up to an average of Rs 24,000 on electricity bills each year.



- The 10 PV Port systems, which are designed for the Indian climate, are manufactured by the New Delhi-based company Servotech Power Systems Limited, which is one of the leading manufacturers of high-end solar products.
- The company operates under the Make in India initiative and has been given the responsibility of installing 40 such PV Port systems throughout Gandhinagar.
- The company has already installed 30 systems at Pandit Deendayal Energy University, Indroda Park, NIFT, Arya Bhavan, GSPC Bhavan, and other places.

#### **Rooftop Solar PV system: How it works?**

- Solar PV rooftop system is basically a small power plant at rooftop.
- The Grid interactive Roof Top Solar Photo Voltaic (PV) mainly consists of three major components.
- These are the solar PV modules, mounting structure for the modules and the inverter or power conditioning units.
- Solar PV modules form an array and it requires a mounting structure to hold PV modules at the required angle for maximized generation.
- The solar panels convert solar energy in the form of light into electricity in DC form (Direct Current).
- The DC electrical energy is converted to AC (Alternate Current) power by the inverter/power conditioning unit which is connected to the power grid through AC distribution board.
- The AC power output can be measured through metering panel connected to it.
- The 415 V AC output of the system can be synchronized with the grid and the electricity can be exported to the grid depending upon solar power generation and local consumption.

### **5G service to be roll-out**

#### **Why in News**

Union Minister of Communications recently said that the commercial rollout of 5G services could be expected from August-September 2022 onwards.

#### **Important Points**

- The government is likely to hold 5G spec-

trum auction in early June.

- The government said that the Department of Telecom is working as per expected timeline and the process is on to resolve industry concerns around spectrum pricing.
- Setting the stage for the rollout of 5G services, telecom regulator Trai has mooted a mega auction plan valued at over Rs 7.5 lakh crore at the base price across multiple bands for radio waves allocated over 30 years.
- Digital Communications Commission will take a call on Trai recommendations and approach them for clarification.
- The watchdog has recommended a mega auction plan of over Rs 7.5 lakh crore for over 1 lakh megahertz spectrum in case the government allocates it for a period of 30 years.
- In case of 20 years, the total value of the proposed spectrum auction will stand at around Rs 5.07 lakh crore at the reserve price, according to the back-of-the-envelope calculation.
- While Trai has reduced spectrum price by about 39 per cent compared to last price, telecom operators have said that the recommended rates are higher than global benchmarks.
- The government said that the family in rural and remote need to be connected for which industry has to be healthy and spectrum has to be reasonably priced to provide affordable telecom services.

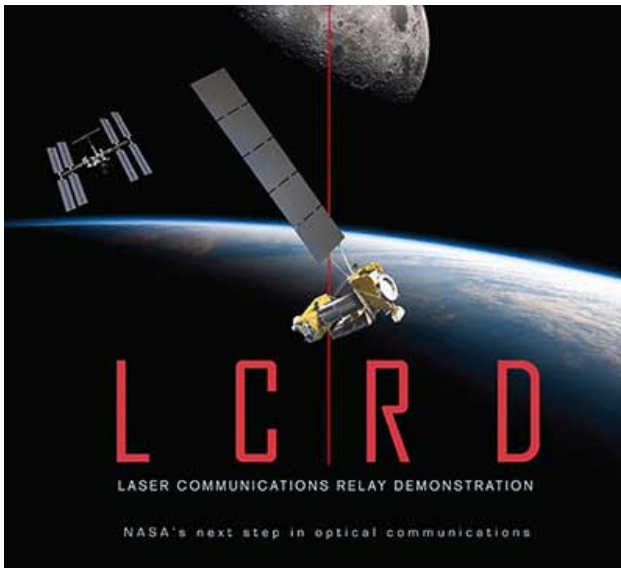
#### **About 5G**

- 5G is the fifth generation of wireless technology.
- It can provide higher speed, lower latency and greater capacity than 4G LTE networks. It is one of the fastest, most robust technologies the world has ever seen.
- Industrie 4.0, the smart factory, the Industrial Internet of Things (IIoT) – these are the future of industrial manufacturing. Designing production plants and intralogistics to be more flexible, autonomous, and efficient requires the right communication framework and comprehensive connectivity. The new 5G communication standard opens up important new prospects.

## LCRD

### Why in News

NASA's new communications system LCRD



### Important Points

- NASA recently demonstrated its Laser Communications Relay Demonstration (LCRD).
  - NASA launched its new Laser Communications Relay Demonstration (LCRD) — the agency's first-ever laser communications system — from Cape Canaveral Space Force Station in Florida.
  - The LCRD will help the agency test optical communication in space.
  - It is the agency's first-ever laser communications system.
  - Currently, most NASA spacecraft use radio frequency communications to send data. Optical communications will help increase the bandwidth 10 to 100 times more than radio frequency systems.
  - LCRD will demonstrate all of the advantages of using laser systems and allow us to learn how to use them best operationally.
- LCRD has two optical terminals – one to receive data from a user spacecraft, and the other to transmit data to ground stations. The modems will translate the digital data into laser signals
  - This will then be transmitted via encoded beams of light. These capabilities make LCRD NASA's first two-way, end-to-end optical relay, the agency said in a release.
  - Laser VS radio
  - Laser communications and radio waves use different wavelengths of light. Laser uses infrared light and has a shorter wavelength than radio waves. This will help the transmission of more data in a short time.

### Advantages

- Optical communications systems are smaller in size, weight, and require less power compared with radio instruments.
- A smaller size means more room for science instruments.
- Less weight means a less expensive launch. Less power means less drain on the spacecraft's batteries. With optical communications supplementing radio, missions will have unparalleled communications capabilities.

### Where will the laser system be?

- The LCRD payload is hosted onboard the US Department of Defense's Space Test Program Satellite 6 (STPSat-6). It will be in a geosynchronous orbit, over 35,000km above Earth.

## Smoking

### Why in News

Smoking causes over seven million deaths a year

### Important Points

India has about 12 crore smokers. This needs to be cut, in light of public health

As per the estimates of WHO (and the FDA of the US) 1.3 billion people (among the 7.9 billion across the world) who smoke, and 80% of them live in low and middle- income countries.

Smoking is thus an epidemic and a great public health threat, killing over eight million people around the year. Over seven million of these people die due to direct tobacco use, and 1.2 million non-smokers who are exposed to second-hand smoke.

### A recent article by Dr. Smiljanic Stasha points out that

1. Smoking causes over seven million deaths every year,
2. 5.6 million young Americans might die because of smoking
3. Second hand smoking causes 1.2 million deaths worldwide
4. Smoking is one of the world's leading causes of impoverishment, and
5. In 2015, 7 out of 10 smokers (68%) reported that they wanted to quit completely.

WHO adopted the Framework Convention on Tobacco Control in 2003, it has been included as a Global Development Target in the 2030 Agenda for Sustainable Development (SD). If all the 155 signatory countries adopt smoking bans, health warnings, advertising bans and raise cigarette costs, this sustainable development is indeed possible.

### The Indian Scenario

- India has graduated from a low-income

country into a developed country, and is estimated to have 120 million smokers (out of a population of 138 crores), or about 9% of Indian people.

- A material called Cannabis was prevalent in India and neighbouring countries. Cannabis is a plant product that was (and still is) known by the local names marijuana, charas, hashish, ganja, and bhang.
- The user feels 'high' upon consuming (smoking) it. The active principle in Cannabis is a psychoactive molecule called tetrahydrocannabinol, which is responsible for its psychoactive and intoxicating effects.
- The active principle in tobacco is the molecule nicotine.

### Ban on tobacco products

- India has about 12 crores of people who smoke. This needs to be drastically reduced, in light of public health. The Indian Ministry of Health is set to prohibit the sale of cigarettes. India has become a party to the WHO Framework Convention on Tobacco Control.
- In accordance with this Framework and SD Goals, our Health Ministry has completely banned smoking in many public places and workplaces such as in healthcare, educational and government facilities, and in public transport. These are welcome moves and we the public must cooperate with them.

## AVGC promotion task

### Why in News

Centre sets up AVGC promotion task force for animation, visual effects, gaming and comic sector

### Important Points

- The Information and Broadcasting Ministry has constituted an Animation, Visual Effects, Gaming and Comics (AVGC) pro-

motion task force.

- Headed by the I&B Secretary, the task force will submit its first action plan within 90 days. It has representation from the industry, academia and State governments.

The responsibilities that have been laid upon the task force include:

- Framing of a national AVGC policy,
- Recommend national curriculum framework for Graduation, Post-Graduation and Doctoral courses in AVGC related sectors,
- Facilitate skilling initiatives in collaboration with academic institutions, vocational training centers & Industry,
- Boost employment opportunities,
- Facilitate promotion and market development activities to extend global reach of Indian AVGC Industry,
- Enhance exports and recommend incentives to attract FDI in AVGC sector.
- It will boost employment opportunities; help in the promotion and market development activities to extend global reach of Indian industry; enhance exports and recommend incentives to attract foreign direct investment in the sector.
- The task force comprises Secretaries of the Ministry of Skill Development and Entrepreneurship, Department of Higher Education, Ministry of Education, Ministry of Electronics and Information Technology, and the Department for Promotion of Industry and Internal Trade.

