



ACS WISDOM

A black and white photograph showing a large stack of papers or documents, some with visible text and markings, fanned out towards the right side of the frame.

**PRELIMS
2022
YEAR BOOK**

100 MOST IMPORTANT TOPICS

UPSC Prelims Current Affairs 2021-22

100 IMPORTANT CURRENT AFFAIRS FOR PRELIMS 2022

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HISTORY & CULTURE

1. Schools of Vedanta Philosophy (Bhakti Movement)

Context: Prime Minister Narendra Modi inaugurated the Statue of Equality in Hyderabad to honour the 11th-century Hindu saint Sri Ramanujacharya.

Statue of Equality

- ✓ The inauguration of the statue is part of the ongoing 12-day celebration of Sri Ramanujacharya's 1,000th birth anniversary.
- ✓ The Statue of Equality is mounted on a 54-feet high building, named "Bhadra Vedi".
- ✓ The building houses a digital library and research centre, ancient texts, a theatre, an educational gallery detailing the works and philosophies of Sri Ramanujacharya.
- ✓ The Vaishnavite saint advocated social equality. Many consider the propagation of Vasudhaiva Kutumbakam (The World Is One Family) his greatest contribution.
- ✓ It is said that many scholars followed his path and the works of ancient poets like Bhakt Ramdas, Kabir and Meerabai were inspired by him.

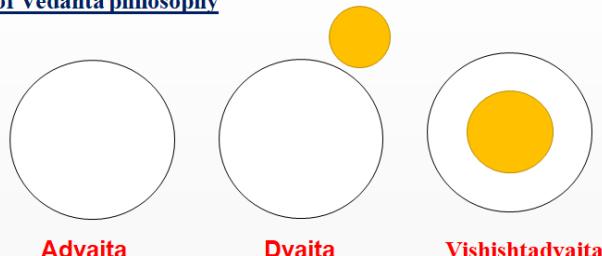
About Vedanta Philosophy

- ✓ Vedanta is one of the six systems of Hindu philosophy,
- ✓ The most well-known schools of Vedanta are Advaita Vedanta (school of non-dualism), Visistha Vedanta (school of qualified non-dualism), and Dvaita Vedanta (school of dualism).

Advaita Vedanta

- ✓ Advaita Vedanta is the non-dualistic school of thought that believes only one truth that is Brahman.
- ✓ Adi Shankaracharya propounded the Doctrine of Advaita (Monism /non-dualism).

School of Vedanta philosophy



Dvaita Vedanta

- ✓ Dvaita Vedanta identifies Atman (soul) and Brahman as separate and non-interchangeable entities.
- ✓ Propounded by Sri Madhvacharya, Dvaita Vedanta describes Brahman as superior to all souls and is perfect in aspects.

Vishishtadvaita

- ✓ Vishishtadvaita is a **non-dualistic school** of Vedanta philosophy
- ✓ Dvaita philosophy states that God and the living entity are eternally Two. Advaita philosophy states that God and the living entity are in actuality eternally One.

UPSC Previous Year Question – About Indian Philosophy (2014)

Q. Which one of the following pairs does not form part of the **six systems of Indian Philosophy**?

- a) Mimamsa and Vedanta
- b) Nyaya and Vaisheshika
- c) Lokayata and Kapalika
- d) Sankhya and Yoga

2. Kathakali (Art and Culture - Classical Dances)

Context: Man-woman love and its vicissitudes came alive on two consecutive evenings at 'Bhava Bhavanam Anubhavam', Kalakshetra's three-day Kathakali festival.

Origin of Kathakali

- ✓ In the 17th century it is alleged that the King of Kottarakkā, south Kerala, was intrigued by the power of the Krishnattam performers.
- ✓ He invited the Krishnanattam Troupe to perform in south Kerala, the King of Calicut refused his invitation so the King of Kottarakkā created eight new stories based on the life of Lord Rama and called the art form Ramanattam.

- ✓ Writers and poets began to create stories from other sacred books such as the Mahabharatha, therefore, Ramanattam was no longer an appropriate name.
- ✓ The name for the new stories was changed to KATHA [meaning story] KALI [meaning play] and Kathakali was born.

About the Kathakali

- ✓ Kathakali is a blend of dance, music and acting and dramatizes stories, which are mostly adapted from the Indian epics. It is a stylised art form, the four aspects of ***abhinaya - angika, aharya, vachika, satvika*** and the ***nritta, nritya and natya*** aspects are combined perfectly.
- ✓ The dancer expresses himself through codified hastamudras and facial expressions, closely following the verses (padams) that are sung. The ***attakkathasor*** stories are selected from the epics and myths and are written in a highly Sanskritised verse form in Malayalam. Many Malayalam writers have also contributed to the vast repertoire of Kathakali literature.
- ✓ Kathakali is a visual art where aharya, costume and make-up are suited to the characters, as per the tenets laid down in the Natya Shastra.
- ✓ The characters are grouped under certain clearly defined types like the pacha, kathi, thadi, kari or minukku. The face of the artist is painted over to appear as though a mask is worn. The lips, the eyelashes and the eyebrows are made to look prominent. A mixture of rice paste and lime is applied to make the chutti on the face which highlights the facial make-up.
- ✓ The characters in a Kathakali performance are broadly divided into ***satvika, rajasika and tamasika*** types. ***Satvika*** characters are noble, heroic, generous and refined. In pacha, green colour dominates and kirta (headgear) is worn by all. Krishna and Rama wear special crowns decorated with peacock feathers. The noble characters like Indra, Arjun and the Devas are some of the pacha characters.
- ✓ Kathakali music follows the traditional ***sopana sangeet of Kerala***. It is said to be the ritual singing of the ***Ashtapadis*** on the flight of steps leading to the sanctum sanctorum. The storytelling of the epic Hindu mythology tales depicting both evil and good is shown through the conversation between the dancers only through their body gestures and facial expressions.
- ✓ Now, Kathakali music also uses Carnatic ragas-the ***raga*** and ***tala*** conforming to the ***bhava, rasa*** and dance patterns (***nritta*** and ***natya***). The orchestra which is also used in other traditional performing arts of Kerala normally comprises the Chenda, Maddalam, Chengila, Ilathalam, Idakka and Shankhu.

CLASSICAL/FOLK DANCES OF INDIA			
	Dances	State	Major Features
1	Bharatnatyam	Tamil Nadu	<ul style="list-style-type: none"> The dance form is known for its beautiful body movements and gestures which are called Mudras in the traditional language. It focuses on the hand gestures, leg movement and the facial expressions of the dancer.
2	Kathak	Uttar Pradesh	<ul style="list-style-type: none"> It is performed in the form of storytelling through the body movements used by the dancer. Kathak is often referred to as the dance of love, and it can be performed by both the male and female dancer together.
3	Manipuri	Manipur	<ul style="list-style-type: none"> This dance form is performed to narrate the romantic relationship between the Hindu gods Radha and Krishna, which is famously known as RaasLeela.
4	Kuchipudi	Andhra Pradesh	<ul style="list-style-type: none"> Kuchipudi includes both singing and dancing by the performer which is why it requires both the skill and much more dedication than any other art forms in India. In the earlier period, Kuchipudi was only performed by the male dancers in the temples, but with the passage of time, it became famous amongst the women and nowadays it is mostly performed by the female dancers.
5	Odissi	Odisha	<ul style="list-style-type: none"> The dance is performed as a way to express the mythological tales of Hindu gods, including that of Shiva and Surya.

			<ul style="list-style-type: none"> ■ The dance is accompanied by a mythical story, Hindi poem in the form of music by the musicians. ■ Odissi dance is performed mostly by the women dancers, and it includes more than 50 intriguing <i>mudras</i>.
6	Sattriya Dance	Assam	<ul style="list-style-type: none"> ■ Mahapurusha Sankaradeva, a Vaishnava saint and reformer of Assam, introduced Sattriya dance in the 15th century AD. ■ This dance form was preserved in the Sattras or the Vaishnava Maths; therefore, it remained a living tradition. ■ This dance was an artistic way of presenting mythological teachings. ■ Traditionally this dance was performed by the male monks or bhokots. However, today, the practice has changed in many ways. The theme is not just related to mythology, and the performances are not limited to the Sattras. ■ Even women can perform Sattriya dance and on the stage.
7	Mohiniyattam	Kerala	<ul style="list-style-type: none"> ■ This classical Indian dance form roots from the age-old Sanskrit text - Natya Shastra. ■ It is traditionally performed by women following a repertoire of Carnatic music, singing and acting a play. ■ At times, the song, a typical hybrid of Malayalam and Sanskrit also called Manipravalam, is sung by the performer herself. ■ With a repertoire of instruments such as Mridangam, Madhalam, Flute, Idakka, Veena and Kuzhitalam; the music is rendered in ragas and performed in a slow melodic style. ■ Although the Lasya dance is often portrayed as gentle, graceful and feminine, it also exhibits a vigorous dance of Tandava relating to Lord Shiva.
8	Bihu	Assam	<ul style="list-style-type: none"> ■ The dancers follow a pattern of rapid hand movement, quick steps and a rhythmic swaying of hips wearing the traditional Assamese clothing with beautiful accessories. ■ Marking the beginning of spring season, Bihu recites the happiness and heritage of Assam and is performed on the occasion of Rangali Bihu. ■ The dhol, Xutuli, Toka, Baanhi, Gogona are the instruments used to play the traditional tunes for the performance. ■ The origin of Bihu is not very known, although the records profoundly state that it originated from the Bisu dance performed by communities of Upper Assam like the Sonowal Kacharis, Deoris, Moran, Chutias and Borahis. ■ This popular Indian Dance was performed at the London Olympics in 2012.
9	Garba	Gujarat	<ul style="list-style-type: none"> ■ Garba comes from Gujarat which is a traditional dance form dedicated to Goddess Durga. It is performed in a couple on the typical Gujarati music, and the sticks are used to perform this art form.
10	Rouf	Kashmir	<ul style="list-style-type: none"> ■ Performed by the Kashmiri people to celebrate their festivals and important occasions, Rouf is a soothing dance form generally performed by the female dancers on the traditional Kashmiri music.
11	Ghoomar	Rajasthan	<ul style="list-style-type: none"> ■ Wearing heavy jewellery and the beautiful costumes, the people of Rajasthan dancing on the beats of music to give away their traditional dance form. ■ Ghoomar includes the intriguing circular movements complemented by the hand gestures.
12	Paika Dance	Jharkhand and Odisha	<ul style="list-style-type: none"> ■ Munda tribe of the Mayurbhanj area in Jharkhand is famous for the Paika dance. ■ It is a unique folk dance form that is a representation of the martial arts. ■ Dancers tell the story of how the Munda people used martial arts in their fight against the British. ■ It is an effective way to educate the new generations about the great deeds of their ancestors. ■ The music is created with various sorts of drums like dhak, and nagada.

		<p>Some traditional Indian musical instruments such as Shehnai, Bheir, and Narsingha are also used.</p> <ul style="list-style-type: none"> ■ Paika Dance performance is done for the amusement of the crowd during several festivals across the state.
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UPSC Previous Year Question – About Sattriya Dance (2014)

Q. With reference to the famous **Sattriya dance**, consider the following statements:

1. Sattriya is a combination of music, dance and drama
2. It is a centuries-old living tradition of Vaishnavites of Assam
3. It is based on classical Ragas and Talas of devotional songs composed by Tulsidas, Kabir and Mirabai

Which of the statements given above is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

3. Battle of Saraighat and Lachit Borphukan (Historical Personalities in News)

Context: In Assam on a three-day visit, President Ram Nath Kovind on Friday inaugurated the year-long celebration of the **400th birth anniversary of Lachit Borphukan**, commander of the Ahom forces and an icon of Assamese nationalism.

The Battle of Saraighat

- ✓ The Battle of Saraighat was fought in the year 1671.
- ✓ It was fought between Mughal Empire and Ahom Kingdom. The main battle was on Brahmaputra river, near Saraighat, Guwahati. That's why it is called Battle of Saraighat.
- ✓ Ahom Kingdom under the command of Lachit Borphukan won the battle.

Lachit Borphukan

- ✓ Lachit Borphukan was a general during the 17th Century period of the Ahom dynasty.
- ✓ He is best known for the Battle of Saraighat on the Brahmaputra, where he beat the Mughals.
- ✓ He was an able commander and his courage is all the more lauded because he was terribly ill during the war.
- ✓ He was born on 24th November, 1622.
- ✓ Lachit Divas has been celebrated on November 24 (on his birth anniversary) in Assam since the 1930s.
- ✓ In 1999, the National Defence Academy instituted the Lachit Borphukan gold medal for the best graduating cadet.
- ✓ He died on 25th April, 1672.

UPSC Previous Year Question – About Birsa Munda’s Revolt (2020)

Q. With reference to the history of India, “Ulgulan” or the Great Tumult is the description of which of the following events?

- a) The Revolt of 1857
- b) The Mappila Rebellion of 1921
- c) The Indigo Revolt of 1859 – 60
- d) Birsa Munda’s Revolt of 1899-1900

4. Jallikattu and other Animal Sports in India (Art & Culture)

Context: The Tamil Nadu government issued an order permitting Jallikattu (traditional bull taming events) across the state during the Pongal festival next week adhering to Covid-19 protocols.

About Jallikattu

- ✓ The Jallikattu is celebrated in the second week of January, during the Tamil harvest festival, *Pongal*.
- ✓ It is a competitive sport which over 2,000 years old.

- ✓ It is a violent sport in which contestants try to tame a bull for a prize; if they fail, the bull owner wins the prize.
- ✓ This very much popular in Madurai, Tiruchirappalli, Theni, Pudukkottai and Dindigul districts known as the Jallikattu belt.
- ✓ It is a traditional way for the peasant community to preserve their pure-breed native bulls.
- ✓ The conservationists and peasants argue that Jallikattu is a way to protect these male animals which are otherwise used only for meat if not for ploughing.

Issues Associated with Ban on ‘Jallikattu’

- ✓ First came under legal scrutiny in 2007 when the **Animal Welfare Board of India** and the animal rights group PETA moved petitions in the Supreme Court against Jallikattu as well as bullock cart races. Tamil Nadu government worked its way out of the ban by passing a law in 2009, which was signed by the Governor.
- ✓ In 2011, the UPA regime at the Centre added bulls to the list of animals whose training and exhibition is prohibited.
- ✓ In May 2014, the Supreme Court banned the bull-taming sport, ruling on a petition that cited the 2011 notification.
- ✓ In January 2017, massive protests against the ban, with Chennai city witnessing a 15-day-long Jallikattu uprising
- ✓ The same year, the Tamil Nadu government released an ordinance amending the central Act and allowing Jallikattu in the state; this was later ratified by the President.
- ✓ PETA challenged the state move, arguing it was unconstitutional –
- ✓ In 2018, the Supreme Court referred the Jallikattu case to a Constitution Bench, where it is pending now. This is to decide whether Tamil Nadu and Maharashtra can conserve jallikattu and bullock cart races as their cultural right and demand their protection **under Article 29 (1)**

Animal Sports	:	State
1. Bullock-Cart Races	:	Maharashtra
2. Kambala	:	Karnataka
3. Cock-Fight	:	Andhra Pradesh
4. Camel Race	:	Rajasthan
5. Dog Fight	:	Delhi, Punjab and Haryana
6. Bulbul Fight	:	Assam

5. UNESCO’s Intangible Cultural Heritage (Art & Culture)

Context: **Durga Puja in Kolkata** has been **inscribed** on the UNESCO’s Representative **List** of the Intangible Cultural Heritage (ICH) of Humanity. It is the first festival in Asia to achieve recognition as UNESCO ICH of Humanity.

About the Initiative

- ✓ One of UNESCO’s main activities, the cultural sector, recognizes the importance of all heritage including the tangible heritage and intangible heritage of mankind and emphasizes cultural diversity for the sustainable development of mankind.
- ✓ In 2003, UNESCO adopted the Convention for the Safeguarding of the Intangible Cultural Heritage, contributing to the promotion of cultural diversity.
- ✓ Currently, it has 492 elements from which **India now has 14 intangible cultural heritage** elements on the prestigious UNESCO Representative List of ICH of Humanity.

Definition of Intangible Cultural Heritage (Article 2 of the Convention)

- ✓ It is practice, representation, expression, knowledge, and skills that generations, groups, or sometimes individuals perceive as part of their cultural heritage, and instruments, objects, artifacts, and cultural spaces related thereto.
- ✓ Intangible heritage is transmitted from generation to generation and promotes respect for cultural diversity and the creativity of mankind by ensuring that groups are recreated constantly

in response to the environment, interacting with nature and history, and ensuring that they have an identity and continuity.

List of UNESCO's ICH From India:

1. Tradition of **Vedic chanting**.
2. **Ramlila**, the traditional performance of the Ramayana.
3. **Kutiyattam**, Sanskrit theatre.
4. **Ramman**, religious festival and ritual theatre of the Garhwal Himalayas.
5. **Mudiyettu**, ritual theatre and dance drama of Kerala.
6. **Kalbelia folk songs and dances** of Rajasthan.
7. **Chhau** dance.
8. **Buddhist chanting of Ladakh**: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir.
9. **Sankirtana**, ritual singing, drumming and dancing of Manipur.
10. **Traditional brass and copper craft** of utensil making among the Thatheras of Jandiala Guru, Punjab.
11. **Yoga**
12. **Nowrus**
13. **Kumbh Mela**
14. **Durga Puja**

6. Veer Savarkar and His contributions (Historical Personalities in the News)

Context: Veer Savarkar was not given the title of Veer by any government but by the 130 crore Indians to acknowledge his courage and patriotism. Some people are raising questions on his life today. It is very distressing,” Shah said in his address to a gathering at Port Blair cellular jail in Andaman and Nicobar.