## State Energy and Climate Index

### Why in News

Launch Event of the State Energy and Climate Index Round- 1

### Important Points

- NITI Aayog has launched the State Energy & Climate Index-Round I on 11th April 2022.

The State Energy & Climate Index (SECI) Round I ranks the states' performance on 6 parameters,

namely;

1. DISCOM's Performance
  2. Access, Affordability and Reliability of Energy
  3. Clean Energy Initiatives
  4. Energy Efficiency
  5. Environmental Sustainability; and
  6. New Initiatives.
- The parameters are further divided into 27 indicators.
  - Based on the composite SECI Round I score, the states and UTs are categorized into three groups: Front Runners, Achievers, and Aspirants.
  - The states have been categorized based on size and geographical differences as larger states, smaller states, and UTs.
  - Gujarat, Kerala, and Punjab have been ranked as the top three performers in the category of larger states.
  - Gujarat has topped the Niti Aayog's State Energy and Climate Index-Round 1 (SECI) among larger states, which is aimed at ranking states and Union territories (UTs) on six parameters including discoms' performance, energy efficiency and environmental sustainability.
  - Goa, emerged as the top-performing state in the smaller states category, followed by Tripura, and Manipur.
  - Among UTs, Chandigarh, Delhi, and Daman & Diu/Dadra & Nagar Haveli are the top performers.
  - NITI Aayog stressed that there is a need to convert the efforts towards achieving the 'Panchamrit' targets announced by the hon'ble PM at COP-26, Glasgow into a peoples' movement.
  - The index can be used by the states and UTs to benchmark their performance against their peers, analyse the potential challenges to develop better policy mechanisms, and efficiently manage their energy resources.

## Global network of silk cities

### Why in News

Bengaluru joins global network of silk cities

### Important Points

- Bengaluru has become the first Indian city to get into the global network of silk cities.
- Bengaluru is now a part of the Silky Cities network, an international network of cities and silk metropolises located in eight countries.
- With this, India becomes the ninth nation on this silk map alongside France, China, Brazil, Japan, Uzbekistan, Georgia, Italy, and Spain.
- Global network of silk cities: The network was created in 2019 by Métropole de Lyon in France, and the Intersoie Consortium, a French silk association. It involves the public and the private sectors.
- The International Sericultural Commission (ISC), an inter-governmental organisation focused on development of the sericulture and silk industry, shifted its office to Bengaluru from Lyon in France and has been functional since January 2013.
- Bengaluru is called India's Silicon Valley, it offers technological competence that could facilitate innovation in textiles just the way Techtera, a textile cluster in France seeks to enhance competitiveness through collaborative innovation.
- Bengaluru's entry into the network could be officiated later this year in France, in the month of November, during a silk-centric event.

## SVANidhi se Samridhhi

### Why in News

'SVANidhi se Samridhhi' launched in additional 126 cities

### Important Points

- Ministry of Housing and Urban Affairs (MoHUA) launched 'SVANidhi se Samridhhi' program in additional 126 cities across 14 States/ UTs, in the presence of senior officials of States/UTs and various

Central Ministries.

- 'SVANidhi se Samridhhi', an additional program of PMSVANidhi was launched on 4th January 2021 in 125 cities in Phase 1, covering approximately 35 Lakh Street vendors and their families.
- 22.5 lakh scheme sanctions have been extended to them including 16 lakh insurance benefits under Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Yojana and 2.7 Lakh pension benefits under Pradhan Mantri Shram Yogi Maandhan Yojana, amongst other such benefits.
- Considering the success of Phase I, MoHUA launched the program expansion to additional 126 cities with an aim to cover 28 Lakh Street vendors and their families, with a total target of 20 Lakh scheme sanctions for FY 2022-23. The remaining cities would be gradually added to the program.
- MoHUA has been implementing Prime Minister Street Vendors AtmaNirbhar Nidhi (PM SVANidhi), a Central Sector Scheme since 1st June 2020.
- The scheme aims to provide an affordable working capital loan to Street Vendors and has successfully crossed the 30 Lakh mark. As envisioned by the Honourable Prime Minister, the scheme aims to not only extend loans to street vendors, but also aims for their holistic development and economic upliftment.
- Keeping this in mind, 'SVANidhi se Samridhhi' program was started to provide social security benefits to street vendors for their holistic development and socio-economic upliftment.
- MoHUA mentioned that the program has two-fold achievements: one, a central database of Street vendors and their families is created on various socio-economic indicators.
- Second, a first of its kind inter-ministerial convergence platform is established between various Central Ministries to extend



safety net of welfare schemes to street vendor households.

- Under the program, socio-economic profiling of PMSVANidhi beneficiaries and their families is conducted to assess their eligibility for 8 Government of India's welfare schemes and facilitate sanctions of eligible schemes.
- Quality Council of India (QCI) is the implementing partner for the programme.

**These schemes include**

- Pradhan Mantri Jeevan Jyoti Bima Yojana
- PM Suraksha Bima Yojana
- Pradhan Mantri Jan Dhan Yojana
- Registration under Building and other Constructions Workers (Regulation of Employment and Conditions of Service) Act (BOCW)
- Pradhan Mantri Shram Yogi Maandhan Yojana
- National Food Security Act (NFSA) portability benefit – One Nation One Ration Card (ONORC)
- Janani Suraksha Yojana and
- Pradhan Mantri Matru Vandana Yojana (PMMVY).

## **Haryana ban on transportation of fodder**

### **Why in News**

Haryana authorities have banned inter-district and inter-state transportation of wheat fodder.

### **Important Points**

- The authorities in Haryana have banned inter-district and inter-state transportation of wheat fodder, insisting they want to meet the local requirements first.
- The decision has drawn sharp criticism from the farmer groups and the Opposition.
- Two types of bans have been imposed on the transportation of fodder in Haryana. A few districts like Fatehabad and Sirsa have banned transportation even to other districts.
- The inter-district sale of dry fodder made of straw of wheat, paddy, mustard and gaur

has been prohibited for brick-kiln and cardboard factories too.

- The farmer leaders in Fatehabad claimed the authorities there have even stopped nearly 100 tractor-trolleys at the border of the district.
- The administration of other districts, including Ambala and Yamunanagar, have banned the transportation of fodder out of the state.
- Haryana Agriculture and Farmers Welfare Ministry claimed the ban has been imposed only on the interstate transportation of fodder in order to meet local needs.
- Haryana would not stop the transportation of fodder within the state, adding the inter-state ban would also be lifted after the fulfilment of the state's requirements.

### **Anticipation of shortage of fodder**

- There are mainly two reasons: one, more farmers opting for mustard crop in place of wheat in southern Haryana and two, less than usual production of wheat because of early onset of summer coupled with an exceptional rise in mercury this year.
- The officials believe the adverse weather conditions may affect the output of wheat fodder too. The farmers say shortage of DAP (di-ammonium phosphate) fertiliser has also affected the wheat crop.
- The farmers are more upset with the restrictions on inter-district transportation of fodder than the inter-state transportation.

## **National Curriculum Framework (NCF)**

### **Why in News**

The 'Mandate Document: Guidelines for the Development of the NCF was recently released.

### **Important Points**

Transforming education is the vision and soul of the new National Education Policy (NEP) 2020. Taking a step forward in making education more inclusive, Union Minister for Education Dharmendra Pradhan released the Mandate Document.

### **What is in the mandate document?**

- National Curriculum Framework

(NCF) is viewed as the centre of the transformative National Education Policy 2020 that has the capacity to empower and enable outstanding teaching and learning in the country.

- NEP 2020 recommends the development of National Curriculum Frameworks (NCF) in four areas- School Education, Early Childhood Care and Education (ECCE), Teacher Education and Adult Education.
- Mandate document is responsible for the development of the process of the NCF, its structure, objectives and some of the basic principles from the NEP 2020 that will inform the development of the four NCFs.
- Mandate document works as a bridge between the NEP 2020 and the NCF.

#### **Mandate document**

- It sets the mechanisms for the development of a coherent and comprehensive NCF, fully leveraging the widespread consultations already underway.
- The process is designed to ensure the seamless integration – vertically (across Stages) and horizontally (across subjects in the same Stage) in the NEP 2020 – to ensure holistic, integrated, and multi-disciplinary education
- It enables the critical linkage between the curriculum of schools with the curriculum of Teacher Education as an integral part of the transformative reforms envisioned by the NEP 2020 in the overall Teacher Education sector, thus enabling rigorous preparation, continuous professional development, and a positive working environment for all our teachers
- It informs the creation of opportunities for life-long learning for all citizens in the country
- Anchored and informed by sound theory and cutting-edge research, yet using simple language with real-life illustrations from

classrooms and schools in a variety of contexts

- As per the official release, NCF will also fully account for other initiatives like NIPUN Bharat, the national mission for Foundational Literacy and Numeracy by the Ministry of Education, which are being implemented with the required urgency even as the NCF is being developed.