About Veer Savarkar

- ✓ He formed a youth organization called as '**Mitra Mela**'
- ✓ He was **against foreign goods and propagated the idea of Swadeshi**.
- ✓ He championed **atheism and rationality** and also **disapproved orthodox Hindu belief**.
- ✓ He worked on **abolishment of untouchability** in Ratnagiri.
- ✓ He was a **president of Hindu Mahasabha** from 1937 to 1943.
- ✓ When congress ministries offered resignation on 22nd oct 1939, **Hindu Mahaasabha under his leadership cooperated with Muslim league** to form government in provinces like Sindh, Bengal and NWFP
- ✓ He founded the “**Abhinav Bharat Society**” in Pune.
- ✓ **He joined the Tilak’s Swaraj Party**.
- ✓ He founded the **Free India Society in 1906**. It was a youth organization of Indian students in England, committed to obtaining the independence of India from British rule.

7. Goa Liberation War 1961 (Post-Independence)

Article: “*Goa never forgot its Indianess: Modi*” (*Page 10*)

Context: The diamond jubilee celebrations of Goa’s Liberation Day commenced with Mr. Modi arriving at the Dr. Shyama Prasad Mookerjee Stadium at Taleigao for the main event, where he felicitated freedom fighters and veterans of Operation Vijay, the military action in 1961 by which India liberated the territories of Goa, Daman and Diu from Portuguese rule.

About the Goa Liberation Day

- ✓ Goa Liberation Day is observed on December 19 every year in India and it marks the day Indian armed forces freed Goa in 1961 following 450 years of Portuguese rule.
- ✓ The Portuguese colonised several parts of India in 1510 but by the end of the 19th-century Portuguese colonies in India were limited to Goa, Daman, Diu, Dadra, Nagar Haveli and Anjediva Island.

- ✓ The Goa liberation movement was sought to end Portuguese colonial rule in Goa.

Goa Liberation in 1961

- ✓ Even as India became independent on August 15, 1947, the French- and Portuguese-owned settlements dotting India's east and west coasts, with Pondicherry and Goa forming their hub.
- ✓ The people of these settlements were eager to join their newly liberated mother-country.
- ✓ The French authorities were more reasonable and after prolonged negotiations handed over Pondicherry and other French possessions to India in 1954.
- ✓ The Government of India, being committed to a policy of settling disputes between nations by peaceful means, was not willing to take military steps to liberate Goa and other Portuguese colonies.
- ✓ The people of Goa took matters in their hands and started a movement seeking freedom from the Portuguese, but it was brutally suppressed as were the efforts of non-violent satyagrahis from India to march into Goa.

What happened after the liberation of Goa?

- ✓ Goa was annexed into the Indian union and was the Union Territory of Goa, Daman and Diu.
- ✓ In 1967, however, the question of whether the state should merge with Maharashtra or not was answered through a plebiscite in which the majority of the Goan people voted against a merger.
- ✓ It continued to remain a Union Territory until 1987 when it was accorded statehood.
- ✓ Goa became India's 25th state even as Daman and Diu continue to be Union Territories.

Operation Vijay

- ✓ In the end, after waiting patiently for international opinion to put pressure on Portugal, Jawaharlal Nehru ordered Indian troops to march into Goa on the night of **17 December 1961**.
- ✓ While the army advanced into Goa from the North and the East, the Indian Air Force bombed the Portuguese airbase at Dabolim. The Indian Navy was tasked with preventing hostile action by Portuguese warships, securing access to the Mormugao harbour, and securing the Anjadip Island of Karwar.
- ✓ By the evening of December 19, 1961, Portuguese Governor General Vassalo De Silva had signed the document of surrender after Indian armed forces, led by the army and backed by the air force and navy, had outnumbered and overwhelmed the Portuguese.
- ✓ Goa was then brought under the control of the Indian government.
- ✓ This moment also marked the exit of the Portuguese, the last of the European colonisers to leave India.
- ✓ The War Memorial at Indian Naval Ship Gomantak was constructed in memory of seven young gallant sailors and other personnel who laid down their lives on 19 Dec 1961 in the “Operation Vijay” undertaken by the Indian Navy for the liberation of Anjadip Island and Territories of Goa, Daman and Diu.”.

8. Paika Rebellion, 1817 (History - Modern India - Major Rebellion)

Context: The 1817 Paika rebellion of Odisha would be included as a case study in the Class 8th NCERT history textbook.

Paika Rebellion, 1817 (Odisha)

- ✓ The Paika Bidroha (Paika Rebellion) of 1817 took place nearly 40 years before the first sepoy mutiny.
- ✓ The Paikas (pronounced “paiko”, literally ‘foot soldiers’), were a class of military retainers had been recruited since the 16th century by kings in Odisha from a variety of social groups to render martial services in return for hereditary rent-free land (nish-kar jagirs) and titles.
- ✓ The Paikas lost their estates when the new colonial establishments and land revenue settlements of the British came into force. The continuous interference in the economy and revenue systems led to exploitation and oppression of the peasants and farmers eventually triggering a rebellion against the British.
- ✓ A large number of Paikas were mobilised under the leadership of Bakshi Jagabandhu Bidyadhar, who then confronted the British on April 2, 1817.

- ✓ Government buildings in Banapur were set on fire, policemen killed and the British treasury looted. Over the next few months, the revolt continued but was eventually overpowered by the British army. Bidyadhar was imprisoned in 1825 and died while still in jail four years later.

9. Development Projects in Kedarnath (Char Dham Projects - Art & Culture)

Context: Modi inaugurates several development projects in Kedarnath

Know More about the Projects

- ✓ Unveiling of a statue of Adi Sankara and monuments related to his samadhi.
- ✓ He laid the foundation stone for projects worth ₹180 crore, including the redevelopment of the Sangam Ghat, and a hospital and administrative offices for those managing the Kedarnath shrine.

Adi shankaracharya

- ✓ Shankaracharya took birth at Kalady in Kerala during 788 C.E. He was disappeared in the year 820 C.E at the young age of 32.
- ✓ According to history, he had made relentless journeys so as to propagate his Advaita Philosophy.
- ✓ The Advaita taught by Sri Sankara is a rigorous, absolute one. According to Sri Sankara, whatever is, is Brahman. Brahman Itself is absolutely homogeneous. All difference and plurality are illusory (Maya).
- ✓ The current shrine of Kedarnath is said to have been built by Adi Shankaracharya in the 8th century AD.
- ✓ He was a great scholar and a saint who established four sacred Mathas in India.
- ✓ It is said that after establishing four sacred Mathas, Shankaracharya attained Nirvana at this place at the age of 32 years.
- ✓ Four Mathas -Sringeri Sharda Math in Karnataka, Govardhana Math in Odisha, Jyotirmath in Uttarakhand, and Dwarka Math in Gujarat — set up by Shankaracharya.
- ✓ He composed **72 devotional and meditative hymns like Soundarya Lahari, Sivananda Lahari, Nirvana Shalkam, Maneesha Panchakam.**
- ✓ **Books** - Viveka Chudamani, Atma Bodha, Vaakya Vritti, Upadesa Sahasri.

Kedar Nath Dham

- ✓ Kedarnath is a holy **Hindu town located in Rudraprayag district of Uttarakhand in India.**
- ✓ Located on the **Garhwal Himalayan Range**.
- ✓ It is **one of the Char Dhams** located in the Himalayas.
- ✓ Near – **Mandakini River**
- ✓ It is one of **12 Jyotirlingas of Kedar or Lord Shiva**.
- ✓ The historical name of this region is "**Kedar Khand**".
- ✓ The temple was originally built in **8th century A.D. by Jagad Guru Adi Shankaracharya** .

Jyotirlinga

- ✓ A **Jyotirlinga or Jyotirlingam**, is a devotional representation of the **Hindu god Shiva**.
- ✓ The 12 Jyotirlingas in India are Somnath, Nageshwar, Bhimashankar, Trimbakeshwar, Grishneshwar, Vaidyanath, Mahakaleshwar, Omkareshwar, Kashi Vishwanath, Kedarnath, Rameshwaram, and Mallikarjunna.

CHAR DHAM		
DHAM	GEOGRAPHICAL FEATURE	CULTURAL FEATURE
Yamunotri Dham	<ul style="list-style-type: none"> ✓ Garhwal Himalayas ✓ Uttarakhand ✓ Yamunotri Glacier – Origin of River Yamuna. 	<ul style="list-style-type: none"> ✓ Goddess Yamuna ✓ In Vedas, Yamuna Is Called Yami(Lady Of Life). ✓ Yamunotri Temple is situated near the foot of Kalind Parbat (peak) and

		on a side of Banderpoonch Parbat.
Gangotri Dham	<ul style="list-style-type: none"> ✓ BHAGIRATI RIVER ✓ UTTARAKHAND ✓ GARHWAL HIMALAYAN HILLS ✓ ORIGIN – GAUMUKH- GANGOTRI GLACIER ✓ After it originates from Gaumukh, the river is known as Bhagirathi and it acquires the name 'Ganga' after the river Alaknanda merges into it near the town of Devaprayag. 	<ul style="list-style-type: none"> ✓ Gangotri Temple ✓ Goddess Ganga ✓ According to Hindu legends, the most sacred of all rivers, Ganges (<i>or Ganga</i>), descended from heaven to earth at Gangotri, when Lord Shiva released the mighty river from his locks.
Badrinath Dham	<ul style="list-style-type: none"> ✓ Banks of Alaknanda River. ✓ Uttarakhand ✓ Garhwal Himalayas 	<ul style="list-style-type: none"> ✓ Badrinath temple dedicated to the preserver, Lord Vishnu. ✓ It is part of Panch Badri temple dedicated to Lord Vishnu. ✓ Architecture of temple resembles Buddhist Temple

10. Subhash Chandra Bose (Modern Indian History- Important Personalities)

Context: 125th Birth Anniversary: Government has decided to install a grand statue of Netaji Subhas Chandra Bose at India Gate to commemorate his 125th birth anniversary and as part of the year long celebrations. His Jayanti is celebrated as 'Parakram Diwas' on 23rd January.

About Subhas Chandra Bose

- ✓ Subhas Chandra Bose Aapda Prabandhan Puraskar has been instituted to recognize and honour the invaluable contribution and selfless service rendered by individuals and organisations in India in the field of disaster management.
- ✓ He cleared the Indian Civil Services (ICS) examination in 1919.
- ✓ Influenced by Vivekananda's teachings - considered him as his spiritual Guru
- ✓ Political mentor was Chittaranjan Das
- ✓ He started the newspaper '**Swaraj'**
- ✓ He opposed the Motilal Nehru Report which spoke for dominion status for India.
- ✓ Actively participated in the Salt Satyagraha of 1930
- ✓ Opposed the suspension of Civil Disobedience Movement and signing of the Gandhi-Irwin Pact in 1931
- ✓ He was associated with left politics in Congress along with Jawaharlal Nehru and M.N. Roy.
- ✓ He won the **congress presidential elections at Haripura in 1938**. Again in 1939 at Tripuri, he won the presidential elections against Gandhi's candidate Pattabhi Sitaramayya.
- ✓ Due to ideological differences with Gandhi, Bose resigned and left congress. Rajendra Prasad was appointed in his place.
- ✓ He founded a new party, '**the Forward Bloc**'.
- ✓ He reached Japanese-controlled Singapore from Germany in July 1943, issued from there his famous call, '**Delhi Chalo**', and announced the **formation of the Azad Hind Government** and the Indian National Army (INA) on 21st October 1943.

- ✓ **INA was first formed under Mohan Singh**
- ✓ INA included both the Indian prisoners of war from Singapore and Indian civilians in South-East Asia
- ✓ INA fought allied forces in 1944 inside the borders of India in Imphal and in Burma.
- ✓ November 1945, a British move to put the INA men on trial immediately sparked massive demonstrations all over the country. (at the Red Fort)
- ✓ Defense was led by Bhulabai Desai, Tej Bahadur Sapru, Kailash Katju, Asaf ali and Nehru
- ✓ He is said to have died in 1945 when his plane crashed in Taiwan.

About Indian National Army (INA)

- ✓ The Indian National Army (INA), also known as the Azad Hind Fauj, was an armed force formed by Indian nationalists, through the patronage of the Imperial Japanese Army, to secure India's independence.
- ✓ First formed in 1942 by Mohan Singh with Indian prisoners of war of the British Indian army captured by Japan in the Malayan campaign and in Singapore, INA was revived by Subhas Chandra Bose in 1943.
- ✓ After the outbreak of World War II, Japan invaded Southeast Asia and conducted a lightning campaign which culminated in the fall of the Malayan peninsula and Singapore in 1942. From the prisoners of war who were captured, the Japanese created an auxiliary army to fight against the British which led to the formation of the first INA under Mohan Singh.
- ✓ But disagreements between Mohan Singh and Japanese army command regarding the autonomy of the Indian National Army led to the disbandment of the first INA in December 1942.
- ✓ After this Mohan Singh recommended Subhas Chandra Bose as the leader of the second INA. The Japanese were ready to support him and invited him to Singapore in July 1943 to take command of the second Indian National Army.
- ✓ INA participated in operation U-Go, the 1944 Japanese campaign towards British India. Following Japan's defeat in World War 2, most of the members of the INA were captured by the British.
- ✓ Rani of Jhansi Regiment - Women's regiment of the INA - Led by Captain Lakshmi Swaminathan (better known as Lakshmi Sahgal)
- ✓ The surviving members of the INA were to be tried by the British colonial government for treason.
- ✓ As the trials were to take place at the Red Fort, they led to a new wave of nationalism in the country as the Indian population saw the members as patriots fighting for independence.

11. Bhagat Singh, Sukhdev and Rajguru (Modern Indian History- Important Personalities)

Context: The Ministry of Home Affairs informed the Lok Sabha that the stature of Bhagat Singh, Sukhdev and Rajguru was “far above any award or title or status” when asked why the freedom fighters had not been given “martyr” status.

About Bhagat Singh

- ✓ Bhagat Singh was an Indian revolutionary freedom fighter who was hanged to death by British. Fondly known as 'Shaheed (martyr) Bhagat Singh'; he is considered a national hero of India's freedom struggle against colonial rule.
- ✓ As a teenager, Bhagat Singh popularised the slogan of 'Inquilab Zindabad' which eventually became the catchphrase of the Indian independence movement.
- ✓ In 1926, Bhagat Singh established the 'Naujawan Bharat Sabha (Youth Society of India) andjoined the Hindustan Republican Association (later known as Hindustan Socialist RepublicanAssociation).
- ✓ In December 1928, Bhagat Singh, along with Sukhdev and Rajguru, planned to avenge the death of Indian nationalist leader Lala Lajpat Rai and plotted to assassinate the Superintendent of Police James Scott in Lahore.
- ✓ In April 1929, Singh and Batukeshwar Dutt bombed the Central Assembly Hall in Delhi, and shouted the slogan of “Inquilab Zindabad!”. He was later arrested after the incident.

- ✓ Bhagat Singh and his revolutionary comrades Rajguru and Sukhdev were hanged by the British on March 23, 1931, in the Lahore Conspiracy case.

About Sukhdev Thapar

- ✓ He is renowned for having being part of the killing of British Officer Saunders in order to protest the death of Lala Lajpat Rai.
- ✓ Sukhdev Thapar was a member of the Hindustan Socialist Republican Association (HSRA), and organised revolutionary cells in Punjab and other areas of North India.
- ✓ A devoted leader, he even went on to educate the youth at the National College in Lahore, greatly inspiring them about India's glorious past.
- ✓ Sukhdev, along with other renowned revolutionaries, started the Naujawan Bharat Sabha at Lahore - an organisation involved in various activities, mainly gearing the youth for the freedom struggle and putting an end to communalism
- ✓ Sukhdev himself took active part in several revolutionary activities like the Prison hunger strike in 1929; however, he would always be remembered in the chronicles of the Indian Freedom Movement for his daring yet courageous attacks in the Lahore Conspiracy Case that shook the very foundation of the British government.
- ✓ After the Central Assembly Hall bombings in New Delhi, Sukhdev and his accomplices were arrested and convicted of their crime, facing the death sentence as verdict.

About Rajguru

- ✓ Shivaram Rajguru was a great Indian freedom fighter who belonged to a Marathi Brahmin Family from Pune.
- ✓ He was born in a place named Khed near Pune in the year 1906 which was later renamed as Rajgurunagar in his honor.

INDIAN GEOGRAPHY

12. Cyclone (Climatology & Disaster Management)

Context: Cyclone Alert in the Eastern states like Odisha and Andhra Pradesh.

About the Cyclones

- ✓ Cyclones are caused by atmospheric disturbances around a low-pressure area distinguished by swift and often destructive air circulation.
- ✓ Cyclones are usually accompanied by violent storms and bad weather.
- ✓ The air circulates inward in an anticlockwise direction in the Northern hemisphere and clockwise in the Southern hemisphere.
- ✓ **Cyclones are classified as:**
 - **Extra tropical cyclones (also called temperate cyclones):** Occur in temperate zones and high latitude regions, though they are known to originate in the Polar Regions.
 - **Tropical cyclones:** Cyclones that develop in the regions between the Tropics of Capricorn and Cancer are called tropical cyclones. Tropical cyclones are large-scale weather systems developing over tropical or subtropical waters, where they get organized into surface wind circulation.
- ✓ The word Cyclone is derived from the Greek word Cyclos meaning the coils of a snake.
- ✓ It was coined by Henry Peddington because the tropical storms in the Bay of Bengal and the Arabian Sea appear like coiled serpents of the sea.
- ✓ The **World Meteorological Organisation (WMO, 1976)** uses the term 'Tropical Cyclone' to cover weather systems in which winds exceed 'Gale Force' (minimum of 34 knots or 63 kph).
- ✓ Tropical cyclones are the progeny of ocean and atmosphere, powered by the heat from the sea; and driven by easterly trades and temperate westerlies, high planetary winds and their own fierce energy.
- ✓ **In India, cyclones are classified by:**
 - Strength of associated winds,
 - Storm surges
 - Exceptional rainfall occurrences.