#### **Why new National Curriculum Framework is important?**

- A 12-member national steering committee was constituted in September 2021 to develop a new National Curriculum Framework (NCF), which could serve as a guideline for designing syllabi, and textbooks, and informs teaching practices in the country.
- It is pertinent to highlight that India is currently following the fourth NCF – published by the National Council for Educational Research and Training (NCERT) in 2005.
- But from 2005 till now, there has been a drastic change in terms of the emergence of new avenues where jobs have been created and the job market dynamics, in terms of demand and supply.
- Today more than 65% of children in India are studying in government-run schools.
- Keeping in view that India has one of the world's largest education sectors with 1.5 million schools, more than 9.6 million teachers and more than 264 million children; prioritizing learning outcomes becomes imperative.
- The foundational learning skills are important and need constant improvement, and a large part of it lies in the way curriculums are designed.
- Undoubtedly, National Education Policy 2020's focus on multidisciplinary education and early-age skilling is laudable.

#### **e-BCAS**

##### **Why in News**

Civil Aviation Ministry mulls automating inter-

nal processes

### **Important Points**

- The meeting of the Parliamentary Consultative Committee attached to the Civil Aviation Ministry.
- The topic of discussion was 'e-BCAS project'.
- BCAS establishes, develops, implements maintains, and reviews the National Aviation Security Programme.
- It also safeguards civil aviation operations against acts of unlawful interference and threat, taking into account the safety, regularity, and efficiency of flights.
- It has now undertaken e-BCAS, an initiative under e-Governance for automation of internal processes.
- This will be an online platform for facilitation of stakeholders.
- It will leverage strength of existing processes and organizational structure, with the objective to make entire activities transparent, user-friendly, and efficient.
- It will digitize the office processes, facilitate fast approvals, and ensure ease of doing business, by technological integration across various divisions and processes.

### **'e-BCAS project'.**

- Biometric enabled Centralised Access Control System (CACS) & Training Module of e-BCAS Project launched – Aims to digitise employee movement process at airports
- Covering 43 Airports of AAI and 5 Joint Venture airports at present, the CACS project is aimed to digitize the employee movement process at the airports.
- This multi-layered security system encompasses the uniqueness of the Airport Entry Permit (AEP) users, biometric authentication in addition to PIN-based identity verification through contactless smart card technology, which manages access of personnel along with RFID based automated vehicle access control system according to the region, terminal, zone, and gate access privileges.
- 'e-BCAS Project: Training Module' aimed at helping more than 1.5 lac employees of various stakeholders by migrating from manual process of training to digital platform.
- The objective of the e-BCAS project is to make all the activities in the BCAS transparent, user-friendly, and efficient and above all, the project intends to provide an ease of doing business with the stakeholders.

# 7

## International Relations

### OPEC+

#### Why in News

Putin and Saudi Crown Prince Upbeat On OPEC+

#### Important Points

Russian President Vladimir Putin and Saudi Crown Prince Mohammed bin Salman gave a "positive assessment" to their cooperation on the OPEC+ producers group to stabilize the world oil market.

Saudi Arabia and other major Persian Gulf oil producers have so far resisted U.S. calls to increase output as prices have surged amid the crisis in Ukraine and concerns about possible sanctions on Russian exports. So, measures such as these are necessary to set things right.

#### About OPEC

- The Organization of the Petroleum Exporting Countries (OPEC) is a permanent, intergovernmental Organization, created at the Baghdad Conference on September 10–14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela.
- OPEC had its headquarters in Geneva, Switzerland, in the first five years of its existence. This was moved to Vienna, Austria, on September 1, 1965.
- OPEC partnered with Russia and several other major exporters to coordinate production and stabilize prices.
- In July 2019, they formalized this new OPEC+ coalition despite U.S. objections, as Washington worried the arrangement would increase Moscow's influence over global oil markets.

#### Objective:

- OPEC's objective is to co-ordinate and unify petroleum policies among Member Countries, in order to secure fair

and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.



- The bloc has adapted by forming the so-called OPEC+ coalition with Russia and other countries, but disruptions caused by the COVID-19 pandemic have undermined those efforts.
- In 2022, Russia's war in Ukraine and the resulting surge in global oil prices refocused attention on OPEC.
- The most prominent challenge to OPEC today comes from unconventional oils, such as shale-based energies, that have become available through recent technological advancements.
- In 2022, Russia's invasion of Ukraine and harsh sanctions imposed by the West in response have caused global oil prices to surge and renewed attention on OPEC's role.

### International Day for Monuments and Sites

#### Why in News

April 18 is celebrated as International Day for Monuments and Sites

#### Important Points

- Every year, the United Nations marks April

18 as the International Day for Monuments and Sites, in many countries also celebrated as World Heritage Day.

- The theme for this year is “Complex Pasts: Diverse Futures”.
- Globally, the day is promoted by the International Council on Monuments and Sites (ICOMOS).

#### **World Heritage Day**

- ICOMOS in 1982 had decided to celebrate April 18 as the International Day for Monuments and Sites or World Heritage Day.
- Approved by UNESCO in 1983 during its 22nd General Conference, the day is dedicated to recognising sites of historical importance, raising awareness regarding them, and stressing the need to restore and preserve them.
- The day, thus, promotes cultural importance, while also highlighting the many impediments in doing so.
- Every year, a theme is proposed for the day which guides the celebrations and the many activities that ICOMOS National and International Scientific Committees and by other bodies.

#### **World Heritage Sites in India**

- Currently, there are 40 World Heritage Sites located in India.
- One Heritage site is classified as ‘Mixed’, the Khangchendzonga National Park.
- In 2019, ‘Jaipur City’ became the 38th addition to the India list under Culture.
- Ramappa Temple (Telangana) was India’s 39th World Heritage Site.
- Harappan city of Dholavira in Gujarat as India’s 40th world heritage site.

### **China-Pak Economic Corridor**

#### **Why in News**

Pakistan passes orders to scrap China-Pak Economic Corridor Authority

#### **Important Points**

- Pakistan's new government has initiated a process to abolish the China-Pakistan Economic Corridor Authority.
- Pakistan's new government has said that

China-Pakistan Economic Corridor Authority was a "redundant organisation" that wasted resources and thwarted speedy implementation of the ambitious regional connectivity programme.

- The China-Pakistan Economic Corridor (CPEC) Authority established through an ordinance in 2019 .
- It was aimed at accelerating the pace of CPEC-related activities, finding new drivers of growth, unlocking the potential of interlinked production networks and global value chains through regional and global connectivity.
- The decision to wind up the CPEC Authority was in line with the Pakistan Muslim League-Nawaz's (PML-N) old policy against the establishment of a parallel setup.

#### **China-Pakistan Economic Corridor or CPEC**

- The China-Pakistan Economic Corridor (CPEC), one of the most ambitious components of Beijing’s Belt and Road Initiative, was announced to great fanfare in 2015.
- CPEC eventually aims at linking the city of Gwadar in South Western Pakistan to China’s North Western region Xinjiang through a vast network of highways and railways.
- The proposed projects are financed by heavily-subsidised loans, that are disbursed to the Government of Pakistan by Chinese banking giants.
- Loans from CPEC were about \$5.8 billion, accounting for 5.3% of Pakistan’s total foreign debt.

#### **India stayed out**

- One main reason why it has stayed out of the Belt and Road Initiative is because it includes projects in Pakistan-occupied Kashmir as part of a corridor connecting Xinjiang with Pakistan.
- The Chinese observation on the Kashmir issue was more anodyne.

### **Falkland Islands**

#### **Why in News**

Argentina to revive Falklands issue in India



### **Important Points**

- “The Commission for Dialogue” with the United Kingdom on the Falkland Islands was recently inaugurated by India and Argentina.
- The Government of Argentina will launch a campaign in India demanding negotiation with the United Kingdom to settle the territorial dispute over the Islas Malvinas that are known as the Falkland Islands in the UK.
- The initiative, which comes two days after the visit of UK Prime Minister Boris Johnson, coincides with the 40th anniversary of the conflict between the UK and Argentina, which ended with the re-establishment of British control over the archipelago.
- The dispute was not settled with the “cessation of hostilities” in 1982 and urged for resumption of bilateral dialogue.
- Argentina claims that the outcome of an armed conflict cannot settle a territorial dispute like the Malvinas/Falkland Islands.
- The Commission seeks to promote compliance with the resolutions of the United Nations and the declarations of other international fora on the Question of the Malvinas Islands, which call for the resumption of negotiations between Argentina and the United Kingdom.
- The members of the Commission will include former Union Minister Suresh Prabh, BJP leader Shazia Ilmi, Congress Lok Sabha MP Shashi Tharoor and veteran peacemaker Tara Gandhi Bhattacharjee.
- The recent sinking of the Russian missile cruiser Moskva in the Black Sea drew parallels with similar incidents during the Falklands War which began on April 2, 1982 when the Argentine forces invaded the UK-controlled islands.
- The 78-day long Falklands War was a unique event involving the United Kingdom and Argentina during the late Cold War period and left lessons in maritime warfare which gave the French Exocet mis-

siles a legendary status.