Worldwide Terminology

- ✓ Cyclones are given many names in different regions of the world.
- ✓ They are known as **Typhoons** in the China Sea and Pacific Ocean; **Hurricanes** in the West Indian islands in the Caribbean Sea and Atlantic Ocean; **Tornados** in the Guinea lands of West Africa and southern USA; **Willy-willies** in north-western Australia and **Tropical Cyclones** in the Indian Ocean.

How Cyclones are formed

- ✓ The development cycle of tropical cyclones may be **divided into three stages:**
 - **Formation and Initial Development Stage:** The formation and initial development of a cyclonic storm depends upon various conditions. These are:
 - A warm sea (a temperature in excess of 26 degrees Celsius to a depth of 60 m) with abundant and turbulent transfer of water vapour to the overlying atmosphere by evaporation.
 - Atmospheric instability encouraging formation of massive vertical cumulus clouds due to convection with condensation of rising air above ocean surface.
 - **Mature Tropical Cyclones**
 - When a tropical storm intensifies, the air rises in vigorous thunderstorms and tends to spread out horizontally at the tropopause level. Once air spreads out, a positive perturbation pressure at high levels is produced, which accelerates the downward motion of air due to convection.
 - With the inducement of subsidence, air warms up by compression and a warm 'Eye' is generated. Generally, the 'Eye' of the storms has three basic shapes: (i) circular; (ii) concentric; and (iii) elliptical.
 - The main physical feature of a mature tropical cyclone in the Indian Ocean is a concentric pattern of highly turbulent giant cumulus thundercloud bands.
 - **Modification and Decay**
 - A tropical cyclone begins to weaken in terms of its central low pressure, internal warmth and extremely high speeds, as soon as its source of warm moist air begins to ebb, or is abruptly cut off.
 - This happens after its landfall or when it passes over cold waters.
 - The weakening of a cyclone does not mean that the danger to life and property is over.

Indian Context

- ✓ The Indian subcontinent is one of the **worst affected regions** in the world. The subcontinent with a long coastline of 8041 kilometres is exposed to nearly 10 per cent of the world's tropical cyclones.
- ✓ Of these, the majority of them have their initial genesis over the Bay of Bengal and strike the East coast of India. On an average, five to six tropical cyclones form every year, of which two or three could be severe. More cyclones occur in the Bay of Bengal than the Arabian Sea and the ratio is approximately 4:1.
- ✓ Cyclones occur frequently on both the west and east coasts. An analysis of the frequency of cyclones on the East and West coasts of India between 1891 and 1990 shows that nearly 262 cyclones occurred (92 of these severe) in a 50 km wide strip above the East coast.
- ✓ Less severe cyclonic activity has been noticed on the West coast, where 33 cyclones occurred the same period, out of which 19 of were severe.
- ✓ Tropical cyclones occur in the months of May-June and October-November. Cyclones of severe intensity and frequency in the North Indian Ocean are bi-modal in character, with their primary peak in November and secondary peak in May.
- ✓ The disaster potential is particularly high during landfall in the North Indian Ocean (Bay of Bengal and the Arabian Sea) due to the accompanying destructive wind, storm surges and torrential rainfall.

How are the cyclones named?

- ✓ In 2000, a group of nations called **WMO/ESCAP** (World Meteorological Organisation/United Nations Economic and Social Commission for Asia and the Pacific), which comprised **Bangladesh, India, the Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand**, decided to start naming cyclones in the region.
- ✓ After each country sent in suggestions, the WMO/ESCAP Panel on Tropical Cyclones (PTC) finalised the list.
- ✓ The WMO/ESCAP expanded to include five more countries in 2018 — **Iran, Qatar, Saudi Arabia, United Arab Emirates and Yemen**.

About Jawad Cyclone (Odisha Coast)

- ✓ A deep depression in the Bay of Bengal has intensified into cyclonic storm Jawad and was expected to make landfall near Odisha and Andhra Pradesh.
- ✓ The name 'Jawad' was suggested by Saudi Arabia.
- ✓ During the period of the last 31 months, including December 2021, the North Indian Ocean has witnessed nearly 21 cyclones of varying intensity. But the State of Odisha was hit by 2 cyclones - Fani (2019) and Yaas (2020). Two other cyclones - Bulbul (2019) and Amphan (2020) tracked to West Bengal.

About Cyclone Asani (Bay of Bengal)

- ✓ The name of the cyclone is given by Sri Lanka, according to an old list posted by the IMD.
- ✓ It was the 2022 first's cyclone in India. It was formed over the Bay of Bengal region.
- ✓ While the point of landfall is not yet clear, strong winds were expected to cause the destruction.
- ✓ People living along the coast have been evacuated, as the National Disaster Response Force (NDRF) has been deployed in Port Blair and the army and navy are on standby.
- ✓ Recently occurred list of cyclones and the countries those who suggested the name:

- | |
|-----------------------------------|
| ■ Fani (2019) - By Bangladesh. |
| ■ Bulbul (2019) - By Pakistan. |
| ■ Amphan (2020) - By Thailand. |
| ■ Jawad (2021) - By Saudi Arabia. |
| ■ Asani (2022) – By Sri Lanka |

13. El Nino and La Nina (El Niño-Southern Oscillation)

Context: Supercomputer simulates what will happen to El Niño, La Niña in a warmer world. There is a growing body of research suggesting that climate change can cause extreme and more frequent El Niño and La Niña events.

About El Niño-Southern Oscillation (ENSO) Cycle

- ✓ Literally translated as 'the boy' and 'the girl' in the Spanish language, El Nino and La Nina are the exact opposite phases of a climatic phenomenon called the El Niño-Southern Oscillation (ENSO) cycle, which takes place in the Pacific Ocean.
- ✓ It got the Spanish name after the phenomenon was first identified by Latin American fishermen in the early 17th century.
- ✓ It involves temperature changes in the waters of the Eastern and Central Pacific Ocean.
- ✓ It is a recurring phenomenon and the change in temperature is accompanied by changes in the patterns of upper and lower level winds, sea level pressure, and tropical rainfall across the Pacific Basin.
- ✓ Generally, El Nino and La Nina occurs every 4 -5 years.
- ✓ These deviations from the normal surface temperatures can potentially have a large-scale impact on the global weather conditions, and the monsoon climate of the Indian subcontinent also gets affected with these temperature fluctuations in the Pacific.

El Nino	La Nina
<ul style="list-style-type: none"> ✓ El Nino is typically known as the warm phase ✓ Derived from the Spanish term which represents “little boy” ✓ El Niño period is characterized by warming or increased sea surface temperatures in the central and eastern tropical Pacific Ocean. 	<ul style="list-style-type: none"> ✓ La Nina is identified as the cold phase ✓ Derived its name from the Spanish term which represents ‘little girl’. ✓ A La Nina event causes the water in the eastern Pacific Ocean to be colder than usual
<ul style="list-style-type: none"> ✓ El Nino is observed when the water temperature in the Eastern Pacific gets comparatively colder than normal. ✓ As a consequence of which, there is a strong high pressure over the eastern equatorial Pacific. 	<ul style="list-style-type: none"> ✓ It contains low air surface pressure in the eastern Pacific. ✓ During La Niña events, trade winds are even stronger than usual, pushing more warm water toward Asia. ✓ It had a greater tendency to trigger intense tropical cyclones as wind direction changes piling up water between Indonesia and nearby areas as winds from Africa onwards gets blocked.
<ul style="list-style-type: none"> ✓ It can cause heavy rains in Ecuador and Peru; Heavy rains in southern Brazil but drought in north East Brazil; Drought in Zimbabwe, Mozambique, South Africa, Ethiopia; Warm winter in the northern half of the United States and southern Canada. Drought, Scant rains off Asia including India, Indonesia, and Philippines; Coral bleaching worldwide; Drought in eastern Australia. 	<ul style="list-style-type: none"> ✓ La Nina causes drought in the South American countries of Peru and Ecuador, heavy floods in Australia, high temperatures in Western Pacific, Indian Ocean, off the Somalian coast and a comparatively better monsoon rains in India.
<ul style="list-style-type: none"> ✓ El Nino is more frequent than La Nina. ✓ The wind speed is low as compared to La Nina. 	<ul style="list-style-type: none"> ✓ During a La Niña year, winter temperatures are warmer than normal in the South and cooler than normal in the North. La Niña can also lead to a more severe hurricane season.
<ul style="list-style-type: none"> ✓ It decreases in the strength of the Coriolis force. 	<ul style="list-style-type: none"> ✓ It increases in the strength of the Coriolis force.

14. Ken-Betwa River Interlinking Project (Geography & Ecology - River Interlinking Project)

Context: The Union Cabinet has approved the funding and implementation of the Ken-Betwa river interlinking project at a cost of ₹44,605 crore at the 2020-21 price level.

About Ken-Betwa River link project

- ✓ The Ken Betwa interlinking of rivers (ILR) project was touted as the **first river inter-link project** under the revised national scheme.
- ✓ It was given the Union Cabinet’s approval in July 2014 but was stalled because of protests from environmentalists and wildlife conservationists.
- ✓ In March 2021, the governments of **Uttar Pradesh and Madhya Pradesh** signed an agreement that nudges forward the long-stalled multi-crore, controversial project to link the Ken and the Betwa rivers.
- ✓ It is a project proposed to **transfer excess water from the River Ken to the Betwa basin** through the use of a concrete canal.

- ✓ The project aims to provide **irrigation to the Bundelkhand region**, which is one of the worst drought-affected areas in India.
- ✓ Nearly 8,650 hectares of forest land including part of **Panna National Park in Madhya Pradesh** will be submerged if the project were to become a reality.

Environmental concerns - Loss of the ecosystem and displacement

The project was on the drawing board for years mainly due to environmental concerns.

✓ Impact on tiger reserves and wildlife sanctuaries in the region:

- Of the 12,500 hectares of land to get submerged by the project, more than 9,000 ha are categorised as forest land. The submergence area includes a critically important section of the **Panna Tiger Reserve**.
- The Reserve is considered as a shining example of conservation after it successfully improved the tiger and vulture populations. Around 40% of the area of the tiger reserve will be irretrievably damaged, if the project is implemented. Also, the project may destroy about 7.2 lakh trees.

15. Krishna River Water Dispute (Geography & Polity - Water/River Disputes)

Context: Dispute between Telangana and Andhra Pradesh was in the news. Both the government submitted in the Supreme Court that there is no information forthcoming from Karnataka for the past 14 years about how much Krishna river water it has diverted.

Introduction

- ✓ India is a Federal democracy consisting of various rivers that cross interstate boundaries. It is thus, essential to evolve a mechanism that is efficient and effective in resolving disputes over river water between the states. Water disputes are not uncommon in India; numerous disputes have taken place in India since Independence.
- ✓ The allocation of water has always been a controversial issue. The primary reason for the increase in demand for water is due to the uncontrollable growth of population along with irrigation-based agriculture, rapid industrialization, and the rise of thermal power.
- ✓ Although the Constitution does not have many provisions with respect to water disputes, it does, however, provide the Parliament with the power to make laws on this subject.
- ✓ The politicization of interstate water disputes in India inevitably leads to the ineffectiveness of the dispute resolution structure. One such dispute is the Krishna Water Dispute between the states of Andhra Pradesh, Telangana, Karnataka, and Maharashtra.

About the Krishna River Dispute

- ✓ The Krishna is an east-flowing river that originates at Mahabaleshwar in Maharashtra and merges with the Bay of Bengal, flowing through Maharashtra, Karnataka, Telangana and Andhra Pradesh.
- ✓ Together with its tributaries, it forms a vast basin that covers 33% of the total area of the four states.
- ✓ A dispute over the sharing of Krishna waters has been ongoing for many decades, beginning with the erstwhile Hyderabad and Mysore states, and later continuing between successors Maharashtra, Karnataka and Andhra Pradesh.

About the Krishna River

- ✓ The river rises in western Maharashtra state in the Western Ghats range near the town of Mahabaleshwar, not far from the coast of the Arabian Sea.
- ✓ It flows east to Wai and then in a generally southeasterly direction past Sangli to the border of Karnataka state.
- ✓ There the river turns east and flows in an irregular course across north-central Karnataka and then to the southeast and into southwestern Telangana state.
- ✓ It then veers southeast and then northeast, forming a portion of the border with Andhra Pradesh state.
- ✓ Turning east it flows into Andhra Pradesh to its delta head at Vijayawada, and from there flows southeast and then south until it enters the Bay of Bengal.

- ✓ The principal **tributaries** joining Krishna are the **Ghataprabha, the Malaprabha, the Bhima, the Tungabhadra and the Musi**.

Major Water Disputes in India (Examples)

1. **Krishna water dispute** between states of Maharashtra, Karnataka, Andhra Pradesh.
2. **Godavari water dispute** between states of Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh, Orissa.
3. **Narmada water dispute** between states of Rajasthan, Madhya Pradesh, Gujarat, Maharashtra.
4. **Cauvery water dispute** between states of Karnataka, Kerala, Tamil Nadu, and Union Territory of Pondicherry.
5. **Mahadayi / Mandovi water dispute** between states of Goa, Karnataka and Maharashtra.
6. **Vansadhara water dispute** between states of Andhra Pradesh, Orissa.

16. James Webb Space Telescope (Origin of Universe - Latest Missions in News)

Context: The James Webb Space Telescope (JWST), hurled into space by the Ariane 5 rocket will now be able to observe the farthest reaches of the universe without any atmospheric turbulence.

About the James Webb Space Telescope

- ✓ The James Webb Space Telescope will find the first galaxies that formed in the early universe and peer through dusty clouds to see stars forming planetary systems.
- ✓ It is the joint project of the National Aeronautics and Space Administration (NASA), ESA (European Space Agency) and the Canadian Space Agency is billed as the next-generation telescope.
- ✓ This telescope is the successor of NASA's Hubble telescope.
- ✓ Unlike the Hubble space telescope, the James Webb telescope will not orbit the Earth, it is headed to a location known as the second Lagrange point from where it will observe the universe, so far back into time that it will see the origin of the universe following the big bang itself.
- ✓ According to NASA, Lagrange points are positions in space where objects sent tend to stay put.
- ✓ At Lagrange points, the gravitational pull of two large masses precisely equals the centripetal force required for a small object to move with them. These points in space can be used by spacecraft to reduce the fuel consumption needed to remain in position.
- ✓ This location lets the telescope stay in line with the Earth as it moves around the Sun allowing its large sunshield to protect the telescope from the light and heat of the Sun and Earth & Moon.

What are Different Lagrange Points?

- ✓ There are five special points where a small satellite can orbit in a constant portion with two big masses. At these five positions part of the Earth-Sun system, **three (L1, L2 and L3)** lie along the line connecting the two large masses. Meanwhile, L4 and L5 form the apex.
- ✓ According to NASA, the **L1 point** of the Earth-Sun system affords an **uninterrupted view** of the sun and is currently home to the **Solar and Heliospheric Observatory Satellite (SOHO)**.
- ✓ The **L2**, where the **James Webb Space Telescope is going**, is **ideal for astronomy** because a spacecraft is **close enough to readily communicate with Earth**, can keep Sun, Earth and Moon behind the spacecraft for solar power and (with appropriate shielding) **provides a clear view of deep space**.
- ✓ It is to be noted that **L1 and L2 points are unstable** and satellites functioning from this location need to go through regular course corrections.
- ✓ Meanwhile, **L3 remains behind the Sun and is unlikely to be used**.
- ✓ The telescope is on a 30-day long journey to cover the 15,00,000 kilometers distance between Earth and its intended orbit. It will reach the location by the end of January.

Webb Vs Hubble

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| <ul style="list-style-type: none"> ✓ Webb's primary goals are to look at the universe at infrared wavelengths, while Hubble primarily studies the cosmos at optical and ultraviolet wavelengths. ✓ Webb has a much bigger mirror than Hubble. Since Webb has a much larger light collecting area, it can peer further back in time than Hubble is capable of doing. |
|---|

- ✓ Hubble Space Telescope orbits the Earth at an altitude of around 570 kilometres above the planet, according to NASA. Webb will not orbit Earth, but will orbit the Sun, and will sit at the Earth-Sun L2 Lagrange point, 1.5 million kilometres away.
- ✓ Hubble can see the equivalent of “toddler galaxies” or young galaxies, while Webb will be able to see “baby galaxies”, or the newborn galaxies. Webb will be able to see the first galaxies because it is an infrared telescope. The telescope will also look back in time to observe the earliest stars.
- ✓ Webb is designed to look deeper into space to look deep into nearby dust clouds to study the formation of stars and planets. It has infrared instruments with longer wavelength coverage and greatly improved sensitivity than Hubble.
- ✓ Both Hubble and Webb can look back in time. Hubble has the ability to observe how the universe was 12.5 billion years ago. Webb is a powerful time machine with infrared vision that will look back in time, more than 13.5 billion years.

INDIAN POLITY

17. Constituent Assembly of India (Making of Indian Constitution)

Context: Constitution Day 2021 - On November 26, 1949, the Constituent Assembly adopted the Constitution of India, and it came into effect on January 26, 1950. While January 26 is celebrated as Republic Day, since 2015, **November 26 has been observed as the Constitution Day of India, or Samvidhan Divas.**

About Constituent Assembly

- ✓ The **idea** of the constituent assembly was put forward for the first time by **MN Roy**.
- ✓ It was the **Indian National Congress (INC)**, for the first time, officially called for a constituent assembly to frame a constitution for India in 1935.
- ✓ **J Nehru** made this emphatic statement regarding the constitution- ‘The constitution of free India must be framed, without outside interference, by a constituent assembly elected on the basis of adult franchise’.
- ✓ The **demand for a constituent assembly was accepted for the first time** by the British through their ‘**August offer**’ of 1940.
- ✓ Eventually, a constituent assembly was **established under the provisions of the Cabinet Mission plan**. It was **constituted in 1946**.
 - Please revise your Polity chapter on Making of the Indian Constitution.

18. State Legislative Council (State Government)

Context: Legislative Council polls in Maharashtra.