- Argentina’s plans to flag the Falkland issue at the international level taking advantage of the 40th anniversary of the war but maintained that there was no official consultation with the Indian side regarding Argentina’s plan to start the Commission in India.
- The Falklands War remains an emotive issue both in the UK and Argentina primarily because it left hundreds of young military personnel dead on both sides.

### **About Falkland Islands**

- The Falkland Islands are located 400 miles (650 km) off the south-east coast of South America and consist of approximately 740 islands.
- The largest islands called East Falkland and West Falkland, with the Capital Stanley located on the former.
- The landscape comprises of mountain ranges, flat plains, rugged coastline, sandy beaches and cliffs.
- The highest point in the Falklands is Mount Osborne on East Falkland and its highest peak is 705m (2,312 ft.).
- The Falkland Islands weather is strongly affected by the cool South Atlantic Ocean giving it a narrow annual temperature.
- Rainfall does not generally differ from season to season with an average 48.7mm per month in summer and 47.2mm in winter.
- On the 1st April 1982, an Argentine military force invaded the Falkland Islands. The British forces liberated the Falkland Islands after 74 days of occupation on 14th June 1982.
- The Falkland Islands are a United Kingdom Overseas Territory by choice.

### **Sustainable Development Goals**

#### **Why in News**

Panchayati Raj Ministry, UNDP sign pact on Sustainable Development Goals

#### **Important Points**

- The Ministry of Panchayati Raj and the United Nations Development Programme (UNDP) signed a joint statement of understanding on localisation of Sustainable Development Goals.
- Panchayati Raj institutions (PRIs) have been a critical component of local self-governance across rural India and India have witnessed the contribution of these institutions in achieving last-mile connectivity and execution of various schemes of different line department/ministries.
- SDGs too can be achieved only through active involvement of PRIs.
- About 65% of India's population lives in rural areas and the government is increasingly routing the funding of social sector schemes in sectors such as sanitation, housing and solid waste management through rural local bodies.
- The UNDP has been leading efforts in partnership with the NITI Aayog and the State governments, notably Haryana, Karnataka, Nagaland, Punjab and Uttarakhand, to localise and accelerate the SDGs through its signature solution of Sustainable Development Coordination Centres.

### About Sustainable Development Goals

- The Sustainable Development Goals



(SDGs), also known as the Global Goals, were adopted by the United Nations in 2015.

- It is considered as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people

enjoy peace and prosperity.

- The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.
- Countries have committed to prioritize progress for those who're furthest behind. The SDGs are designed to end poverty, hunger, AIDS, and discrimination against women and girls.

## NATO

### Why in News

Russia warns Sweden and Finland against Nato membership

### Important Points

- Russia has warned Finland and Sweden against joining Nato, arguing the move would not bring stability to Europe.
- NATO would be possible to allow Finland and Sweden in "quite quickly" but NATO has not commented on what a fast-track process would be.
- The Finland government has submitted a report to Parliament on "fundamental changes" in the foreign and security policy environment following Russia's invasion of Ukraine, as part of a process that is expected to lead to a decision on whether or not to join North Atlantic Treaty Organisation (NATO).
- Washington is believed to support the move which would see the Western alliance grow to 32 members.
- Before it launched its invasion, Russia demanded that the alliance agree to halt any future enlargement, but the war has led to the deployment of more Nato troops on its eastern flank and a rise in public support for Swedish and Finnish membership.
- Ukraine has accused Russia of holding civilians, including journalists, activists and elected officials, in prisons on Russian territory.

### About NATO

- Formed in 1949 with the signing of the Washington Treaty, NATO is a security alliance of 30 countries from North America and Europe. NATO's fundamental goal is to safeguard the Allies' freedom and security by political and military means.
- NATO remains the principal security instrument of the transatlantic community and expression of its common democratic values.
- It is the practical means through which the security of North America and Europe are permanently tied together. NATO enlargement has furthered the U.S. goal of a Europe whole, free, and at peace.
- Article Five of the treaty states that if an armed attack occurs against one of the member states, it should be considered an attack against all members, and other members shall assist the attacked member, with armed forces if necessary.
- NATO is comprised of two main parts, the political and military components.
- NATO Headquarters is where representatives from all the member states come together to make decisions on a consensus basis.

A NATO Military Exercise is scheduled by a NATO Commander. It aims to establish, enhance and display NATO's Military Capability across the Alliance's full mission spectrum which is based on the three Alliance military missions:

- Article 5 Collective Defence;
- Non-Article 5 Crisis Response; and
- Consultation and Co-operation.

## Global Security Initiative

### Why in News

Chinese President Xi Jinping put forward a new Global Security Initiative.

### Important Points

- A new Global Security Initiative put forward by Chinese President Xi Jinping will look to counter the U.S. Indo-Pacific strategy and the Quad – the India, U.S., Australia, Japan grouping.
- Mr. Xi first proposed what he called a

Global Security Initiative, speaking at the Boao Forum in China, warning against “hegemonism, power politics and bloc confrontation”.

- Specifically, he opposed the wanton use of unilateral sanctions and long-arm jurisdiction, appearing to refer to Western sanctions.
- China said that the some countries were eager to engage in exclusive ‘small circles’ and ‘small groups’”, Chinese officials have used previously to describe the Quad as well as the AUKUS (Australia-U.K.-U.S.) security pact.
- China's proposed security initiative would “oppose” what he called “the destruction of the international order under the banner of so-called ‘rules’ and the dragging of the world under the cloud of the ‘new cold war’”, and would “build an Asian security model of mutual respect, openness and integration”.
- China stressed that it firmly oppose the use of the ‘Indo-Pacific’ strategy to divide the region and create a ‘new Cold War’, and the use of military alliances to put together an ‘Asian version of NATO’.
- China had also taken aim at the Quad , suggesting during the annual National People's Congress in Beijing that the grouping was equivalent to the “Five Eyes”.
- “Five Eyes” is an intelligence alliance involving the Australia, New Zealand, Canada, the U.S. and U.K. and the AUKUS pact, as a key element in what he called U.S. plans to build an “Asian NATO”.
- The members of the Quad have rejected the notion that it is an Asian NATO or a military alliance, and pointed to its broad-based cooperation, including on vaccines and technology.

### About Five Eyes

- It is an alliance of intelligence agencies of Australia, Canada, New Zealand, the United Kingdom and the United States.

- The origins of it can be traced back to the context of the Second World War and by its necessity of sharing vital information mainly between Britain and the United States so both countries could enhance their close war effort.
- The Five Eyes was formally founded in the aftermath of the Second World War, through the multilateral agreement for co-operation in signals intelligence (SIGINT), known as the UKUSA Agreement, on 5 March 1946.
- Initially, comprising only the UK and the United States, it expanded to also include Canada in 1948 and Australia and New Zealand in 1956.
- The current role of the Five Eyes has many ramifications, such as the 'maritime domain' where the alliance monitors shipping traffic passing through strategic maritime areas and the 'aerospace domain' which covers ballistic missile tests, foreign satellite deployments and the military activities of relevant air forces.

## Cybersecurity

### Why in News

Microsoft introduces cybersecurity skills campaign in India, 22 countries

### Important Points

- Microsoft has introduced a cybersecurity skills development campaign in 23 geographies, including India, to address the alarming shortage of internet security professionals.
- By 2025 there will be 3.5 million cybersecurity jobs available globally, representing a 350% increase over an eight-year period, as per Cybersecurity Ventures, a researcher that tracks the global cyber economy.
- By that time, India alone is estimated to have almost 3.5 lakh cybersecurity job positions waiting to be filled, both in the private and public sectors.
- From supply chain disruptions to ransom-

ware attacks, cybercriminals have become increasingly sophisticated and the threat landscape got more diverse.

- These cybersecurity challenges are compounded by a workforce shortage; there simply aren't enough people with the cybersecurity skill sets needed to fill open jobs.
- Microsoft had launched this campaign in the U.S. earlier and now expanded it to India, Australia, Belgium, Brazil, Canada, Colombia, Denmark, France, Germany, Ireland, Israel, Italy, Japan, Korea, Mexico, New Zealand, Norway, Poland, Romania, South Africa, Sweden, Switzerland, and the U.K.
- These countries have an elevated cyber-threat risk, coupled with a significant gap in their cybersecurity workforces both in terms of the number of professionals employed in cybersecurity versus the demand, as well as a lack of diversity.
- In these countries, on average, only 17% of the cybersecurity workforce are females.
- Leaving women out of the cybersecurity workforce leaves talent on the table and will only hurt our ability to close the skills gap.