Bicameral System in the State Level

- ✓ India follows a bicameral system at both the centre and state level. Under this system, the state's legislature is divided into two parts - Legislative Assembly or Vidhan Sabha and Legislative Council or Vidhan Parishad.
- ✓ Members of the Legislative Assembly are directly elected by the people through assembly elections.
- ✓ Vidhan Parishad or Legislative Council is a permanent body, which can be formed or abolished when the Legislative Assembly passes a special resolution.
- ✓ In other words, the Legislative Council is the upper house of the state. Its institution is outlined in Article 169 of the Constitution of India. A member of a legislative council is referred to as an MLC.

About the State Legislative Council

- ✓ The Constitution of India does not mandate states to form a Legislative Council.
- ✓ As of January 2020, six out of 28 states have a legislative council. The states with bicameral legislature include Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana and Uttar Pradesh. These states have both the Legislative Council and Legislative Assembly.

The difference between the Legislative Assembly and the Legislative Council

- ✓ **Term/Tenure:** The term of the Legislative Assembly is five years unless it is dissolved earlier on the request of the chief minister. The tenure of the members of the council is six years, and a third of the members of the House retire after every two years.
- ✓ **Lower/Upper House:** Legislative Assembly is the lower house, much like the Lok Sabha of the Parliament. Legislative Council is the upper house in the state and like the Rajya Sabha, it is a permanent House.

Composition and election of the members of the State Legislative Council

- ✓ Article 171 of the Constitution of India lays down the composition of a State Legislative Council.
- ✓ It states that the total number of members in the State Legislative Council shall not be more than 1/3rd of the total number of members in the State Legislative Assembly.
- ✓ Also, the total number of members in the Legislative Council should not be less than 40.
- ✓ Until the Parliament provides the composition of the State Legislative Council, the members of the State Legislative Council are either nominated by the Governor or are elected indirectly by the State Legislative Assembly. The composition of the members of the State Legislative Council is as follows:
 - ✓ One-third of the members of this House are elected by the Legislative Assembly.
 - ✓ One-third are elected by the local bodies like a municipality or other local authorities.
 - ✓ One-twelfth of the members are elected by graduates.
 - ✓ One-twelfth of the members are elected by teachers.
 - ✓ About one-sixth of the members are nominated by the Governor. The members of the State Legislative Council nominated by the Governor should have knowledge or expertise in any of the following areas, i.e., science, arts, social service, cooperative movement, or literature.

Eligibility criteria

- ✓ Indian citizen who is at least 30 years of age; a person cannot simultaneously be a Member of Parliament and State legislature.

Role of the Legislative Council

- ✓ The Constitution of India gives limited power to the Legislative Council.
- ✓ It cannot make or break a government. It cannot say 'no' to Finance Bills.
- ✓ The legislative Council elects its Chairman, who plays the role of presiding officer and Deputy Chairman from amongst its members. They enjoy the status of Cabinet Ministers in the state.
- ✓ It is considered important for two reasons:
 - ✓ It can ensure individuals who might not be cut out for the elections are able to contribute to the legislative process (like artists, scientists, etc).
 - ✓ It can keep an eye on hasty decisions taken by the Legislative Assembly.

Abolition of State Legislative Councils

- ✓ Article 169 of the Constitution of India states that, on the passing of a resolution by the State Legislative Assembly of a state, the Parliament by law can provide for the creation or abolition of the State Legislative Council.
- ✓ The resolution should be voted by at least 2/3rd majority members who are present and voting.
- ✓ The process of abolition of a State Legislative Council is as follows:
 - As per Article 168, a resolution shall be presented in the State Legislative Assembly for abolishing the existing State Legislative Council.
 - The resolution for abolishing the existing State Legislative Council should be passed with 2/3rd majority members of the State Legislative Assembly.
 - After the resolution is passed, the resolution for abolishing the State Legislative Council is presented in the Parliament.
 - If both the house of the Parliament and the President of India give assent for the abolition of the State Legislative Council, then the State Legislative Council shall be abolished.

19. Hate Speech (Fundamental Rights to Freedom of Speech and Expression)

Context: The three accused named in the first information report (FIR) pertaining to the hate speeches at a religious event in Haridwar between December 17 and 19, 2021.

About the Hate Speech

- ✓ The Constitution of India, under **Article 19(1)(a)** provides the **right to freedom of speech and expression**.
- ✓ The principle behind freedom of speech and expressions is as under:
 - Only the Indian citizen has the liberty to enjoy this right, the right isn't given any foreign citizen.
 - This right gives liberty to express one's view through any medium e.g.: by words in writing speaking, in pictures etc.
 - Since the freedom of speech and expression is not an absolute right, the government is given powers to frames law for and against it.
- ✓ However, under **article 19(2)**, the constitution also **provides for the reasonable restrictions** against free speech in the interests of sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.
- ✓ **Hate speech constitutes a criminal charge under Section 153A**, which is the offence of promoting communal disharmony or feelings of hatred between different religious, racial, language or regional groups or castes or communities.
- ✓ 153B of the **Indian Penal Code** categorises the offence of promoting religious, racist, linguistic, community or caste hatred or incites any religious, caste or any other disharmony or enmity within India, through any speech either in written form or spoken.
- ✓ Section 298 of the IPC, similarly, classifies the offence of uttering words with the deliberate intent to wound the religious feelings of any person.
- ✓ Likewise, Section 505 of the IPC, criminalises the act of delivering speeches that incite violence. Sections 295A and 509A also have similar provisions.
- ✓ The 123(3A) of the Representation of the People Act, 1951, also criminalises hate speech by election candidates.

Supreme Court Observation of the Issue

- ✓ In 2014, while addressing a Public interest Litigation seeking guidelines for regulating Hate Speech, the Supreme Court made certain observations.
- ✓ In Pravasi Bhalai Sangathan vs Union of India & Ors.(2014) the Supreme Court said: "Hate speech is an effort to marginalise individuals based on their membership in a group.
- ✓ Using expression that exposes the group to hatred, hate speech seeks to delegitimise group members in the eyes of the majority, reducing their social standing and acceptance within society.
- ✓ On the proliferation of hate speech, the Supreme Court pointed out that "the root of the problem is not the absence of laws but rather a lack of their effective execution. Therefore, the executive as well as civil society has to perform its role in enforcing the already existing legal regime.
- ✓ Effective regulation of "hate speeches" at all levels is required as the authors of such speeches can be booked under the existing penal law and all the law enforcing agencies must ensure that the existing law is not rendered a dead letter.
- ✓ Further, the Supreme Court requested the Law Commission of India to examine the issue.
- ✓ The 267th report of the Law Commission was of the clear opinion that new provisions in IPC were required to address the issue. It suggested the insertion of new Sections 153C (prohibiting incitement to hatred) and section 505A (causing fear, alarm, or provocation of violence in certain cases) to curb the menace of hate speech.
- ✓ Despite a draft Bill being annexed to the report, none has been presented to Parliament so far.

20. Central Information Commission (CIC) (Statutory Bodies)

Context: The Central Information Commission (CIC) has dismissed an appeal seeking disclosure of reports submitted by the State Bank of India to the Centre and the Reserve Bank of India regarding sale and encashment of electoral bonds in 2018 which are withheld by the SBI on grounds of personal information held in fiduciary capacity.

About the Central Information Commission (CIC)

- ✓ The Central Information Commission has been constituted with effect from 12-10-2005 under the Right to Information Act, 2005.
- ✓ The jurisdiction of the Commission extends over all Central Public Authorities.
- ✓ The Commission has certain powers and functions mentioned in sections 18, 19, 20 and 25 of the RTI Act, 2005. These broadly relate to adjudication in second appeal for giving information; direction for record keeping, suo motu disclosures receiving and enquiring into a complaint on inability to file RTI etc; imposition of penalties and Monitoring and Reporting including preparation of an Annual Report.
- ✓ The decisions of the Commission are final and binding.

How is CIC constituted?

- ✓ Under the provision of Section-12 of RTI Act 2005 the **Central Government shall**, by notification in the Official Gazette, constitute a body to be known as the CIC.
- ✓ The Commission shall consist of the Chief Information Commissioner (CIC) and such number of Central Information Commissioners not exceeding 10 as may be deemed necessary.

Eligibility criteria and the process of appointment of CIC/IC

- ✓ Section 12(3) of the RTI Act 2005 provides as follows.
- ✓ **Selection Committee**
 - (i) The Prime Minister, who shall be the Chairperson of the committee;
 - (ii) The Leader of Opposition in the Lok Sabha ; and
 - (iii). A Union Cabinet Minister to be nominated by the Prime Minister.
- ✓ Section 12(5) of the RTI Act 2005 provides that the Chief Information Commissioner and Information Commissioners shall be persons of eminence in public life with wide knowledge and experience in law, science and technology, social service, management, journalism, mass media or administration and governance.
- ✓ Section 12(6) of the RTI Act 2005 provides that Chief Information Commissioner or an Information Commissioner shall not be a Member of Parliament or Member of the Legislature of any State or Union Territory as the case may be , or hold any other office of profit or connected with any political party or carrying on any business or pursuing any profession.

Term of office and other service conditions of CIC

- ✓ Section 13 of the RTI Act 2005 provides that the Chief Information Commissioner shall hold office for a **term of five years** from the date on which he enters upon his office and **shall not be eligible for reappointment**:
- ✓ Section 13(5)(a) of the RTI Act 2005 provides that the **salaries** and **allowances** payable to and other terms and conditions of service of the Chief Information Commissioner shall be the **same as that of the Chief Election Commissioner**.

Term of office and other service conditions of IC

- ✓ Section 13(2) of the RTI Act 2005 provides that the Information Commissioner shall hold office for a **term of five years** from the date on which he enters upon his office and **shall not be eligible for reappointment as such Information Commissioners** provided.
- ✓ Provided that every Information Commissioner shall on vacating his office under this sub-section be **eligible for appointment as the Chief Information Commissioner** in the manner specified in sub-section (3) of section 12 of the RTI Act 2005.
- ✓ Provided further that where the Information Commissioner is appointed as the Chief Information Commissioner, his term of office shall not be more than five years in aggregate as the Information Commissioner and the Chief Information Commissioner.

- ✓ Section 13(5)(b) of the RTI Act 2005 provides that the salaries and allowances payable to and other terms and conditions of service of an Information Commissioner shall be the same as that of an Election Commissioner.

CIC/SIC Report

- ✓ Section 25 of the RTI Act 2005 provides that, the CIC or State Information Commission ,as the case may be, shall ,as soon as practicable after the end of each year, prepare a report on the implementation of the provisions of this Act during that year and forward a copy thereof to the appropriate Government.

21. Private Members Bill (Types of Bills)

Context: The revised lists of business for the both Houses of Parliament have Private Members' Legislative Business scheduled during the Winter Session.

Private Members Bill

- ✓ A member of parliament (MP) who is not a minister is a private member.
- ✓ The Bills introduced by private members are referred to as Private Member's Bills.
- ✓ Whether the Private Bill has to be admitted or not is decided by the Speaker of the Lok Sabha or Chairperson of the Rajya Sabha.
- ✓ A private member's bill is only introduced and discussed on Fridays.
- ✓ The Private Member's Bills are either drafted by the MP or his staff.
- ✓ The MP who wants to move a Private Member's Bill has to give at least a month's notice, for the House Secretariat to examine it for compliance with constitutional provisions and rules on legislation.
- ✓ In case of multiple Bills, a ballot system is used to decide the sequence of bills for introduction.
- ✓ The Parliamentary Committee on Private Member's Bills and Resolutions goes through all such Bills and classifies them based on their urgency and importance.
- ✓ So far, the Parliament has passed 14 such Bills, six of them in 1956. No Private Member's Bill has been passed by the Parliament since 1970, according to PRS Legislative Research.

Facts about the Government Bills

- ✓ The Bills introduced by ministers are called government Bills.
- ✓ The government bills have the backing of the government and reflect its legislative agenda.
- ✓ A government Bill can be introduced and discussed on any day.

22. BAIL (Legal Term Mentioned in the News)

Context: Legal terms such as bail are often seen in the news.

Definition and Meaning:

- ✓ 'Bail' is derived from the old **French verb 'baillier'** meaning to '**give or deliver**'.
- ✓ The term **bail has not been defined** in the Criminal Procedure Code. The word has been used in the Cr.P.C. several times and remains one of the most vital concepts of the criminal justice system.
- ✓ **Definition:** Setting free of the defendant by releasing him/her from the custody of law and entrusting him/her to the custody of his/her sureties who are liable to produce him/her to appear for trial at a specific date and time.

23. Demands for Grants (Polity and Economy - Types of Grants)

Context: The Union Budget is finalized with inputs from all ministries and departments about estimates of their spending for the next FY. This estimate tabled as part of the Budget is called Demand for Grants.

About the Demands for Grants

- ✓ Each ministry sends out a demand for grants for funds it needs for the next financial year for various schemes. Once the process is over, the government then collectively presents them in Lok Sabha as part of the Union Budget.

- ✓ Article 113 of the Constitution mandates that the estimates of expenditure from the Consolidated Fund of India included in the Annual Financial Statement and required to be voted by the Lok Sabha is submitted in the form of Demands for Grants.
- ✓ The Demands for Grants are presented to the Lok Sabha along with the Annual Financial Statement.
- ✓ Under Article 113, the Lok Sabha has the power to give or refuse its assent to a demand for grants or it can reduce the amount specified in the demand.
- ✓ Generally, one Demand for Grant is presented in respect of each ministry or department.
- ✓ However, more than one demand may be presented for a ministry or department depending on the nature of expenditure.
- ✓ With regard to Union Territories without legislature, a separate demand is presented for each of the Union Territories.
- ✓ Each Demand first gives the totals of 'voted' and 'charged' expenditure as also the 'revenue' and 'capital' expenditure included in the demand separately, and also the grand total of the amount of expenditure for which the demand is presented.
- ✓ This is followed by the estimates of expenditure under different major heads of account.
- ✓ The breakup of the expenditure under each major head between 'Plan' and 'Non-Plan' is also given.
- ✓ The amounts of recoveries taken in reduction of expenditure in the accounts are also shown.
- ✓ A summary of Demands for Grants is given at the beginning of the Budget document, while details of 'New Service' or 'New Instrument of Service', such as formation of a new company, undertaking or a new scheme, etc, if any, are indicated at the end of the document.
- ✓ Each demand normally includes the total provisions required for a service; that is, provisions on account of revenue expenditure, capital expenditure, grants to state and Union Territory governments, and also loans and advances relating to the service.
- ✓ In cases where the provision for a service is entirely for expenditure charged on the Consolidated Fund of India, for example, interest payments, a separate Appropriation, as distinct from a Demand, is presented for that expenditure and it is not required to be voted by the Lok Sabha.
- ✓ However, where expenditure on a service includes both 'voted' and 'charged' items of expenditure, the latter are also included in the demand presented for that service but the 'voted' and 'charged' provisions are shown separately in that demand.

24. Enforcement Directorate (ED)

Context: Former Maharashtra Home Minister Anil Deshmukh was arrested by the Enforcement Directorate (ED) on charges of corruption and money laundering.

About Enforcement Directorate (ED)

- ✓ It is a **law enforcement agency and economic intelligence agency** responsible for enforcing economic laws and fighting economic crime in India.
- ✓ The Ed is mandated with the task of enforcing the provisions of two special fiscal laws – **Foreign Exchange Management Act, 1999 (FEMA)** and **Prevention of Money Laundering Act, 2002 (PMLA)**.
- ✓ It is part of the **Department of Revenue, Ministry of Finance**, Government of India.

Composition:

- ✓ Directly recruiting personnel, officers from different Investigating Agencies, viz., Customs & Central Excise, Income Tax, Police, etc. on deputation.

Other functions:

- ✓ Processing cases of **fugitive/s from India under Fugitive Economic Offenders Act, 2018**.
- ✓ Sponsor cases of **preventive detention** under **Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA)** in regard to contraventions of FEMA.

Special courts:

- ✓ For the trial of an offence punishable under **section 4 of PMLA**, the Central Government (in consultation with the Chief Justice of the High Court), designates one or more Sessions Court as Special Court(s). The court is also called "**PMLA Court**".
- ✓ Any appeal against any order passed by PMLA court can directly be filed in the High Court for that jurisdiction.

25. Suspending MPs in Rajya Sabha (Polity - Parliament)

Context: Twelve Opposition members of the Rajya Sabha were suspended for the entire winter session for “unprecedented acts of misconduct”, and “unruly and violent behaviour” on August 11, the last day of the previous monsoon session. This is the first time RS members have been suspended for misconduct during the previous session.

Rules and Procedure related to Suspending MPs in Rajya Sabha

- ✓ The rules provide that the house is the master of its procedure and the procedure is regulated by its Speaker or Chairman. No appeal lies against the Speaker or Chairman of the house in the matter of procedure anywhere.
- ✓ The house can punish its members or outsiders for bringing disrepute to the legislature.
- ✓ The power of the house includes the power to suspend a member from attending the sitting for a day or for the remainder of the session.
- ✓ The suspension notice said that the 12 MPs including six from the Congress were punished under Rule 256 of Rules of Procedure and Conduct of Business in the Rajya Sabha.
- ✓ Rule 256(1) reads, “The Chairman may, if he deems it necessary, name a member who disregards the authority of the Chair or abuses the rules of the Council by persistently and willfully obstructing the business thereof.”
- ✓ Rule 256(2) continues, “If a member is so named by the Chairman he shall forthwith put the question on a motion being made, no amendment, adjournment or debate being allowed, that the member (naming him) be suspended from the service of the Council for a period not exceeding the remainder of the Session: Provided that the Council may, at any time, on a motion being made, resolve that such suspension be terminated.”
- ✓ It is common in Indian parliamentary practices, because such matters are referred to a committee which examines them. It takes time during which the presiding officer seeks the views of relevant parties. The session comes to an end by the time the report is ready. If the committee finds that violation was serious enough to be given a punishment as a deterrent for other members, the house or the chairperson announces the decision.
- ✓ This particular incident happened on the last day of the Monsoon Session. It was natural for the Rajya Sabha chairman to announce a decision on the first day of the Winter Session. This is the same house, the same chairman and also the presiding officer is the same, only the session is different. The report has come and punishment announced.