## UAE Golden Visa

### Why in News

Ranveer Singh joins list of celebs to receive the UAE Golden Visa

### Important Points

- Days after signing on as the brand ambassador of Yas Island Abu Dhabi, Bollywood actor Ranveer Singh has been awarded the UAE Golden Visa by the Abu Dhabi Department of Culture & Tourism.
- The 'Gully Boy' actor's family has also been awarded with the same.
- He received the prestigious 10-year residence visa by Mohamed Abdalla Al Zaabi, CEO of Miral, at the Island's.
- One of the benefits of the visa is that it enables foreigners to work, live and study in the UAE. However, there's a difference since individuals won't need a sponsor.
- Singh is not the first Bollywood celebrity to

have received this honour.

- In fact, there are many celebrities across the world who have been awarded with Golden Visas including Shah Rukh Khan, Sanjay Dutt, Suniel Shetty, Sonu Nigam, Ali Zafar, Boney Kapoor, and Arjun Kapoor among others.
- Popular stars from Malyalam film industry, such as, Mohanlal, Mammooty, and Prithviraj Sukumaran also hold this prestigious visa.
- The actor had recently featured in a video as part of Yas Island's marketing campaign, 'Yas Hai Khaas' (Yas is special), that saw the actor showcasing the venue's plethora of attractions and diversity of offerings.
- The aim of the campaign was to invite travellers from India to experience a vacation like no other.

#### **Golden Visa**

- The Golden Visa system essentially offers 5 and 10 years long-term residency to people belonging to the following groups: investors, entrepreneurs, individuals with outstanding talents such as researchers, medical and scientific and knowledge professionals, and outstanding students.
- The General Directorate of Residency and Foreigners Affairs (GDRFA) announced a new 24x7 service called 'You are Special'. The service aims to assist Golden Visa holders, among others.
- The main benefit of the visa will be security as, through the issuance of the Golden Visa, the UAE government has made it clear that it is committed to providing expatriates, investors and essentially everyone looking to make the UAE their home an extra reason to feel secure about their future.

#### **Eligibility for UAE Golden Visa**

- Investors with public investment of not less than AED 10 million can apply for the 10-year visa, whether in the form of an investment fund or a company.
- However, at least 60 percent of the total investment must not be in the form of real estate and the amount invested must not be loaned or, in the case of assets, investors must take full ownership.
- The investor must also be able to hold the investment for a minimum of three years.
- The 10-year golden visa can be extended to include business partners as long as each partner contributes AED 10 million. The long-term visa may also include the holder's spouse and children, as well as an executive director and advisor.
- For the 5-year golden visa, the rules are very similar for investors, with the only difference being that the required investment amount is AED 5 million.
- Foreigners wishing to establish their company in the United Arab Emirates can also apply for 5 years permanent residency through the Golden Business Visa scheme.



## Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)

### Why in News

Cabinet approves extension of Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) for another 6 months

### Important Points

- The Union Cabinet chaired by the Prime Minister has extended the Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) scheme for another six months i.e., till September 2022 (Phase VI).
- The Phase-V of PM-GKAY scheme was to end in March 2022. It may be recalled that the PM-GKAY has been under implementation since April 2020, as the largest food security program in the world.
- Under the extended PM-GKAY each beneficiary will get additional 5 kg free ration per person per month in addition to his normal quota of foodgrains under the NFSA. This means that every poor household would get nearly double the normal quantity of ration.
- The benefit of free ration can be availed through portability by any migrant labour or beneficiary under One Nation One Ration Card (ONORC) plan from nearly 5 lakh ration shops across the country. So far, over 61 Crore portability transactions have benefitted the beneficiaries away from their homes.

### One Nation One Ration Card (ONORC)

- The One Nation One Ration Card (ONORC) is an ambitious plan and endeavour of the Department to ensure seamless delivery of subsidised food-security entitlements to all beneficiaries covered under the National Food Security Act, 2013 (NFSA), irrespective of their physical location anywhere in the country.
- The objective of this programme is to empower all NFSA beneficiaries to be self-reliant for their food security anywhere in the

country, through portability of their same existing ration cards to seamlessly lift their subsidised foodgrains (in part or full) from any ePoS (electronic Point of Sale device) enabled Fair Price Shop in the country with biometric/Aadhaar authentication at the time of lifting the foodgrains through portability.

## RAMP

### Why in News

Cabinet approves USD 808 million for “Raising and Accelerating MSME Performance”

### Important Points

- The Union Cabinet approved a USD 808 million or Rs 6,062.45 crore, World Bank assisted programme on “Raising and Accelerating MSME Performance” (RAMP).
- RAMP is a new scheme and would commence in FY 2022-23.

### RAMP

- It is a World Bank assisted Central Sector Scheme, supporting various Corona Virus Disease 2019 (COVID) Resilience and Recovery Interventions of the Ministry of Micro, Small and Medium Enterprises (MoMSME).
- The programme aims at improving access to market and credit, strengthening institutions and governance at the Centre and State, improving Centre-State linkages and partnerships, addressing issues of delayed payments and greening of MSMEs.

Major Impact including employment generation potential and no. of beneficiaries:

- RAMP programme will address the generic and COVID related challenges in the MSME sector by way of impact enhancement of existing MSME schemes, especially, on the competitiveness front.
- RAMP programme, through enhanced collaboration with States, will be a job-enabler, market promoter, finance facilitator, and will support vulnerable sections and green-

ing initiatives.

- RAMP will complement the Atma Nirbhar Bharat mission by fostering innovation and enhancement in industry standards, practices and provide the necessary technological inputs to the MSMEs.

**RAMP would thus be a:**

- “Policy Provider”: Through the enhanced capacity for evidence-based policy and program design, to enable the delivery of more effective and cost-efficient MSME interventions to improve competitiveness and business sustainability.
- “Knowledge Provider”: Through bench-marking, sharing and demonstrating best practices/success stories by leveraging international experiences, and
- “Technology Provider”: Providing access to high-end technology resulting in the digital and technological transformation of MSMEs through state of art Artificial Intelligence, Data Analytics, Internet of things (IoT), Machine Learning etc.

## **New India Literacy Programme**

### **Why in News**

The Ministry of Education (MoE) approved the 'New India Literacy Programme.

### **Important Points**

- Government of India has approved the 'New India Literacy Programme' for the next five financial years (2022-27) in order to integrate all the aspects of adult education with the National Education Policy, 2020 (NEP).
- Additionally, the education ministry has chosen to use 'Education for All' rather than 'Adult Education,' since the previous terminology was not applicable to non-literates aged 15 and above.
- The scheme will be implemented through volunteerism through online mode.
- The training, orientation, workshops of volunteers, may be organized through face-to-face mode.
- All material and resources shall be provided digitally for easy access to registered volunteers through easily accessible digital modes like TV, radio, cell phone-based free or open-source Apps or portals etc.
- School will be Unit for implementation of

the scheme. Schools to be used for conducting surveys of beneficiaries and Voluntary Teachers. Different strategies are to be adopted for different age cohorts.

- Flexibility for States and UTs will be provided to undertake innovative activities.
- Foundational Literacy and Numeracy will be imparted through Critical Life Skills to all non-literates in the age group of 15 years and above.

**The scheme has five components namely:**

1. Foundational Literacy and Numeracy.
2. Critical Life Skills.
3. Vocational Skills Development.
4. Basic Education.
5. Continuing Education.

**The objectives of the scheme are:**

- To reach 5 crore learners for foundational literacy and numeracy
- To provide vocational skills development (for local employment)
- To provide basic education
- To provide education on topics of interest or use to local learners

## **Rashtriya Gram Swaraj Abhiyan**

### **Why in News**

Cabinet approves Rs 5,911 crore for scheme to boost rural local bodies

### **Important Points**

- The Union Cabinet approved a financial outlay of Rs 5,911 crore for the Rashtriya Gram Swaraj Abhiyan (RGSA) aimed at helping 2.78 lakh rural local bodies achieve sustainable development goals.
- The Cabinet Committee on Economic Affairs gave its assent for the continuation of the centrally sponsored scheme from April 1, 2022 to March 31, 2026 in an effort to boost the governance capabilities of Panchayati Raj institutions (PRIs).
- Of the total outlay of Rs 5,911 crore, the Centre's share is Rs 3,700 crore and that of states is Rs 2,211 crore.
- The scheme was first approved by the Cabinet in 2018 for implementation from 2018-19 to 2021-22.
- Around 60 lakh elected representatives, functionaries and other stakeholders of rural local bodies, including traditional bodies, across the country will be direct benefi-

- ciaries of the scheme.
- Panchayats have representation of Schedule Castes, Schedule Tribes and women, and are institutions closest to the grassroots, strengthening panchayats will promote equity and inclusiveness, along with social justice and economic development of the community.
- Increased use of e-governance by PRIs will help achieve improved service delivery and transparency.
- The scheme will strengthen gram sabhas to function as effective institutions with social inclusion of citizens, particularly the vulnerable groups.
- It will establish the institutional structure for capacity building of PRIs at the national, state and district level with adequate human resources and infrastructure.
- The Cabinet also approved a policy for the utilisation of non-minable land for development and setting up of infrastructure relating to coal and energy.
- The approved policy provides a clear framework for utilisation of lands that are no longer suitable or economically viable for coal mining activities; or lands from which coal has been mined out/de-coaled and has been reclaimed.
- The Cabinet also granted ex-post facto approval to a pact signed with Japan for collaboration in exploring technologies for treating wastewater.
- The Jal Shakti Ministry had signed a memorandum of cooperation with Japan's Ministry of Environment last month for promoting cooperation for decentralised domestic wastewater management.