26. Article 19 (1) (d)& Article 19 (5) (Polity - Fundamental Rights)

Context: The High Court of Meghalaya has said the entry of Indian citizens through the implementation of the Meghalaya Residents' Safety and Security Act, 2016, may not be regulated. The State Government had referred to Article 19(5) of the Constitution while drawing up the Act.

About the Article 19 (1) (d) - Freedom To Move Freely throughout the Territory of India

- ✓ Article 19(1) (d) guarantees to all citizens of India the right "to move freely throughout the territory of India."
- ✓ This right is however, subject to reasonable restrictions mentioned in clause (5) of Article 19, i.e. in the interest of general public or for the protection of the interest of any Scheduled Tribe.
- ✓ Article 19(1) (d) of the Constitution guarantees to its citizens a right to go wherever they like in Indian territory without any kind of restriction whatsoever.

- ✓ They can move not merely from one State to another but from one place another within the same State.
- ✓ This freedom cannot be curtailed by any law except within the limits prescribed under Article 19(5).
- ✓ What the Constitution lays stress upon is that the entire territory is one unit so far the citizens are concerned.
- ✓ Thus the object was to make Indian citizens national minded and not to be petty and parochial.

Grounds of Restrictions

- ✓ The State may under clause (5) of Article 19 impose reasonable restriction on the freedom of movement on two grounds
 - In the interests of general public.
 - For the protection of the interest of Scheduled Tribes.

27. Question Hour and Zero Hour (Polity - Devices of Parliament)

Context: A call for bringing in a uniform civil code dominated Zero Hour in the Lok Sabha.

What is Question Hour

- ✓ Asking of questions is an inherent and unfettered parliamentary right of members. It is during the Question Hour that the members can ask questions on every aspect of administration and governmental activity.
- ✓ The time earmarked for it is the first 60 minutes after a House begins its meeting for the day.
- ✓ It is during this one hour that Members of Parliament ask questions of ministers and hold them accountable for the functioning of their ministries. The questions that MPs ask are designed to elicit information and trigger suitable action by ministries.

Significance

- ✓ Over the last 70 years, MPs have successfully used this parliamentary device to shine a light on government functioning. Their questions have exposed financial irregularities and brought data and information regarding government functioning to the public domain.
- ✓ With the broadcasting of Question Hour since 1991, Question Hour has become one of the most visible aspects of parliamentary functioning.

How is Question Hour regulated?

- ✓ Parliament has comprehensive rules for dealing with every aspect of Question Hour.
- ✓ And the presiding officers of the two houses are the final authority with respect to the conduct of Question Hour.
- ✓ For example, usually Question Hour is the first hour of a parliamentary sitting. In 2014, Rajya Sabha Chairman Hamid Ansari shifted Question Hour in the House from 11 am to 12 noon. The move was to prevent the disruption of Question Hour.

Kinds of Questions		
Starred Question	Unstarred Question	Short Notice Question
<ul style="list-style-type: none"> ■ Printed in Green colour ■ Requires an oral answer and hence supplementary questions can follow. ■ In addition to the ministers, the questions can also be asked to the private members (related some bill, resolution or other matters connected with the business of the House for which that member is responsible). (Printed in Yellow colour) 	<ul style="list-style-type: none"> ■ Printed in White colour ■ Requires a written answer and hence supplementary questions cannot follow 	<ul style="list-style-type: none"> ■ Printed in Light Pink colour ■ It is asked by giving a notice of less than ten days. It is answered orally.

What is Zero Hour?

- ✓ While Question Hour is strictly regulated, **Zero Hour is an Indian parliamentary innovation.**
- ✓ The **phrase does not find mention in the rules of procedure.**
- ✓ The concept of Zero Hour started organically in the first decade of Indian Parliament, when MPs felt the need for **raising important constituency and national issues.**

- ✓ During the initial days, Parliament used to break for lunch at 1 pm. Therefore, the opportunity for MPs to raise national issues without an advance notice became available at 12 pm and could last for an hour until the House adjourned for lunch.
- ✓ This led to the hour being popularly referred to as Zero Hour and the issues being raised during this time as Zero Hour submissions.
- ✓ Over the years, presiding officers of both Houses have given directions to streamline the working of Zero Hour to make it even more effective.
- ✓ Its importance can be gauged from the support it receives from citizens, media, MPs and presiding officers despite not being part of the rule-book.

28. Sessions of the Parliament (Polity - Parliament)

Context: The Winter Session, which began on November 29, saw a deadlock between the Opposition and the government in the Rajya Sabha over the suspension of a dozen MPs due to alleged unruly behaviour during the previous Monsoon Session.

About the Sessions of Parliament in India

- ✓ The Parliament is the legislative organ of the union government. It occupies a pre-eminent and central position in the Indian democratic political system.

What is session of the Parliament?

- ✓ A session of the Parliament is the period during which a House meets almost every day uninterruptedly to manage the business. The summoning of Parliament is specified in Article 85 of the Constitution.
- ✓ The **President** from time to time **summons** each House of the Parliament to meet.
- ✓ But the maximum gap between two sessions of the Parliament cannot be more than six months. In other words, **Parliament should meet a minimum of twice a year**.
- ✓ India does not have a fixed parliamentary calendar. By convention (i.e. not provided by the Constitution), Parliament meets for three sessions in a year:
 - Budget Session, Monsoon Session and Winter Session

SESSIONS OF PARLIAMENT		
Budget Session	Monsoon Session	Winter Session
<ul style="list-style-type: none"> ■ The budget session takes place in February to May every year. ■ It is considered to be an important session of the Parliament. ■ The Budget is generally presented on the last working day of the month of February. ■ In this session, the Members of the Parliament (MP) discuss the various provisions of the budget and matters concerning taxation, after the Finance Minister presents the budget. ■ The budget session is usually split into two periods with a gap of one month between them. ■ The session starts with the President's Address to both Houses. 	<ul style="list-style-type: none"> ■ The monsoon session takes place in July to September every year after the gap of two months (after the budget session). ■ In this session, matters of public interest are to be discussed. 	<ul style="list-style-type: none"> ■ The winter session takes place in mid-November to mid-December every year. ■ It is the shortest session of all the sessions. ■ It discusses the matters that could not be considered upon earlier and makes up for the absence of legislative business during the second session of the Parliament.

Joint Session/Sitting of Parliament

- ✓ **Article 108 of the Constitution of India** deals the **joint sitting** of the Parliament **to resolve a deadlock** between the two Houses i.e., the Lok Sabha and the Rajya Sabha over the passage of a bill.
- ✓ A deadlock could have been taken place under any one of the following three:

- if the bill is rejected by the other House,
 - if the Houses finally disagreed on the amendments made to the bill,
 - if more than 6 months have elapsed from the date of the receipt of the bill by the other House without the bill being passed by it.
- ✓ In order to break any deadlock, the President can summon both the Houses to meet in a joint sitting for the purpose of deliberating and voting on the bill.
- ✓ Such session is **presided by the Speaker**, and in his/her absence, by the Deputy Speaker. If both Speaker and Deputy Speaker are absent then, it is presided by the Deputy Chairman of the Rajya Sabha. If any of the above is not present, any other member of the Parliament can preside by consensus of both the Houses.
- ✓ **Money Bill and Constitution Amendment Bill are the exceptions to Joint Sittings** because there are no provisions for a Joint Sittings of Parliament for these bills.

Facts/Terms Related to Sessions of Parliament		
Adjournment	Prorogation	Quorum
<ul style="list-style-type: none"> ■ Adjournment terminates the sitting of the House which meets again at the time appointed for the next sitting. ■ The postponement may be for a specified time such as hours, days or weeks. ■ If the meeting is terminated without any definite time/ date fixed for the next meeting, it is called Adjournment sine die. 	<ul style="list-style-type: none"> ■ Prorogation is the end of a session. ■ A prorogation puts an end to a session. ■ The time between the Prorogation and reassembly is called Recess. ■ Prorogation is the end of session and not the dissolution of the house (in case of Lok Sabha, as Rajya Sabha does not dissolve). 	<ul style="list-style-type: none"> ■ Quorum refers to the minimum number of the members required to be present for conducting a meeting of the house. ■ The Constitution has fixed one-tenth strength as quorum for both Lok Sabha and Rajya Sabha. ■ Thus, to conduct a sitting of Lok Sabha, there should be at least 55 members present while to conduct a sitting of Rajya Sabha, there should be at least 25 members present.

29. No Legal Right to Award (Polity - Legal Rights and Constitutional Rights)

Context: Delhi High Court has said that no person has a legal right to any award or medal and dismissed a CRPF personnel's petition seeking Police Medal for Gallantry (PMG) for an encounter with Maoists.

Legal Rights

- ✓ Legal rights apply to a collection of rights formulated within a government's legal structure. They are granted to the people of that specific state as privileges. Therefore, there are certain rights and privileges provided to citizens which are provided by the rules. According to the rules of the particular country, these rights are granted to the citizens of that country. In short, the freedoms granted to people by their governments are legal rights.
- ✓ These rights are thus established and upheld by the government's legal framework, which therefore ensures that the same parties may also redefine or change them. Similarly, these rights are not universal, differing from state to state, country to country, individual to individual, and even from time to time. Judicial privileges are protected under the ordinary statute, but by amending the law, they may be changed or revoked by the legislature.
- ✓ If violated, these rights will be dealt with by either of the ordinary courts that contradict the other two rights.

No Legal Right to an Award/Medal (According to the Delhi High Court Observation)

- ✓ National Awards in India are a part of the Indian Honours System.
- ✓ The most important civilian awards in India are the Bharat Ratna and the Padma Awards. In the military, the awards include like wartime gallantry awards, Param Vir Chakra, Maha Vir Chakra, Sarvottam Yudh Seva Medal, Uttam Yudh Seva Medal and so on. Literature Awards include like Jnanpith Award, Sahitya Akademi Award, Saraswati Samman, Bhasha Samman etc.

- ✓ There is **no legal right to an award or medal** but only a right for consideration of name for such award or medal, the Delhi High Court recently observed while dismissing a plea by a Central Reserve Police Force (CRPF) personnel challenging denial of Gallantry Award for his role in a 2019 operation between the CRPF and armed naxals.

Fundamental Rights under Article 18: Abolition of Titles

- ✓ No title, not being a military or academic distinction, shall be conferred by the State.
- ✓ No Citizen of India shall accept any title from any foreign State.
- ✓ No person who is not a citizen of India shall, while he holds any office of profit or trust under the State, accept without the consent of the President any title from any foreign State.
- ✓ No person holding any office of profit or trust under the State shall, without the consent of the President, accept any present, emolument, or office of any kind from or under any foreign State.
- ✓ The conferment of titles of “Bharat Ratna”, “Padma Vibhushan”, “Padma Shri”, etc. (introduced in 1954) are said to be **not prohibited under Article 18** as they merely denote State recognition of good work by citizens in the various fields of activity.
- ✓ It may be noted that Article 18 does not secure any fundamental right but imposes a restriction on executive and legislative power. Further, conferring of titles offended against the fundamental principle of equality of all citizens guaranteed by Article 14.

Important Case of Article 18

- ✓ In the case of *Balaji Raghavan v. Union of India*, AIR 1996, the court said that National awards aren't titles under clause 1 of Article 18. The court asked for setting up of guidelines while giving these awards as they are highly respected.
- ✓ The committee was set up by the Government of India in which it said that the awards should be given based on recommendations of names given by various state governments. These recommendations will be reviewed by the Centre government. After this committee, the names will be sent to Prime Minister's Office and finally sent to the President for the final verdict.
- ✓ It is important to remember that there are no guidelines given for the Bharat Ratna award.

30. Appointment of VCs in Universities(Polity - Role & Functions of the Governor)

Context: West Bengal Governor Jagdeep Dhankhar said that the State government had appointed Vice-Chancellors to 24 universities without his approval.

Appointment of VCs in Universities

- ✓ The Governor is the Chancellor of all State universities and appointment of Vice-Chancellor is usually made by the Governor on the recommendations of the State government.
- ✓ The appoints vice-chancellors (V-C) based on the recommendations of a search committee.
- ✓ The search committee would recommend a panel of five names to the Chancellor for the appointment of the V-C.
- ✓ If the Chancellor (Governor) doesn't approve the name, he had the power to seek fresh names from the same committee or a new committee.

About the Issue/Debate

- ✓ Recently, the question has arisen with regard to whether the Governor, who is also a constitutional head of the State, can make the appointment on his own, or he/she is supposed to act on the advice of the respective State Government.
- ✓ This remains a grey area, and there is a difference of opinion and the victims of any disagreement are the institution and the Vice Chancellor.
- ✓ The Chancellor as a non-political person is important as head of the institution, the Government is important as the funding agency.
- ✓ The Chief Minister or the Education Minister is also important as they represent the university in the legislature and remain accountable to it.

- ✓ Hence, it is possible that there could be a difference of opinion between the Governor and the Government, which of course is a matter of concern.
- ✓ It is clear, that, not all universities are able to adopt appointment procedures with little or no government involvement.
- ✓ Certain facts about the appointment of a VC should be given due consideration, such as, appointing a VC on the basis of political affiliation often means that he/she is viewed in general as more accountable to the government than to the university, and at the same time is a major cause for conflict between the academicians and students on the one hand, and the university administration on the other.
- ✓ Appointment on the basis of only academic merit might at least ensure that the chosen VC has some credibility in the eyes of the academic staff and the students of the universities.
- ✓ It's true that the Search / Selection Committee plays a significant role in the selection of the Vice Chancellor; yet the selected VC's performance in the universities vary from university to university. So the members of the Search Committee, who are given the privilege and honour of selecting and suggesting names for the appointment of VC are directly or indirectly responsible for the achievement of the university. Commitment to the quality and the objectives of the universities in particular and higher education system in general, are of course the deciding factors in selecting the right person.

31. Electoral Bonds (Polity & Governance - Transparency in Election Funding)

Context: Ahead of the Assembly elections in five States, the government approved issuance of the 19th tranche of electoral bonds that will be open for sale from January 1 to 10.

About the Electoral Bonds

- ✓ Announced in the 2017 Union Budget, electoral bonds are interest-free bearer instruments used to donate money anonymously to political parties.
- ✓ A bearer instrument does not carry any information about the buyer or payee and the holder of the instrument (which is the political party) is presumed to be its owner.
- ✓ The bonds are sold in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore, and the **State Bank of India (SBI) is the only bank authorised to sell them.**
- ✓ Donors can purchase and subsequently donate the bonds to their party of choice, which the party can then cash through its verified account within 15 days.
- ✓ There is no limit on the number of bonds an individual or company can purchase.
- ✓ SBI deposits bonds that a political party hasn't encashed within 15 days into the Prime Minister's Relief Fund.
- ✓ The move, the Centre had said, was part of a "conscious legislative policy" to further electoral reforms "to defeat the growing menace of black money, especially when the country is moving towards a cashless-digital economy".
- ✓ The government has been defending the scheme on the ground that it limits the use of cash in political funding, thus bringing more transparency, and provides a shield to donors by granting them anonymity.
- ✓ According to the government, "non-disclosure of the identity of the donor is the core objective of the scheme, which is in order to safeguard the donor from political victimisation" and the records of the purchaser are always available in the banking channel and may be retrieved as and when required by enforcement agencies".
- ✓ Donations through bonds received from a domestic company having a majority stake are permitted, subject to its compliance with KYC norms and FEMA guidelines.
- ✓ Therefore, the electoral bonds attempt at bringing greater transparency, ensuring KYC compliance and keeping an audit trail in comparison to the earlier opaque system of cash donations.

32. J&K Delimitation Commission (Social Sector - Government Schemes in News)

Context: The National Conference (NC) in a letter to the J&K Delimitation Commission, sought details of the agenda of the upcoming meeting with parties from the Union Territory scheduled for December 20 in New Delhi.

About the Delimitation Commission

- ✓ Delimitation is the act of redrawing boundaries of an Assembly or Lok Sabha seat to represent changes in population over time. This exercise is carried out by a Delimitation Commission, whose orders has the force of law and cannot be questioned before any court.
- ✓ The objective is to redraw boundaries (based on the data of the last Census) in a way so that the population of all seats, as far as practicable, be the same throughout the State. Aside from changing the limits of a constituency, the process may result in change in the number of seats in a state.

About the J&K Delimitation Exercise

- ✓ Delimitation exercises in J&K in the past have been slightly different from those in the rest of the country because of the region's special status — which was scrapped by the Centre in August 2019. Until then, delimitation of Lok Sabha seats in J&K was governed by the Constitution of India, but the delimitation of the state's Assembly seats was governed by the Jammu and Kashmir Constitution and Jammu and Kashmir Representation of the People Act, 1957.
- ✓ Assembly seats in J&K were delimited in 1963, 1973 and 1995. The last exercise was conducted by the Justice (retired) K K Gupta Commission when the state was under President's Rule and was based on the 1981 census, which formed the basis of the state elections in 1996.
- ✓ There was no census in the state in 1991 and no Delimitation Commission was set up by the state government after the 2001 census as the J&K Assembly passed a law putting a freeze on the fresh delimitation of seats until 2026.
- ✓ This freeze was upheld by the Supreme Court. The J&K Assembly, at that time, had 87 seats — 46 in Kashmir, 37 in Jammu and 4 in Ladakh. Twenty-four more seats are reserved for Pakistan-occupied Kashmir.
- ✓ The freeze, some political parties argue, has created inequity for Jammu region.
- ✓ After the abrogation of J&K's special status in 2019, delimitation of Lok Sabha and Assembly seats in the newly-created Union Territory would be as per the provisions of the Indian Constitution.
- ✓ As per the Jammu and Kashmir Reorganisation Bill, the number of Assembly seats in J&K would increase from 107 to 114, which is expected to benefit the Jammu region.