### **Rashtriya Gram Swaraj Abhiyan**

- It is a project which is implemented by both the centre and the state governments across various states in India to reform and strengthen the Panchayat levels.
- This RGSA scheme is sponsored by both the central govt. as well as the state government.
- The Central Components of the scheme will be fully funded by the Government of India.
- The funding pattern for State Components

will be in the ratio of 60:40 among Centre and States respectively, except NE, Hilly States and Union Territory (UT) of J&K where Central and State share will be 90:10. However, for other UTs, Central share will be 100%.

- The main motto of the scheme is to train and assist the Gram Panchayats who get elected across the country so that they can perform their work efficiently in the basic level.
- The implementation and monitoring of the activities of the scheme will broadly be aligned for achieving the Sustainable Development Goals (SDGs).
- Panchayats are the focal points for all the developmental activities and implementation of schemes of various Ministries/ Departments and State Government to achieve SDGs.

### **Ayush visa**

#### **Why in News**

India to introduce special visa category for Ayush treatment

#### **Important Points**

Prime Minister announced that the Centre would soon introduce a special Ayush visa category for foreign nationals who want to come to India to take advantage of traditional medicine, as part of initiatives to promote medical tourism.

Speaking at the inaugural session of the Global Ayush Investment and Innovation Summit 2022 at Mahatma Mandir in Gandhinagar, PM said that the Centre has a plethora of initiatives to encourage and promote the Ayush sector.

PM emphasised that how ayurvedic medicines, Ayush kada and many such other products were aiding people to increase immunity.

During the times of Covid-19, turmeric export from India increased manifold. Innovation and investment increase the capability of any sector manifold. It is time now to increase investment as much as possible in the Ayush sector.

PM highlighted initiatives planned by the government for the near future to further encourage this sector, including aiding farmers, encouraging startups, and incentivising medical tourism.

Be it natural supplements, drug supply chains, Ayush-based diagnostics or telemedicine, there

are possibilities of innovation and investment all around.

To encourage startups in the traditional medicine sector, many steps have been taken. Some days ago, an incubation centre was inaugurated under the All India Institute of Ayurveda. In the four months of 2022, 14 startups in India joined the unicorn club.

The Himalayas is known for herbal plants, the government of India is encouraging the production of herbal and medicinal plants.

It can be an avenue of sustainable income and has scope for employment generation. The market for such plants is, however, limited and specialised. Such farmers must find it easy to associate with the market.

Thus the government is working speedily for an e-marketplace which is a portal that would connect companies making Ayush products with farmers growing medicinal plants.

'Ayushmark' is also being developed which will be stamped on products to give an assurance of high quality globally.

Speaking on the prowess of traditional medicines, Modi cited an example of Rosemary Odinga, daughter of former Kenyan prime minister Raila Odinga, who was reportedly cured of blindness by Ayurveda treatment in Kerala.

## **e-Shram portal**

### **Why in News**

Government of India looking for a mechanism to process unorganised workers' accident claims in the works.

### **Important Points**

- Top functionaries of the Union Labour and Employment Ministry emphasised that the Ministry was working on a mechanism to process accident insurance claims by unorganised workers registered on the e-Shram portal, which has seen over 27 crore registrations so far.
- The portal was launched six months ago with the aim of creating a national database of unorganised workers and to facilitate social security schemes for them.
- Among the promises made at the time was that the workers would be eligible for Rs2 lakh as accident insurance.

- Ministry said discussions were on to link the e-Shram portal with the Pradhan Mantri Suraksha Bima Yojana, the Centre's existing accident insurance scheme.
- The scheme would allow the workers to get the direct benefit transfer (DBT) through the e-Shram unique ID number.
- The official added that the unique IDs on the e-Shram portal carried the same series from the Employees Provident Fund Organisation's (EPFO) universal account number (UAN).
- In Budget Speech 2022-2023, Finance Minister Nirmala Sitharaman had announced the linking of four portals \_ the National Career Service, e-Shram, UDYAM (for those interested in starting MSMEs) and ASEEM (Atmanirbhar Skilled Employee Employer Mapping).
- The Labour Ministry announced that the inter-linking of the NCS and e-Shram portals had been completed recently.
- This linkage has enabled unorganised workers registered on e-Shram to seamlessly register on NCS and look for better job opportunities through NCS.
- So far, more than 26,000 e-Shram beneficiaries have registered on NCS and have started benefiting from this linkage.

### **e-Shram portal**

- The portal, which was launched in August 2021, has over 23 crore registrations so far and is eventually meant to lead to the creation of a national database of unorganised workers to be used to roll-out welfare schemes.
- It is the first-ever national database of unorganised workers including migrant workers, construction workers, gig and platform workers, etc.
- It will have details of name, occupation, address, occupation type, educational qualification, skill types and family details etc. for optimum realization of their employability and extend the benefits of the social security schemes to them.

## **Jivhala**

### **Why in News**

- The Maharashtra Department of Prisons has launched a loan scheme for inmates

serving sentences in jails across the state.

### **Important Points**

- The Maharashtra Department of Prisons has launched a loan scheme for inmates serving sentences in jails across the state. The credit scheme titled Jivhala is being offered by the Maharashtra State Cooperative Bank.
- The pilot was introduced for prisoners at Yerawada Central Jail in Pune, and will gradually be extended to nearly 60 prisons across the state.
- According to bank and prison officials, this is likely the first kind of credit scheme for prisoners in India. Existing loans initiatives for inmates are for rehabilitation after completion of their prison terms.

### **What is Maharashtra's loan scheme for prisoners, and who is eligible?**

- The credit scheme, called Jivhala meaning 'affection' in Marathi, has been launched primarily for convicted inmates who are undergoing a prison sentence of more than three years.
- Officials said majority of the inmates are sole breadwinners, and their incarceration has left their families without a source of income.
- Therefore, while the loan will be disbursed in the name of the inmate, it will be issued to designated family members.

- In the initial phase, a loan of Rs 50,000 will be given at a 7 per cent interest rate.
- Of the interest the bank earns, one per cent will be given back to the system as a contribution to the Prisoners' Welfare Fund.
- The loan will be provided without any requirement of mortgage or guarantor.
- Inmates will be able to use the loans for education of their children, medical treatment of family members, legal fees, or any other expenses.
- Bank officials said they found that over 75 per cent of the applications were for agricultural purposes.

### **The launch of the Jivhala scheme, and the road ahead**

- On Maharashtra Day on May 1, state Home Minister Dilip Walse Patil launched the Jivhala scheme at Yerawada Central Prison.
- He handed over a representational cheque to one inmate during the function.
- In the pilot phase, loan applications of 222 male and eight female inmates from Yerawada Central Prison are being processed by bank officials.
- Based on the response to the pilot and creditworthiness of the inmates, a decision will be taken to increase the loan amount.



## Manali – Sarchu Road

### Why in News

BRO opens up Manali – Sarchu Road in record time

### Important Points

- BRO opens Road Manali to Sarchu in record time frame, negotiating the formidable Baralacha La Pass (16043 ft).
- BRO used air effort to induct a Special Team for snow clearance and opened the Road and Pass more than a month before expectations.
- In the initial phase only Army vehicles carrying essential supplies will be allowed to move on the road, the civil traffic movement will be allowed post approval from local Civil Administration.
- In an another major breakthrough of opening up of passes in the North-Western border areas, the Border Road Organisation (BRO) opened up the 210 Km long Manali-Sarchu Road on NH 1D in Himachal.
- This achievement comes a day after the BRO opened the Zojila Pass for civilian traffic on the Srinagar- Kargil- Leh Road on NH 1. Opening the Manali – Sarchu Road establishes the vital connect to Lahaul District in Himachal Pradesh which further leads to Leh in Ladakh.
- The pass and the road, in the past, generally opened in the last week of April, but with the successful movement of a road convoy by the BRO has opened the pass almost a month in advance which is a record in itself.
- During the winters the Road normally remains closed for over 160-180 days in a year, but this time Project Deepak of BRO has opened the road in 117 days.
- Opening the Manali-Sarchu Road was

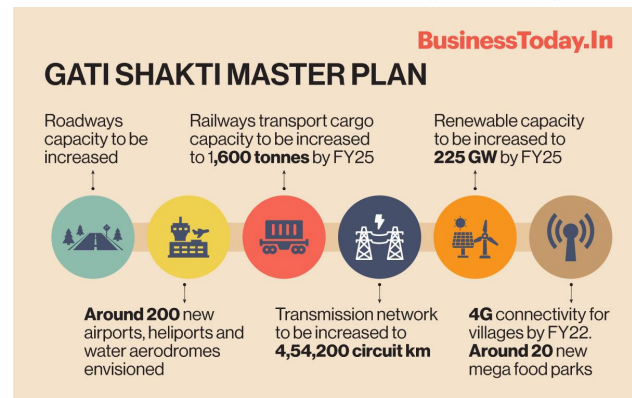
premised on successful conduct of snow clearance operations over one of the highest passes of the Zaskar Range, the formidable Baralacha La Pass (16,043 feet).

- The BRO adopted a two prong approach, with simultaneous deployment of snow clearance teams from two sides, one from Patsio to Baralacha La and the second from Sarchu to Baralacha La.
- Since Sarchu is cut off from rest of the country during winters, as part of proactive actions and planning by the Project winter stocking of snow clearance plant equipment and spares was done well in advance during November last year in Sarchu Camp.

## PM Gati Shakti

### Why in News

PM Gati Shakti entails the geospatial mapping of



everything in the country.

### Important Points

Union Ministry for Commerce & Industry said PM Gati Shakti entails the geospatial mapping of everything in the country, different layers of maps which talk to each other, leading to integrated planning, with better optimization of time and cost.

### What is Geospatial Technology?

- Geospatial technologies is a term used to

describe the range of modern tools contributing to the geographic mapping and analysis of the Earth and human societies.

- Identification of geospatial data enables monitoring, tracing, measuring, assessment, identification, or modeling. The basic list of geospatial technologies encompasses remote sensing (RS), GPS, and GIS.

Types of spatial technologies used in industry applications:

- **Remote Sensing:** satellite imagery and geospatial data collected from satellite sensors or airborne cameras. Satellite imagery greatly enhances a GIS mapping project and serves as a source of information and data to support analysis and classification for geospatial assessment and modeling.
- **Geographic Information Systems (GIS):** mapping tools for analysis of geospatial data which is georeferenced. GIS can be used to support environmental management for natural hazards and disasters, global climate change, natural resources, wildlife conservation, land cover change detection, and many other applications.
- **Global Positioning System (GPS):** satellite-based navigation system made up of a network of 24 satellites placed into orbit to collect coordinates locations.

#### **About PM GatiShakti:**

- It is a digital platform that connects 16 ministries — including Roads and Highways, Railways, Shipping, Petroleum and Gas, Power, Telecom, Shipping, and Aviation.
- It aims to ensure holistic planning and execution of infrastructure projects.

#### **PM Gati Shakti is based on six pillars:**

- **Comprehensiveness:** It will include all the existing and planned initiatives of various Ministries and Departments with one centralized portal. Each and every Department will now have visibility of each other's activities providing critical data while planning & execution of projects in a comprehensive manner.

- **Prioritization:** Through this, different Departments will be able to prioritize their projects through cross-sectoral interactions.
- **Optimization:** The National Master Plan will assist different ministries in planning for projects after identification of critical gaps. For the transportation of the goods from one place to another, the plan will help in selecting the most optimum route in terms of time and cost.
- **Synchronization:** Individual Ministries and Departments often work in silos. There is lack of coordination in planning and implementation of the project resulting in delays. PM Gati Shakti will help in synchronizing the activities of each department, as well as of different layers of governance, in a holistic manner by ensuring coordination of work between them.
- **Analytical:** The plan will provide the entire data at one place with GIS based spatial planning and analytical tools having 200+ layers, enabling better visibility to the executing agency.
- **Dynamic:** All Ministries and Departments will now be able to visualize, review and monitor the progress of cross-sectoral projects, through the GIS platform, as the satellite imagery will give on-ground progress periodically and progress of the projects will be updated on a regular basis on the portal. It will help in identifying the vital interventions for enhancing and updating the master plan.

### **Pinaka Mk-I Rocket System**

#### **Why in News**

India successfully test-fires Pinaka missile systems

#### **Important Points**

- A new version of the Pinaka rocket system has been successfully flight-tested by the DRDO.
- As many as 24 Pinaka Mk-I (Enhanced) Rocket Systems (EPRS) were fired for different ranges and the weapons met the required accuracy and consistency.
- The EPRS is the upgraded version of the

Pinaka variant that has been in service with the Indian Army for the last decade.

- The Pinaka rocket system, named after Lord Shiva's bow, has been developed by Pune-based Armament Research and Development Establishment (ARDE) and High Energy Materials Research Laboratory (HEMRL).
- As part of the same set of trials, the Area Denial Munition (ADM), designed by the ARDE for Pinaka and manufactured by the industry partners under technology transfer, were also successfully tested.
- ADMs are a category of ammunition used to prohibit the adversary from occupying or passing through a particular area.
- The development of the Pinaka, which is a multi-barrel rocket system, was started by the DRDO in the late 1980s as an alternative to the Multi Barrel Rocket Launcher systems of Russian make called the 'Grad', which are still in use by some regiments.
- After successful tests of Pinaka Mark-1 in late 1990, it was first used in the battlefield during the Kargil war of 1999, quite successfully.
- DRDO has also developed and successfully tested the Pinaka Mk-II, which has a range of 60 km, and the Guided Pinaka system, which has a range of 75 km.
- The navigation system of Guided Pinaka missile is also aided by the Indian Regional Navigation Satellite System (IRNSS).

#### **Munitions India Limited (MIL)**

- • Munitions India Limited (MIL) is an Indian state-owned defence company, headquartered in Pune, India established in 2021 as part of the restructuring and corporatisation of the Ordnance Factory Board into seven different Public Sector Undertakings.
- • Munitions India primarily manufactures ammunition, explosives, rockets and bombs for the use of the Indian Armed Forces, foreign militaries and domestic civilian use.

#### **Some notable products of Munitions India include:**

- Pinaka Multi Barrel Rocket Launcher
- High Speed Low Drag Bomb
- FSAPDS
- Shivalik Multi mode grenade

### **GCTM**

#### **Why in News**

Prime Minister lays foundation stone of WHO Global Center for Traditional Medicine.

#### **Important Points**

- The Prime Minister Shri Narendra Modi laid the foundation stone of WHO Global Centre for Traditional Medicine (GCTM) in Jamnagar, Gujarat.
- The WHO Global Centre for Traditional Medicine (GCTM) will be the first and only global outpost centre for traditional medicine across the world as it will emerge as an international hub of global wellness.
- It may be noted that more than five decades ago the world's first Ayurvedic University was established in Jamnagar.
- The new Centre will focus on data, innovation and sustainability and will optimize the use of traditional medicine.
- The primary objective of WHO GCTM is to harness the potential of traditional medicine from across the world through modern science and technology and improve overall health of the communities' world over.
- The Centre will highlight the potential of traditional medicine and utilize technological advancements to promote its safe and effective use.
- The centres five main areas will be research and leadership, evidence and learning, data and analytics, sustainability and equity and innovation and technology.
- Traditional medicine is a key pillar of health care delivery systems and plays a crucial role in maintaining good health and well-being not only in India but across the world.
- In recent year, traditional medicine therapies have also seen a major transformation as usage of artificial intelligence, technologi-

ical innovations have made it more accessible to masses.

- GCTM will aim to integrate the benefits of traditional medicine with the achievements of modern science and create a comprehensive health strategy.

**GCTM will lay down five goals:**

- First, to create a database of traditional knowledge system using technology.
- Second, it will create international standards for testing and certification of traditional medicines so that confidence in these medicines improves.
- Third, GCTM should evolve as a platform where global experts of traditional medicines come together and share experiences.
- Fourth, GCTM should mobilize funding for research in the field of traditional medicines.
- Fifth, GCTM should develop protocols for holistic treatment of specific diseases so that patients could benefit from both traditional and modern medicine.

## Malaria-free

### Why in News

Karnataka sets 2027 target to become malaria-free

### Important Points

- Karnataka has set a target to eliminate malaria by 2027, three years before the 2030 target set by the Union government.
- Karnataka has received national recognition and appreciation for its efforts to eliminate malaria in the past six years, between 2015 and 2021, as part of the National Framework for Malaria Elimination in India (NFMEI) initiative.
- Karnataka, which had a Category- 2 classification in malaria elimination, has been upgraded and classified as Category-1. The state has, in the past three years, been reporting fewer cases every year.
- The Union government has a target of making India malaria-free by 2030, and already 10 districts in Karnataka have not seen a

single case of malaria in the past three years.

- Currently, the most number of malaria cases in Karnataka are in Udupi and Dakshina Kannada districts and research is under way to understand the reason for this.
- The easiest way to detect malaria is to get a blood test, which is available at all primary health centres, government taluk hospitals and government district hospitals.

World Malaria Day 2022: World Malaria Day is observed annually on April 15 to highlight the need for the prevention and control of the life-threatening disease.