What is the status of the current Delimitation Commission

- ✓ Although the Commission was tasked to finish delimitation in a year, on March 4 this year, it was granted a year's extension. This was done on the request of the panel members since it couldn't make much progress due to the Covid-19-induced shutdown across the country.
- ✓ Moreover, J&K State Election Commissioner Sharma was appointed only on October 30 last year, following which he was busy with the District Development Council (DDC) polls in J&K that concluded last December. So, in effect, the Commission could start functioning properly, with all members in place, only this year.
- ✓ While 2011 Census will continue to remain the main factor in the delimitation exercise, the Commission will also consider geographical compactness, public conveniences, accessibility, communication facilities and topography of various areas.

33. Law Commission of India(Polity - Local Government)

Context: The Government has informed the Supreme Court that appointment of the Chairperson and Members of the 22nd Law Commission of India, the Government's top body to recommend crucial legislative reforms, is under consideration.

- ✓ The 22nd Law Commission was constituted by the Government on February 21, 2020. However, no progress has been made in the appointments till date and the short affidavit filed by the Law Ministry in the court does not explain the reasons for the day.

About the Law Commission of India

- ✓ Law reform has been a continuous process in India. After independence in 1947, there had been demand in Parliament and outside for establishing a Central Law Commission to recommend revision and updating of extant laws.
- ✓ The **first Law Commission after independence was set up in the year 1955**. Subsequent Commissions were constituted from time to time.
- ✓ The **21st Law Commission of India** was constituted **on 1st September, 2015** for a period of **three years**. The term of 21st Law Commission was **ended on 31st August, 2018**.
- ✓ Usually each Commission is constituted for a **term of three years**.
- ✓ The Law Commissions have been able to make important contribution towards the progressive development and codification of the laws in the country.
- ✓ To continue the work of legal reforms, **Twenty-second Law Commission of India has been constituted on 21st February, 2020** for a period of three years.

22nd Law Commission of India

Composition

- A full-time Chairperson;
- Four full-time Members (including Member-Secretary);
- Secretary, Department of Legal Affairs as ex officio Member;
- Secretary, Legislative Department as ex officio Member; and
- Not more than five part-time Members.

The **terms of reference** of the Twenty-second Law Commission is as under:

- ✓ **Review/Repeal of obsolete laws:**
 - ✓ Identify laws which are no longer needed or relevant and can be immediately repealed.
 - ✓ Identify laws which are not in harmony with the existing climate of economic liberalisation and need change.
 - ✓ Identify laws which otherwise require changes or amendments and to make suggestions for their amendment.
 - ✓ Consider in a wider perspective the suggestions for revision/amendment given by Expert Groups in various Ministries/Departments with a view to coordinating and harmonizing them.
 - ✓ Consider references made to it by Ministries/Departments through the Department of Legal Affairs, Ministry of Law and Justice, in respect of legislations having bearing on the working of more than one Ministry/Department.
 - ✓ Suggest suitable measures for quick redressal of citizens grievances, in the field of law.
- ✓ **Law and Poverty:**
 - ✓ Examine the laws which affect the poor and carry out post-audit for socioeconomic legislations.
 - ✓ Take all such measures as may be necessary to harness law and the legal process in the service of the poor.
- ✓ Keep under review the system of judicial administration **to ensure that it is responsive to the reasonable demands of the times and in particular to secure:**
 - ✓ Elimination of delays, speedy clearance of arrears and reduction in costs so as to secure quick and economical disposal of cases without affecting the cardinal principle that decision should be just and fair.
 - ✓ Simplification of procedure to reduce and eliminate technicalities and devices for delay so that it operates not as an end in itself but as a means of achieving justice.
 - ✓ Improvement of standards of all concerned with the administration of justice.
- ✓ **Examine the existing laws in the light of Directive Principles of State Policy** and to suggest ways of improvement and reform and also to suggest such legislations as might be necessary to

- implement the Directive Principles and to attain the objectives set out in the Preamble of the Constitution.
- ✓ **Examine** the existing laws with a view for **promoting gender equality** and suggesting amendments thereto.
 - ✓ **Revise the Central Acts of general importance** so as to simplify them and to remove **anomalies, ambiguities and inequities**.
 - ✓ Recommend to the Government measures for making the statute book up to date by repealing obsolete laws and enactments or parts thereof which have outlived their utility.
 - ✓ Consider and convey to the Government its views on any subject relating to law and judicial administration that may be specifically referred to it by the Government through Ministry of Law and Justice (Department of Legal Affairs).
 - ✓ Consider the requests for providing research to any foreign countries as may be referred to it by the Government through Ministry of Law and Justice (Department of Legal Affairs).
 - ✓ Examine the impact of globalization on food security, unemployment and recommend measures for the protection of the interests of the marginalised.

34. Public Account Committee (Polity - Parliament Committee)

Context: President Ram Nath Kovind inaugurated the centennial year celebration of the Public Accounts Committee (PAC) in the Central Hall of Parliament in December. The PAC is one of the most powerful financial committees of Parliament.

Significance

- ✓ Necessary to expertise to make a detailed scrutiny of all legislative measures and other matters.
- ✓ To examine the appropriation of accounts and the finance accounts of the Union government and any other account laid before the parliament.

About the Parliamentary Committees

- ✓ The Constitution of India makes a mention of these committees at different places, but without making any specific provisions regarding their position, tenure, functions etc. All these matters are dealt by the rules of two houses.
- ✓ The Parliamentary Committees may be classified into the following categories:
 - Financial Committees
 - Departmentally Related Standing Committees;
 - Other Parliamentary Standing Committees; and
 - Ad hoc Committees.

Financial Committees

Sl. No	Name of the Committee	Composition	Tenure	Election/ Nomination
1	Estimates Committee	30 (Lok Sabha)	1 Year	Elected by Lok Sabha
2	Public Accounts Committee	22 (15 LS & 7 RS)	1 Year	Elected by the Two Houses
3	Committee on Public Undertakings	22 (15 LS & 7 RS)	1 Year	Elected by the Two Houses

About the Public Accounts Committee

- ✓ This committee was setup first in 1921 under the provisions of the Government of India Act of 1919 and has since been in existence.
- ✓ At Present, it consists of 22 Members (15 from Lok Sabha and 7 from Rajya Sabha).
- ✓ The members are elected by the Parliament very year from amongst its members according to the principle of proportional representation by means of the single transferable vote.
- ✓ The term of the office of the members is one year.
- ✓ A minister cannot be elected as a member of the committee.
- ✓ The chairperson of the committee is appointed from amongst its members by the speaker.

- ✓ Until 1966-67, the chairperson of the committee belonged to the ruling party. However, since 1967 a convention has developed whereby the chairperson of the committee is selected invariably from the opposition.
- ✓ The function of the committee is to examine the annual audit reports of the Comptroller and Auditor General of India (CAG), which are laid before the Parliament by the President.
- ✓ The CAG submits three audit report to the President, namely, audit report on appropriation accounts, audit report on finance account and audit report on public undertakings.
- ✓ This Committee scrutinises the value for money—the economy, efficiency and effectiveness—of public spending and generally holds the government and its civil servants to account for the delivery of public services.
- ✓ It also examines public bodies and private companies providing public services.

What the Committee does Not Do

- ✓ The Committee looks at how rather than why public money has been spent and does not examine the merits of Government policy. That role is performed by the relevant Departmental Select Committee.
- ✓ The Committee does not look at the spending of individual local authorities, police forces or other local bodies. That role is performed by the relevant local auditor and/or elected scrutiny body.
- ✓ The Committee cannot assist in resolving individual cases. That is the role of constituency MPs.

35. Constitution (73rd Amendment) Act, 1992 (Polity - Local Government)

Context: OBC reservation debate in Maharashtra's Panchayat election.

About the Panchayat Raj Institutions

- ✓ Panchayat Raj Institutions are the vehicles of political empowerment of people at the grass root level for shaping their own destiny.
- ✓ A vast majority of people are living at the grassroot level in the rural and remote areas without any touch of modern day.
- ✓ A large section of such deprived people belong to Scheduled castes, Scheduled tribes and other Backward casts as also women in general at the grass root level.

About the the Constitution (73rd Amendment) Act, 1992

- ✓ Article 40 of the Constitution which enshrines one of the Directive Principles of State Policy lays down that the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.
- ✓ Accordingly, the Constitution (73rd Amendment) Act, 1992 has added a new part IX consists of provisions from Article 243 to 243 O and the Eleventh Schedule to the Constitution.
- ✓ The 73rd Amendment envisages the Gram Sabha as the foundation of the Panchayat Raj System to perform functions and powers entrusted to it by the State Legislatures. The amendment provides for a three tier Panchayat Raj System at the village, intermediate and district levels.
- ✓ **Mandatory provisions incorporated by the 73rd Amendment which include**

- Three tiers of Panchayats, at the village, intermediate and district levels.
- direct election to seats at all three tiers of Panchayats
- and indirect elections to offices of chairpersons of Block and District Panchayats
- 21 years to be the minimum age for contesting elections to panchayats
- Reservation of seats (both members and chairpersons) for SCs and STs in panchayats at all the three levels.
- Reservation of one-third seats (both members and chairpersons) for women in panchayats at all the three levels.
- Setting up of State Election Commissions and holding elections to Panchayats every five years.
- Fixing tenure of five years for Panchayat at all levels and holding fresh elections within six months in the event of supersession of any Panchayat.

- Organisation of Gram Sabha in a village or group of villages
- ✓ **Voluntary Provisions** incorporated by the 73rd Amendment which include
 - Giving representation to members of the Parliament (both the Houses) and the state legislature (both the Houses) in the Panchayat at different levels falling within their constituencies.
 - Providing reservation of seats (both members and chairpersons) for backward classes in Panchayat at any level.
 - Granting powers and authority to the Panchayat to enable them to function as institutions of self-government (in brief, making them autonomous bodies).
 - Devolution of powers and responsibilities upon Panchayat to prepare plans for economic development and social justice; and to perform some or all of the 29 functions listed in the 11th Schedule of the Constitution.
 - Granting financial powers to the Panchayat, that is, authorizing them to levy, collect and appropriate taxes, duties, tolls and fees.

36. Registrar-General of India [Polity- Population & Associated Issues]

Context: The maternal mortality ratio (MMR) of India has declined by 10 points, says a special bulletin released by the Registrar-General of India.

About Registrar-General & Census Commissioner of India

- ✓ Registrar General and Census Commissioner of India, founded in 1961 by Government of India Ministry of Home Affairs, for arranging, conducting and analysing the results of the demographic surveys of India including Census of India and Linguistic Survey of India.
- ✓ The position of Registrar is usually held by a civil servant holding the rank of Joint Secretary.
- ✓ The responsibility of conducting the decennial Census rests with the Office of the Registrar General and Census Commissioner.
- ✓ The Government of India decided in May 1949 to initiate steps for developing systematic collection of statistics on the size of population, its growth, etc., and established an organisation in the Ministry of Home Affairs under Registrar General and ex-Officio Census Commissioner, India.
- ✓ This organisation was made responsible for generating data on population statistics including Vital Statistics and Census.
- ✓ Later, this office was also entrusted with the responsibility of implementation of Registration of Births and Deaths Act, 1969 in the country.

Maternal Mortality Ratio (MMR)

- ✓ The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given time period per 100,000 live births during the same time period.
- ✓ It depicts the risk of maternal death relative to the number of live births and essentially captures the risk of death in a single pregnancy or a single live birth.

SOCIAL SECTOR & GOVERNANCE

37. Rights of Person with Disability Act (Social Sector - Vulnerable Sections)

Context: The Supreme Court has held that disciplinary proceedings against a person with mental disability amount to indirect discrimination.

Background

- ✓ After India signed and ratified the **United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)** in 2007, the process of enacting a new legislation in place of the Persons with Disabilities Act, 1995 (PWD Act, 1995) began in 2010 to make it compliant with the UNCRPD.
- ✓ After series of consultation meetings and drafting process, the Rights of PWD Act, 2016 (RPWD Act, 2016) was passed by both the houses of the Parliament. It was notified on December 28, 2016 after receiving the presidential assent.

- ✓ Principles stated to be implemented for empowerment of persons with disabilities (PWD) are respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons.
- ✓ The Act lays stress on non-discrimination, full and effective participation and inclusion in society, respect for difference and acceptance of disabilities as part of human diversity and humanity, equality of opportunity, accessibility, equality between men and women, respect for the evolving capacities of children with disabilities, and respect for the right of children with disabilities to preserve their identities.
- ✓ The principle reflects a paradigm shift in thinking about disability from a social welfare concern to a human rights issue.

The Rights of Persons with Disabilities Act, 2016

- ✓ In order to protect them from alienation, the (Equal Rights, Protection of Rights and Full Participation Act) came into force in 1996 this Act covered only 7 types of disability as it was seen it was lacking short of today's realities the new act tries to cover it.
- ✓ In the RPWD Act, 2016, the list has been expanded from 7 to 21 conditions and it now also includes cerebral palsy, dwarfism, muscular dystrophy, acid attack victims, hard of hearing, speech and language disability, specific learning disabilities, autism spectrum disorders, chronic neurological disorders such as multiple sclerosis and Parkinson's disease, blood disorders such as haemophilia, thalassemia, and sickle cell anaemia, and multiple disabilities.
- ✓ The nomenclature mental retardation is replaced by intellectual disability which is defined as "a condition characterized by significant limitation both in intellectual functioning (reasoning, learning, problem-solving) and in adaptive behavior which covers a range of every day social and practical skills including specific learning disabilities and autism spectrum disorders."
- ✓ The Act provides an elaborate definition of mental illness which is "a substantial disorder of thinking, mood, perception, orientation, or memory that grossly impairs judgment, behavior, and capacity to recognize reality or ability to meet the ordinary demands of life but does not include retardation which is a condition of arrested or incomplete development of mind of a person, especially characterized by subnormality of intelligence."
- ✓ Persons with benchmark disabilities are defined as those with at least 40% of any of the above disability. PWD having high support needs are those who are certified as such under section 58(2) of the Act.
- ✓ The RPWD Act, 2016 provides that "the appropriate Government shall ensure that the PWD enjoy the right to equality, life with dignity, and respect for his or her own integrity equally with others."

38. Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act (Polity- Govt acts)

Context: Special court acquits five in 2015 incident- murder of an engineering graduate belonging to the Scheduled Caste.

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act

- ✓ The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Act, 2015 seeks to ensure more stringent provisions for prevention of Atrocities against Scheduled Castes and the Scheduled Tribes.
- ✓ This legislation aims at preventing commission of offences by persons other than Scheduled Castes and Scheduled Tribes against Scheduled Castes and Scheduled Tribes.
- ✓ The Act extends to whole of India except Jammu & Kashmir.
- ✓ The Act is implemented by the respective State Governments and Union Territory Administrations, which are provided due central assistance under the Centrally Sponsored Scheme for effective implementation of the provisions of the Act.
- ✓ All offences listed in the Act are cognizable.
- ✓ The police can arrest the offender without warrant and start investigation into the case without taking any orders from the court.
- ✓ Section 4 of the act deals with punishment for neglect of duties by a public servant.
- ✓ Section 5 provides enhanced punishment for subsequent conviction.

Key features

- It punishes crimes against people belonging to Scheduled Castes and Tribes.
- It gives special protections and rights to victims.
- It sets up courts for fast completion of cases.
- The Act attempts to curb and punish violence against Dalits through three broad means
- It identifies what acts constitute atrocities.
- The Act calls upon all the states to convert an existing sessions court in each district into a Special Court to try cases registered under the POA.
- It creates provisions for states to declare areas with high levels of caste violence to be atrocity-prone and to appoint qualified officers to monitor and maintain law and order.

39. National Medical Commission (NMC) (Regulatory Organizations- Medical Education)

Context: The war in Ukraine forced thousands of students from India who are pursuing medicine in Ukraine to return to India. For about three decades now, Indian students have been heading out to Russia, China, Ukraine, Kyrgyzstan, Kazakhstan, the Philippines to pursue a medical degree because of lack of seats in public colleges in India & unaffordable fee in private sector.

About National Medical Commission (NMC)

- ✓ The National Medical Commission (NMC) which replaced the Medical Council of India (MCI), as the country's apex regulator of medical education and profession has come into existence in 2020.
- ✓ The NMC Act, which seeks for reforms in the medical education sector, provided for the setting up of NMC.
- ✓ The NMC comprises a chairman, 10 ex-officio members and 22 part-time members.

Objectives of NMC

- Improve access to quality and affordable medical education.
- Ensure availability of adequate and high quality medical professionals in all parts of the country
- Promote equitable and universal healthcare that encourages community health perspective and makes services of medical professionals accessible to all the citizens
- Encourages medical professionals to adopt latest medical research in their work and to contribute to research
- Objectively assess medical institutions periodically in a transparent manner
- Maintain a medical register for India
- Enforce high ethical standards in all aspects of medical services
- Have an effective grievance redressal mechanism.

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)

- The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) intends to rectify the imbalances in the availability of affordable healthcare facilities across different parts of the country and supplement facilities for quality medical education in the underserved states.
- The scheme was approved in March 2006.
- The main aim is to make tertiary healthcare services available in different parts of the country.
- The two components of the PMSSY are:
 - Setting up institutions in line with All India Institute Of Medical Sciences(AIIMS)
 - Upgradation of existing Government medical colleges/institutions
- The PMSSY has been implemented in multiple phases
- A total of 75 projects have been considered in different phases.

40. Atal Ranking of Institutions on Innovation Achievements (Higher Education)

Article: “*Atal innovation ranks puts IITs, IISc on top*” (Page 12)

Context: Seven Indian Institutes of Technology and the Indian Institute of Science, Bengaluru, are among the top 10 central institutions in promotion and support of innovation and entrepreneurship development, according to Atal Ranking of Institutions on Innovation Achievements (ARIIA) announced on Wednesday.

About the Atal Ranking of Institutions on Innovation Achievements (ARIIA)

The ARIIA is an initiative of the Union Education Ministry to rank systematically all major higher education institutions in India on indicators related to innovation, start-up and entrepreneurship development among students and faculty members.

Key parameters

- ✓ The ARIIA evaluates institutions on parameters such as patent filed and granted, number of registered students and faculty start-ups, fund generation by incubated start-ups, specialised infrastructure created by institutions to promote innovation and entrepreneurship.

ARIIA-2021 ranking

- ✓ **ARIIA-2021 ranking** has been announced in **various categories** which include Centrally funded technical institutions (IITs, NITs and so on), State universities, State standalone technical colleges, private universities, private standalone technical colleges, non-technical government and private universities and institutions. According to Ministry officials, this year the participation has almost doubled to 1,438 institutes and quadrupled over the first edition.
- ✓ The top rank has been bagged by the IIT, Madras followed by the IITs in Bombay, Delhi, Kanpur and Roorkee. The IISc has bagged the sixth position in the ranking followed by the IITs in Hyderabad and Kharagpur, the National Institute of Technology (NIT), Calicut, and the Motilal Nehru National Institute of Technology, Uttar Pradesh.

41. NIRF (Education Sector & Index/Reports in News)

Context: The NIRF's ranking of State-run and a centrally-funded higher education institution on a common scale is problematic.

- ✓ Recently, the Education Ministry launched the sixth edition of the NIRF in which IIT-Madras, IISc-Bangalore, and IIT-Bombay have emerged as the country's top three higher education institutions.

About the National Institute Ranking Framework (NIRF)

- ✓ National Institute Ranking Framework or NIRF is the first-ever effort by the government to rank higher education institutions (HEIs) in the country.
- ✓ Before NIRF's launch in 2016, Higher Educational Institutions were usually ranked by private entities, especially news magazines.
- ✓ While participation in the NIRF was voluntary in the initial years, it was made compulsory for all government-run educational institutions in 2018.
- ✓ This year, roughly 6,000 institutions have participated in NIRF — about twice the number in 2016.
- ✓ In order to be ranked, all education institutions are assessed on five parameters: teaching, learning and resources, research and professional practices, graduation outcomes, outreach and inclusivity, and perception.
- ✓ NIRF lists out best institutions across 11 categories – overall national ranking, universities, engineering, college, medical, management, pharmacy, law, architecture, dental and research.

42. Pradhan Mantri Ujjwala Yojana (PMUY) (Social Sector - Schemes in News)

Context: Reinstating subsidies on LPG refills for low-income households can help reverse families going back to polluting fuels.

About PMUY

- ✓ In May 2016, Ministry of Petroleum and Natural Gas (MOPNG), introduced the 'Pradhan Mantri Ujjwala Yojana' (PMUY) as a flagship scheme with an objective to make clean cooking fuel such as LPG available to the rural and deprived households which were otherwise using traditional cooking fuels such as firewood, coal, cow-dung cakes etc.
- ✓ Usage of traditional cooking fuels had detrimental impacts on the health of rural women as well as on the environment.
- ✓ The scheme was launched on 1st May 2016 in Ballia, Uttar Pradesh

- ✓ The target under the scheme was to release 8 Crore LPG Connections to the deprived households by March 2020.
- ✓ Under the Union Budget for FY 21-22, provision for release of additional 1 Crore LPG connections under the PMUY scheme has been made. In this phase, special facility has been given to migrant families.

About Initiative for Sustainable Energy Policy (ISEP)

- ✓ It is a research collective that uses cutting-edge social and behavioral science to solve this global challenge.
- ✓ Centered at Johns Hopkins University, our research collective identifies and tests innovative policy solutions for the global energy transition that advance three central goals: impact, justice, and growth.

About Compressed Bio Gas (CBG)

- ✓ Waste / Bio-mass sources like agricultural residue, cattle dung, sugarcane press mud, municipal solid waste and sewage treatment plant waste, etc. produce bio-gas through the process of anaerobic decomposition.
- ✓ The biogas is purified to remove hydrogen sulfide (H₂S), carbon dioxide (CO₂), water vapor and compressed as Compressed Bio Gas (CBG), which has methane (CH₄) content of more than 90%
- ✓ CBG has calorific value and other properties similar to CNG and hence can be utilized as green renewable automotive fuel. Thus it can replace CNG in automotive, industrial and commercial areas, given the abundance biomass availability within the country

About SATAT Scheme

- ✓ The SATAT Scheme (Sustainable Alternative Towards Affordable Transportation) is an initiative by the government of India with the objective of setting up Compressed Biogas production plants, and make it available for market use for automotives by inviting expression of interest through potential investors
- ✓ The Scheme was launched in October 2018 by the Ministry of Petroleum and Natural Gas in collaboration with several oil related public sector units like Bharat Petroleum Corporation and Hindustan Petroleum Corporation.
- ✓ The scheme will help to maintain India's commitment towards reducing carbon emissions, fulfilling agreements such as the Paris Agreement.

43. PM POSHAN (Mid-Day Meal Scheme) (Social Sector - Government Schemes in News)

Context: The state government in Rajasthan has come up with a unique scheme for providing regular or work-from-home employment to the women who have had to quit their earlier jobs because of family reasons. The "Back to Work" scheme will be operated with the help of the private sector.

About the PM Poshan Scheme

- ✓ The Cabinet Committee on Economic Affairs (CCEA) chaired by Prime Minister Narendra Modi on September 29, 2021, approved a new meal scheme known as 'Pradhan Mantri Poshan Shakti Nirman' scheme (PM Poshan Scheme) for government and government-aided schools for the next five years (from 2021-22 to 2025-26) with the financial outlay of Rs 1.31 trillion, and the existing 'Mid Day Meal' scheme will also be included in this programme.
- ✓ Earlier, the scheme was known as the 'National Scheme for Mid Day Meal in Schools', popularly known as the 'Mid Day Meal' scheme.

Features

- ✓ It is a centrally-sponsored scheme, that will provide hot-cooked meals to students of elementary classes in schools and it is expected to benefit about 118 million children studying in classes 1 to 8 across the country, as per the government.
- ✓ The PM Poshan Scheme also cover students of balvatikas (children in the 3-5 year age group) from pre-primary classes.

- ✓ The social audit of the scheme has been made mandatory in all the districts of the country and a special provision is made for providing supplementary nutrition items to children in districts with a high prevalence of Anemia and other health-related ailments.
- ✓ The Centre has directed the states and the UTs to switch to Direct Benefit Transfer (DBT) system for providing compensation to the cooks and helpers working under the scheme.
- ✓ Use of locally-grown nutritional food items will be encouraged from "school nutrition gardens" for boosting the local economic growth, cooking competitions will be conducted to promote ethnic cuisine and innovative menus and will also include involvement of Farmers Producer Organizations (FPO) and Women Self Help Groups in the implementation of the scheme.
- ✓ The revamped scheme essentially does away with the restriction on the part of the Centre to provide funds only for wheat, rice, pulses and vegetables. If a state decides to add any component like milk or eggs to the menu, the Centre does not bear the additional cost. Now that restriction has been lifted.
- ✓ The scheme has a provision for supplementary nutrition for children in aspirational districts and those with high prevalence of anaemia.

Tithi Bhojan

- ✓ Under the PM Poshan Scheme, the concept of Tithi Bhojan will be promoted extensively which is a **community participation programme where people provide special food to children on special occasions and festivals.**

What is mid-day meal?

- ✓ The mid-day meal scheme was launched by the central government in 1995 to provide free cooked meals to children in primary schools (classes 1-5; age 6–10 years).
- ✓ Initially, states did not participate in the scheme, but between 1999 and 2004, the programme's coverage increased manifold, largely due to an order from the Supreme Court of India directing state governments to provide cooked mid-day meals in primary schools.
- ✓ It will provide a new shape to the policy to enhance the nutrition levels of schoolchildren.
- ✓ The National Education Policy has also recommended that pre-school education should be formalised. This is a step towards that.
- ✓ With the introduction of DBT system, it will also help to prevent leakages and bring more transparency in its implementation.

44. Mission Olympic Cell (MOC) (Sports Initiatives in News)

Context: The Union Sports Ministry has strengthened the Mission Olympics Cell (MOC) with more athletes to make it even more “athlete centric” in its attempt to best prepares the elite athletes for the Paris Olympics through the Target Olympic Podium Scheme (TOPS).

About the Mission Olympic Cell (MOC)

- ✓ Mission Olympic Cell is a body set up by the Sports Authority of India to select athletes who are to get assistance under the Target Olympic Podium Scheme.
- ✓ The MOC is under the Chairmanship of the Director General, Sports Authority (DG, SAI).
- ✓ The Committee meetings are attended by representatives of respective National Sports Federations (NSFs) and Project Officers of the SAI besides other members.
- ✓ The idea of the MOC is to debate, discuss and decide the processes and methods so that the athlete receives best assistance.
- ✓ The MOC also focuses on selection, exclusion and retention of athletes, coaches, training institutes that can receive TOPS assistance.
- ✓ Some of the functions that the MOC are enumerated below –
 - To approve customized programs for athletes chosen under the TOP Scheme.
 - To recommend financial disbursement for the customized programs.
 - To support, monitor and review progress of athletes in accordance with the training programs.
 - To set a regular reporting structure on the athletes' training program.
 - To take decisions on sudden and unanticipated requirements/needs of athletes.

- To communicate regularly with the athletes on their progress, requirements and perspectives.
- To engage implementation partner agencies to carry out/execute any or all the above functions.
- To ensure documentation/contractual obligations of beneficiaries.
- To deliver sponsor/commercial partner/media commitment under the NSDF TOP Scheme

Target Olympic Podium Scheme(TOP)

- ✓ It is a flagship program of the Ministry of Youth Affairs and Sports which is an attempt to provide assistance to India's top athletes.
- ✓ The Scheme looks to add a premium to the preparations of these athletes so that they can win Olympic medals in 2020 and 2024 Olympics.
- ✓ Under the Scheme, the Department of Sports shall identify athletes who are potential medal winners in the 2020 / 2024 Olympics.
- ✓ The idea of the Scheme is to also keep an eye in the future and fund a Developmental Group of Athletes who are medal prospects for the Olympic Games in Paris in 2024 and Los Angeles Games in 2028.

INTERNATIONAL RELATIONS/ORGANIZATIONS/POLICIES

45. International Solar Alliance (ISA) (International Institutions in News)

Context: The UN General Assembly has conferred Observer Status on the International Solar Alliance (ISA).

About International Solar Alliance (ISA)

- ✓ The International Solar Alliance (ISA) is an action-oriented, member-driven, collaborative platform for increased deployment of solar energy technologies as a means for bringing energy access, ensuring energy security, and driving energy transition in its member countries.
- ✓ The ISA strives to develop and deploy cost-effective and transformational energy solutions powered by the sun to help member countries develop low-carbon growth trajectories, with particular focus on delivering impact in countries categorized as Least Developed Countries and the Small Island Developing States.
- ✓ The ISA was conceived as a **joint effort by India and France** to mobilize efforts against climate change through deployment of solar energy solutions. It was conceptualized on the sidelines of the 21st Conference of Parties (**COP21**) to the United Nations Framework Convention on Climate Change (UNFCCC) **held in Paris in 2015**.
- ✓ The primary **objective** of the alliance is to work for efficient consumption of solar energy to reduce dependence on fossil fuels.
- ✓ The launching of such an alliance in Paris also sends a strong signal to the global communities about the sincerity of the developing nations towards their concern about climate change and to switch to a low-carbon growth path.
- ✓ The ISA is guided by its '**Towards 1000**' **strategy** which aims to mobilise USD 1,000 billion of investments in solar energy solutions by 2030, while delivering energy access to 1,000 million people using clean energy solutions and resulting in installation of 1,000 GW of solar energy capacity. This would help mitigate global solar emissions to the tune of 1,000 million tonnes of CO₂ every year.
- ✓ With the amendment of its Framework Agreement in 2020, all member states of the United Nations are now eligible to join the ISA. At present, 101 countries are signatories to the ISA Framework Agreement, of which 80 countries have submitted the necessary instruments of ratification to become full members of the ISA.
- ✓ The UN General Assembly has conferred Observer Status on the ISA).
- ✓ The ISA is **headquartered in Gurugram, India**.

46. NATO (IR: International Institutions/Groupings/Allies)

Context: Russia and Ukraine Conflict

About the NATO

- ✓ The North Atlantic Treaty Organization was created in 1949 by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.
- ✓ NATO promotes democratic values and enables members to consult and cooperate on defence and security-related issues to solve problems, build trust and, in the long run, prevent conflict.
- ✓ NATO is committed to the peaceful resolution of disputes. If diplomatic efforts fail, it has the military power to undertake crisis-management operations. These are carried out under the collective defence clause of NATO's founding treaty - Article 5 of the Washington Treaty or under a United Nations mandate, alone or in cooperation with other countries and international organisations.
- ✓ NATO is an alliance of countries from Europe and North America. It provides a unique link between these two continents, enabling them to consult and cooperate in the field of defence and security, and conduct multinational crisis-management operations together.

NATO Members

- ✓ The most important players in the North Atlantic Treaty Organization are the member countries themselves.
- ✓ Its original members were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- ✓ Joining the original signatories were Greece and Turkey (1952); West Germany (1955; from 1990 as Germany); Spain (1982); the Czech Republic, Hungary, and Poland (1999); Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia (2004); Albania and Croatia (2009); Montenegro (2017); and North Macedonia (2020).
- ✓ At present, NATO has 30 members.
- ✓ Provision for enlargement is given by Article 10 of the North Atlantic Treaty.
- ✓ Article 10 states that membership is open to any “European State in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area”.
- ✓ Any decision to invite a country to join the Alliance is taken by the North Atlantic Council, NATO’s principal political decision-making body, on the basis of consensus among all Allies.

Warsaw Pact

Context:

Warsaw pact in the context of Russian invasion of Ukraine.

About Warsaw pact

- ✓ The Warsaw Treaty Organization, commonly known as the Warsaw Pact, was a collective defense treaty signed in Warsaw, Poland, between the Soviet Union and seven other Eastern Bloc socialist republics of Central and Eastern Europe (Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania) in May 1955, during the Cold War.
- ✓ It was created in reaction to the integration of West Germany into NATO in 1955 and represented a Soviet counterweight to NATO.
- ✓ The revolutions that swept Eastern Europe beginning in 1989 resulted in the end of the pact.
- ✓ After Poland withdrew from it the next country was East Germany, which left after the reunification of Germany.
- ✓ When the Soviet Union disintegrated in 1991, NATO promised Russia that if it terminates the Warsaw Pact, NATO, at any time in the future, will not include those countries of Eastern Europe in its military organization which were previously part of the Soviet Union.
- ✓ Russia ended this pact after the dissolution of the Soviet Union in 1991 in the hope that NATO would also fulfill its promise, but NATO did not fulfill its promise.
- ✓ Rather, it included countries like Estonia, Latvia, Poland and Romania as a member of NATO, which were once part of the Soviet Union under the Warsaw Pact.

47. European Union (IR: International Institutions/Groupings/Allies)

Context: Russia – Ukraine Conflict

About European Union

- ✓ The European Union (EU) is a political and economic grouping of 27 European countries committed to shared democratic values.
- ✓ It is one of the world's most powerful trade blocs.
- ✓ The objectives of the European Union are to establish European citizenship, ensure freedom, justice and security, promote economic and social progress, and assert Europe's role in the world.
- ✓ Membership is open to any country with a democratic government, a good human rights record and sound economic policies.
- ✓ The capital of the European Union is Brussels, Belgium.
- ✓ The euro is the shared official currency of 19 EU members known collectively as the euro area or eurozone.
- ✓ The European Economic Community, launched in 1957, became the European Union in 1993 with the adoption of the Maastricht Treaty deepening the integration of members' foreign, security and internal affairs policies.
- ✓ The EU established a common market the same year to promote the free movement of goods, services, people, and capital across its internal borders.
- ✓ The **Treaty of Lisbon** amends the Treaty on European Union to explicitly recognize for the first time the member states' right to withdraw from the union.
- ✓ In the 2016 'Brexit' referendum, the U.K. voted to leave the EU.
- ✓ The UK officially left the EU in 2020.
- ✓ Between Feb. 28 and March 3, 2022, three countries—Georgia, Moldova, and Ukraine submitted applications for EU membership in response to Russia's invasion of Ukraine.

48. India-China Border Dispute (India & China Relations)

Context: China's Ministry of Civil Affairs said it had issued "standardised" names for 15 places in Arunachal Pradesh, to be used henceforth on official Chinese maps, part of broader recent moves by Beijing to step up its territorial claims.

About the India-China Border Dispute

- ✓ The main conflict between India and China concerns the differences over the borders between two countries in different regions especially Ladakh and Arunachal Pradesh.
- ✓ The issue traces its roots back to British Imperial times. As more and more areas came under British control, it sought to fix its boundaries. In the process of their settlement of borders with China, there always remained a conflict and this conflict continued to post their exit.
- ✓ Today's India-China border also known as the Line of Actual Control (LAC), is recognised by neither of countries and this conflict is particularly intense in Ladakh and Arunachal Pradesh.
- ✓ Aksai Chin, which lies on the eastern side of LAC, is currently under Chinese control but is claimed by India as a part of its recently created union territory of Ladakh. This region is strategically very important.
- ✓ Galwan Valley near the Line of Actual Control (which is the de facto border between China and India on the eastern side of Ladakh) is where the tensions were high between neighbouring nations last year.



History of the conflict

- ✓ The conflict in this region traces its history to the state of Jammu and Kashmir under Dogra rule.
- ✓ Following the treaty of Amritsar, the Jammu and Kashmir including Ladakh were transferred to Gulab Singh.
- ✓ Aksai Chin region was put into the newly formed state by William Johnson, who surveyed the region in 1897.