- Malaria is caused by a parasite which is transmitted to humans through a certain type of mosquito. When an infected female Anopheles mosquito bites a person, it injects the Plasmodium parasites into the bloodstream thus infecting him.
- Although the disease is curable and preventable, there were around 241 million cases of malaria in 2020 worldwide, as per a report by the World Health Organisation. In addition, the deadly disease also claimed the lives of 6.27 lakh people worldwide in 2020.
- There are some countries who have been able to successfully eradicate Malaria. The WHO has granted malaria-free certification to 40 countries and territories globally.
- Of these, China is the latest country which was declared malaria free by the WHO. Other recent countries to join the malaria-free club are El Salvador (2021), Argentina (2019), Paraguay (2018), and Uzbekistan (2018).
- In India, no state so far has been able to completely eliminate Malaria. In 2019, India accounted for 88 per cent of malaria cases and 86 percent of deaths due to malaria in the WHO South-East Asia region. It is also the only country outside Africa which is among the 11 'high burden to high impact' countries.
- India is now on the road to reach zero malaria cases by the year 2030. It is a signato-

ry to the National Framework for Malaria Elimination (NFME) and has been making efforts to achieve the goal.

- By taking adequate measures, India was able to reduce the number of malaria cases by 60 per cent as compared to 2017 and recorded 46 per cent reduction as compared to 2018.
- Odisha is one of the states that is moving closer to achieving the malaria-free goal. The state government had announced last year that it recorded a 90 per cent reduction in malaria cases in the last three years.

### **S-400 air defence missile**

#### **Why in News**

India receives simulators, training equipment from Russia for S-400 training.

#### **Important Points**

- India has received simulators and other equipment for the training of the S-400 air defence missile squadron from Russia.
- The equipment including simulators, study materials and documents have arrived for the S-400 training squadron which will be set up soon to train Indian Air Force (IAF) personnel.
- The system does not include missiles or related weaponry.
- The consignment of the S-400 missile system was delivered by ship and is now operational. Parts of the missile system arrived via both air and sea routes and were quickly deployed in the designated locations.
- Last December, India took delivery of the first S-400 regiment, five of which were contracted from Russia under a \$5.43 bn deal signed in October 2018. The first unit has been deployed in Punjab and is operational.
- With the threat of U.S. sanctions under CAATSA (Countering America's Adversaries Through Sanctions Act), New Delhi and Moscow had worked out payments through Rupee-Rouble exchange for this deal.
- The two sides are now exploring the same

payment route for the larger bilateral trade.

- China also possesses the S-400 Triumph long range air defence system, currently being inducted by India, and the system remains a potent weapon for them.
- Countering them will be for Indian Air Force (IAF)'s tactics to take them out, based on "direct tactical planning", an IAF representative informed the parliamentary standing committee on defence.

#### **About S-400**

- Considered one of the most advanced and potent air defence systems in the world, S-400 Triumph has the capability to protect against almost all sorts of aerial attacks, including drones, missiles, rockets and even fighter jets.
- The system, intended to act as a shield over a particular area, is a long-range surface-to-air missile system.
- Russia has been developing S-400 since 1993. Testing began in 1999- 2000 and Russia deployed it in 2007.
- The system comes equipped with four types of missiles: short- range up to 40 km; medium-range up to 120 km; long-range 48N6 going as far as 250 km, and very-long-range 40N6E up to 400 km and a flight altitude of 180 km.
- It can simultaneously track up to 160 objects in a 600 km range, and target 72 objects in a 400 km range.

#### **How does it work?**

- S-400 detects an aerial threat approaching the air defence bubble (the area it has to protect), calculates the trajectory of the threat, and fires missiles to counter it.
- It has long-range surveillance radars that sends information to the command vehicle. On identifying the target, the command vehicle orders a missile launch.

### **Extra neutral alcohol (ENA)**

#### **Why in News**

Alcohol manufacturers want import duty reduced

#### **Important Points**

- Alcohol manufacturers have written to



NITI Aayog asking for reduction in import duty.

- Anticipating shortage of domestic supplies, they have sought a reduction in duty to make it cost-effective for them to import Extra Neutral Alcohol from global markets.

#### **Extra Neutral Alcohol (ENA)**

- It is the primary raw material for making alcoholic beverages.
- It is a colourless food-grade alcohol that does not have any impurities.
- It has a neutral smell and taste, and typically contains over 95 per cent alcohol by volume.
- It is derived from different sources — sugarcane molasses and grains — and is used in the production of alcoholic beverages such as whisky, vodka, gin, cane, liqueurs, and alcoholic fruit beverages.
- ENA also serves as an essential ingredient in the manufacture of cosmetics and personal care products such as perfumes, toiletries, hair spray, etc.
- Given its properties as a good solvent, ENA also finds industrial use and is utilised in the production of some lacquers, paints and ink for the printing industry, as well as in pharmaceutical products such as antiseptics, drugs, syrups, medicated sprays.
- Consultancy firm IMARC Group's estimates put the ENA market in India at a volume of 2.9 billion litres in 2018.
- Like ethanol, ENA is a byproduct of the sugar industry, and is formed from molasses that are a residue of sugarcane processing.
- In its letter to NITI Aayog anticipating lower supplies, the Confederation of Indian Alcoholic Beverage Companies has cited the diversion of ethanol for bio-fuel blending by oil marketing companies, and recent floods in Maharashtra and Karnataka that have adversely affected sugarcane crop in the region.

## **Delhi University**

### **Why in News**

DU marks its centenary in 2022

#### **Important Points**

- The Delhi University has announced that students who dropped out of college in the final year can register for a one-time 'entenary' chance to appear in examinations and complete their degree.
- The opportunity has been given to the dropout students in view of the Delhi University's year long centenary celebrations that has been started on May 1, 2022.
- Undergraduate, postgraduate and professional course students who took regular courses, Non Collegiate Women's Education Board (NCWEB), School of Open Learning (SOL) and External Cell will be able to apply for registration.
- The former students can submit their registration forms for centenary chance.
- All the faculties, departments, colleges and centres under Delhi university have been asked to complete the confirmation and verification process of registration forms filled by such students by June 20, 2022.
- The former students can also fill their registration form by using the online students' portal link of Delhi University. After filling the registration form, the students can keep the printout of the filled forms for further communication.
- The provisional admit cards will be issued after confirmation of the registration form by their respective faculty, department, college or centre.

#### **About Delhi University**

- Established in 1922 as a unitary, teaching and residential University by the Act of the then Central Legislative Assembly, a strong commitment to excellence in teaching, research and social outreach has made the University a role-model and trend setter for other universities.
- The President of India is the Visitor, the Vice-President is the Chancellor and the Chief Justice of the Supreme Court of India is the Pro-Chancellor of the University.

- Motto: 'Nishtha Dhriti Satyam' "निष्ठा धृति सत्यम्" (Dedication, Steadfastness and Truth).

## Operation Satark

### Why in News

RPF launches Focused effort under “Operation Satark”

### Important Points

- Railway Protection Force is an armed force of the union entrusted with the security of railway property, passenger area and passengers. It is the lead security agency in the field of railway security having a pan India reach.
- Indian Railways, being the primary transporter of the nation, is likely to be used by tax evaders, smugglers, gun runners, and forces inimical to the nation to transport illegal items to different parts of the country for acting on their nefarious designs.
- Railway Protection Force is alive to this and has recently started “Operation Satark” with an objective of taking action against illicit liquor/FICN/illegal tobacco products/unaccounted gold/cash/precious items/ any other items being transported through railway network for the purpose of tax evasion/smuggling/commission of crime/acts of terror.
- Focused effort under “Operation Satark” was launched from 5th April to 30th April 2022 wherein 26 cases of transportation of illegal tobacco products were detected with seizure of tobacco products worth more than Rs 44 Lakhs and arrest of 14 persons involved.
- 177 cases of transportation of illicit liquor were intercepted with arrest of 97 persons and seizure of illicit liquor worth about Rs 18 Lakhs.

- Unaccounted gold/silver jewellery and unaccounted cash is transported through rail for the purpose of tax evasion.
- RPF detected 23 such cases of tax evasion and handed over unaccounted cash/gold/silver worth about Rs 2.60 Crores to the respective tax authorities.
- Being aware of its responsibility as the first responder in cases of smuggling through rail, RPF took concerted action in such cases and seized smuggled items worth about Rs. 3.18 Crores during the period mentioned above.
- Arms, ammunition and explosives are sometimes transported by forces inimical to the nation in order to commit crime or realize nefarious design in different parts of the country. RPF has been conducting intensive checks in stations, trains and railway area under “Operation Satark” to thwart the design of such elements.
- In course of such an effort across the nation, RPF nabbed 17 persons and recovered one AK 47 rifle, one pipe gun, one Double Barrel Gun, one pistol, 06 country made pistols, 3 daggers, 10 pieces of 12 bore ammunition, 140 pieces of .315” bullet, 404 pieces of 7.62 mm bullets and 9 pieces of different caliber ammunition.
- Indian Railways is the life line of the nation and RPF, being the sentinels on the rail, will leave no stone unturned to keep it safe and disallow its use for nefarious activities.



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R-26, Zone-II, Opp, Railway Track, M.P. Nagar, Bhopal  
CONTACT: 0755-7967814, 7967718, +91 83196 18002