- ✓ The boundary line such created came to be known as the Johnson line. This line was preferred by Maharaja since this line increased the borders of his state.
- ✓ In around 1899, the Britishers revised their proposed borders with China in this region. This time they put the Aksai Chin region on the Chinese side.
- ✓ The main reason behind this move was to keep Russians away. This line came to be known as the Macartney-Macdonald line.
- ✓ Following the exit of the British from the subcontinent, this region became the focus of a dispute between two newly formed nations - India and Pakistan. Both of the countries claimed the whole of the princely state.
- ✓ While Pakistan claimed it on the basis of the Muslim majority population in the state, India claimed it on the basis of accession signed by its last ruler.
- ✓ But China's part in this dispute was totally different. With China, the dispute was regarding the borders. While India claimed the Johnson line to be their border with China in the region, China claimed the Macartney-Macdonald line to be one.
- ✓ For China, this issue became more important following the taking over of Tibet. Since Aksai Chin connected the Xingjiang region with Tibet.
- ✓ After the first Indo-Pak war in 1947, Pakistan took control of what is today called Pakistan Occupied Kashmir (POK) and the Gilgit Baltistan region of the former princely state. And India controlled the rest of the state.
- ✓ During this time even though India claimed all of Ladakh, it did not control all of it.

About the Dispute over Arunachal Pradesh

- ✓ Arunachal Pradesh, known as the North East Frontier Agency (NEFA) until 1972, is the largest state in the northeast and shares international borders with Tibet to the north and northwest, Bhutan towards the west and Myanmar to the east.
- ✓ Britishers tried to settle the borders in the 1914 Shimla Convention. It was a border agreement between Tibet and the Britishers. Since Tibet wasn't part of China back then, China wasn't a part of this agreement.
- ✓ In this convention, borders between both countries were agreed upon it came to be known as McMohan Line. It is this line which is regarded as official borders by India and not China.
- ✓ China claims many areas south as part of its territory. The conflict on this side came into prominence after China occupied Tibet and started sharing border with India on this side as well.
- ✓ But again there was no one accepted borders. While India recognised the McMohan line based on Shimla Convention, China claimed there was no agreed border arrangement and claimed many areas on historic grounds.
- ✓ In the 1962 war, China also crossed over from this side but the LAC over the eastern side especially in Arunachal Pradesh is still more or less as per the McMohan Line.
- ✓ It is China's claim of Lands beyond this line that makes the situation complicated for both countries.

Strategic Significance

- ✓ Arunachal Pradesh is the closest location for India to target China with missiles. Also, Arunachal is the best location for India to deploy a multi-layered air defence system for possible attacks from China. Thus control over Arunachal will give China a strategic advantage.

49. G-20 (IR: International Institutions/Groupings)

Context: India joins G20's Troika with Indonesia and Italy. Troika refers to the top grouping within the G20 that consists of the current, previous and the incoming presidencies — Indonesia, Italy and India.

About the G-20

- ✓ The Group of 20, also called the G-20, is a group of finance ministers and central bank governors from 19 of the world's largest economies, including those of many developing nations, along with the European Union.

- ✓ Formed in 1999, the G-20 promotes global economic growth, international trade, and regulation of financial markets.
- ✓ The G20 is a strategic multilateral platform connecting the world's major developed and emerging economies. The G20 holds a strategic role in securing future global economic growth and prosperity.
- ✓ Together, the G20 members represent more than 80 percent of world GDP, 75 percent of international trade and 60 percent of the world population.
- ✓ Starting in 1999 as a meeting for the finance minister and central bank governors, the G20 has evolved into a yearly summit involving the Head of State and Government. The agenda and activities of the G-20 are established by its rotating Presidencies, in cooperation with the membership.
- ✓ In addition to that, the Sherpa meetings (in charge of carrying out negotiations and building consensus among Leaders), working groups, and special events are also organized throughout the year.

Membership of the Group of 20 (G-20)

- ✓ Along with the members of the G-7 (France, Germany, Italy, Japan, the United States, the United Kingdom, and Canada), 12 other nations currently comprise the G-20: Argentina, Australia, Brazil, China, **India**, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea, and Turkey.

Russia and the Group of 20 (G-20)

- ✓ In 2014, the G-7 and G-20 took different approaches to Russia's membership after the country made military incursions into Ukraine and eventually annexed the Ukrainian territory of Crimea.
- ✓ G-7, which Russia had formally joined in 1998 to create the G-8, suspended the country's membership in the group; Russia subsequently decided to formally leave the G-8 in 2017.
- ✓ Though Australia, host of the 2014 G-20 summit in Brisbane, proposed to ban Russia from the summit over its role, Russia has remained a member of the larger group, in part because of strong support from Brazil, India, and China, who together with Russia are collectively known as the BRIC nations.

Recent Summit

- ✓ **16th G20 Summit 2021:** The Summit concluded on October 31, 2021, with the adoption of the '**Rome Declaration**' and the commitment to the Paris Agreement by the G20 leaders.
- ✓ Prime Minister Modi, along with G20 leaders, was able to have elaborate discussions on issues of global significance.
- ✓ The 17th G20 Heads of State and Government Summit will take place in October 2022 in Bali, Indonesia.
- ✓ India will assume the G20 presidency on December 1, 2022 from Indonesia, and will convene the G20 Leaders' Summit for the first time in India in 2023.

50. Organization of Islamic Cooperation (OIC) (IR - International Institutions and Summits)

Context: Islamic countries scrambled on Sunday to find ways to help Afghanistan avert an imminent economic collapse they say would have a “horrendous” global impact.

About the Organization of Islamic Cooperation (OIC)

- ✓ The Organisation of Islamic Cooperation (OIC) is the second largest organization after the United Nations with a membership of 57 states spread over four continents.
- ✓ The Organization is the collective voice of the Muslim world. It endeavors to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world.
- ✓ The Organization was established upon a decision of the historical summit which took place in Rabat, Kingdom of Morocco on 25th September 1969.
- ✓ In 1970 the first ever meeting of Islamic Conference of Foreign Minister (ICFM) was held in Jeddah which decided to establish a permanent secretariat in Jeddah headed by the organization's secretary general.

- ✓ The first OIC Charter was adopted by the 3rd ICFM Session held in 1972. The Charter laid down the objectives and principles of the organization and fundamental purposes to strengthen the solidarity and cooperation among the Member States.
- ✓ Over the last 40 years, the membership has grown from its founding members of 30 to 57 states.
- ✓ The majority of its member states are Muslim-majority countries, while others have significant Muslim populations, including several African and South American countries. While the 22 members of the Arab League are also part of the OIC, the organisation has several significant non-Arab member states, including Turkey, Iran and Pakistan.
- ✓ It also has five observer members, including Russia and Thailand.
- ✓ The Organization has consultative and cooperative relations with the UN and other inter-governmental organizations to protect the vital interests of the Muslims and to work for the settlement of conflicts and disputes involving Member States.
- ✓ The new programme OIC-2025 is anchored in the provisions of the OIC Charter and focuses on 18 priority areas with 107 goals. The priority areas include issues of Peace and Security, Palestine and Al-Quds, Poverty Alleviation, Counter-terrorism, Investment and Finance, Food Security, Science and Technology, Climate Change and Sustainability, Moderation, Culture and Interfaith Harmony, Empowerment of Women, Joint Islamic Humanitarian Action, Human Rights and Good Governance, among others.
- ✓ There are also specialized organs under the banner of the OIC including the Islamic Development Bank and the Islamic Educational, Scientific and Cultural Organization, as well as subsidiary and affiliate organs that play a vital role in boosting cooperation in various fields among the OIC member states.
- ✓ The Secretary General is elected by the Council of Foreign Ministers for a period of five years, renewable once only. The Secretary-General is elected from among nationals of the Member States in accordance with the principles of equitable geographical distribution, rotation and equal opportunity for all Member States with due consideration to competence, integrity and experience.
- ✓ The OIC holds an Islamic Summit once every three years. At the summit, heads of state discuss ways to achieve the charter's objectives and make policy decisions that concern its member states.
- ✓ The latest summit of the OIC was held at Islamabad on December 19.
- ✓ **India is not a member of OIC.**

51. SAGAR Initiative (IR & Maritime Security)

Context: An Indian Navy sailor deployed onboard INS Kesari in Mozambique was airlifted by a P-8I maritime patrol aircraft after he needed urgent medical attention, the Navy said on Thursday. As part of Mission Sagar, INS Kesari was deployed to Maputo, Mozambique, for delivering food aid, two FICs and self-defence equipment.

Strategic Significance

- ✓ Indian Ocean carries half of the world's container ships, one third of the world's bulk cargo traffic and two thirds of the world's oil shipments, making it the most important sea route.
- ✓ Also, the Indian Ocean Island countries form the part of Indian Ocean Sea Lines of Communication (SLOCs).
- ✓ Sea lines of communication are very important for state's economy and region's economic health. They are very important for commercial trade routes and also for military movements.
- ✓ Helping the Indian Ocean Island Nations and developing positive relations with them is strategically significant for India.

SAGAR (Security and Growth for All in the Region) Initiative

- ✓ Looking at such economic and strategic importance of Indian Ocean islands as also recognized by other nations, SAGAR (Security and Growth for All in the Region) was launched by India in 2015.

- ✓ The main purpose for SAGAR was tackling regional issues like providing humanitarian help to maritime neighbors and counter non-state actors like pirates in the Indian Ocean.
- ✓ 2004 tsunami, repeated earthquakes, threat of rising sea water, water crisis of Maldives and Indian help that followed shows the importance of this initiative.
- ✓ The overall objective for India is to gain legitimacy as the sole regional power in the Indian Ocean with the capability of providing humanitarian relief and security to the entire region.
- ✓ The Sagar Initiative, launched in 2015, works in tandem with Act East Policy, Project Sagarmala and Project Mausam.
- ✓ Covid-19 gave an important opportunity to India to extend its relations with the Indian Ocean Island Nations and through Mission Sagar, the concept of SAGAR Initiative of 2015 got strengthened.
- ✓ With the amount of lives saved, capacity build and equipment supplied, Mission Sagar became an important milestone in the relations.
- ✓ The recent acceptance of India into the Indian Ocean Commission, as an observer state, in the presence of China, shows that India has gone a long way since the launch of SAGAR in 2015.
- ✓ Through Indian Ocean Commission observer status, India can have a say in another choke point of Indian Ocean—the Mozambique channel.
- ✓ Mission Sagar can be extended to the Gulf countries and Indian Ocean stakeholder states to increase Indian legitimacy and build a positive image.

Mission SAGAR 2020

- ✓ Mission Sagar was launched on 10 May, 2020 to provide Covid-19 related assistance to the island nations of Maldives, Mauritius, Madagascar, Comoros and Seychelles.
- ✓ While on the mission, INS Kesari delivered essential food items, medicines, Ayurvedic medicines and also deployed Medical Assistance Teams to Maldives, Mauritius, Seychelles, Madagascar and Comoros. The aid also included the deployment of medical assistance teams of the Indian Navy in multiple locations during the initial days of the coronavirus pandemic.

About the INS Kesari

- ✓ INS Kesari is primarily an amphibious warfare ship of Shardul-class ships of the Navy and has been used in versatile roles in the past, including search and relief operations.

52. BIMSTEC [IR- Groupings & Agreements involving India]

Context: As world attention remains focused on the war in Ukraine, leaders of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) summit was held recently. It was hosted by Sri Lanka, the current BIMSTEC chair. This year is the 25th Anniversary of BIMSTEC.

About BIMSTEC

- ✓ Founded in 1997, the seven-member BIMSTEC, which includes the littoral states of India, Bangladesh, Sri Lanka, Myanmar, Thailand and the land-locked states of Nepal and Bhutan.
- ✓ This sub-regional organization came into being on 6 June 1997 through the Bangkok Declaration.
- ✓ BIMSTEC organizes inter-governmental interactions through Summits, Ministerial Meetings, Senior Officials Meetings and Expert Group Meetings and through BIMSTEC Working Group (BWG) based in Bangkok.
- ✓ Unlike many other regional groupings, BIMSTEC is a sector-driven cooperative organization.
- ✓ BIMSTEC has identified 14 pillars for special focus.
- ✓ These are trade and investment, transport and communication, energy, tourism, technology, fisheries, agriculture, public health, poverty alleviation, counter terrorism and transnational crime, environment and disaster management, people-to-people contact, cultural cooperation and climate change.
- ✓ India is lead country for Transport & Communication, Tourism, Environment & Disaster Management and Counter Terrorism & Transnational Crime.
- ✓ The regional group constitutes a bridge between South and South East Asia and represents a reinforcement of relations among these countries.



- ✓ BIMSTEC has also established a platform for intra-regional cooperation between SAARC and ASEAN members.
- ✓ The BIMSTEC region is home to around 1.5 billion people which constitute around 22% of the global population with a combined gross domestic product (GDP) of 2.7 trillion economies.

Threats faced by the region

- ✓ According to the Food and Agriculture Organization of the United Nations (FAO), the Bay of Bengal is one of IUU fishing hotspots in the Asia-Pacific.
- ✓ A Bay of Bengal Maritime Dialogue (BOBMD) organised recently by the Centre for Humanitarian Dialogue and the Pathfinder Foundation brought together government officials, maritime experts, and representatives of prominent think tanks from Sri Lanka, India, Bangladesh, Myanmar, Thailand and Indonesia.
- ✓ The pressing challenges that confront the Bay of Bengal include the emergence of a dead zone with zero oxygen where no fish survive; leaching of plastic from rivers as well as the Indian Ocean; destruction of natural protection against floods such as mangroves; sea erosion; growing population pressure and industrial growth in the coastal areas and consequently, huge quantities of untreated waste flow.
- ✓ Security threats such as terrorism, piracy and tensions between countries caused by the arrests of fishermen who cross maritime boundaries are additional problems.

INDIAN ECONOMY AND AGRICULTURE

53. Repo Rate & Reverse Repo Rate (Banking Sector - Monetary Policies)

Context: The Reserve Bank of India (RBI) has increased the amount of variable rate reverse repo (VRRR) auctions in December, as it is shifting out of the fixed-rate overnight reverse repo auction and re-establishing VRRR as the main liquidity management operations.

About the Repo Rate (Repurchasing Option' Rate)

Repo rate refers to the rate at which commercial banks borrow money by selling their securities to the Central bank of our country i.e Reserve Bank of India (RBI) to maintain liquidity, in case of shortage of funds or due to some statutory measures.

Who decides the Repo Rate?

- ✓ The Monetary Policy Committee (MPC) along with the RBI governor who is the chairperson of the committee decides the repo rate based on the inflation and fiscal projections. They together formulate, administer and modify the policy rates. The RBI changes it according to the liquidity crunch or surplus in the country.

How RR Functions?

- ✓ Banks take loans from RBI pledging securities and repurchase them the following day. The loan is an overnight fund for banks undergoing a cash crunch. Although the loan at RR is usually for 1 day, banks may need it for more than a day.
- ✓ The one-day loan is at Overnight Repo while more than that is a Term Repo. Term Repo is also called Variable Rate Term Repo.
- ✓ RBI normally announces auction for Term Repo as it can be for 7, 14, or 28 days.
- ✓ When inflation is higher than RBI's standards, it increases the rate to check it. RBI increases the RR to infuse liquidity with a lower cost of funds for borrowers.

About Reverse Repo Rate

- ✓ Reverse Repo Rate is a mechanism to absorb the liquidity in the market, thus restricting the borrowing power of investors.
- ✓ Reverse Repo Rate is when the RBI borrows money from banks when there is excess liquidity in the market.
- ✓ The banks benefit out of it by receiving interest for their holdings with the central bank.
- ✓ During high levels of inflation in the economy, the RBI increases the reverse repo. It encourages the banks to park more funds with the RBI to earn higher returns on excess funds. Banks are left with lesser funds to extend loans and borrowings to consumers.

Implications of Repo rate

✓ Controlling in inflation

- During high levels of inflation, RBI makes strong attempts to bring down the flow of money in the economy. One way to do this is by increasing the repo rate.
- This makes borrowing a costly affair for businesses and industries, which in turn slows down investment and money supply in the market.
- As a result, it negatively impacts the growth of the economy, which helps in controlling inflation.
- In the case of deflation, RBI decreases the repo rate.

✓ Increasing Liquidity

- On the other hand, when the RBI needs to pump funds into the system, it lowers the repo rate.
- Consequently, businesses and industries find it cheaper to borrow money for different investment purposes.
- It also increases the overall supply of money in the economy.
- This ultimately boosts the growth rate of the economy.

What is accommodative stance?

- ✓ An accommodative stance means that the central bank is willing to loosen the monetary conditions in the economy further, by expanding the supply of money to support slowing economic growth (as measured by the GDP).
- ✓ When the economy slows, the RBI can implement an accommodative monetary policy where it cuts the benchmark policy rates to stimulate the economy, by reducing the cost of borrowing.

About the Variable Rate Reverse Repo (VRRR)

- ✓ Considering the liquidity situation in the market, the RBI might want to change the repo rate during the intermittent period, thereby infusing money / sucking out money from the economy. This is where the role of variable rate repo auction comes into picture.
- ✓ The RBI conducts variable rate 14 day term repo auctions on every Tuesday and Friday. At this auction, it decides the repo rate and the amount of disbursement available under this window. In this manner, it is able to keep the call money rates closer to the previously decided repo rate.
- ✓ Currently, it also conducts 28 day term repo auctions. As recommended by the Urjit Patel committee, the RBI would seek to introduce longer term variable rate repo auctions as well.

Difference Between Repo Rate & Reverse Repo Rate	
Repo Rate	Reverse Repo Rate
✓ It is the rate at which RBI lends money to banks	✓ It is the rate at which RBI borrows money from banks
✓ It is higher than the reverse repo rate	✓ It is lower than the repo rate
✓ It is used to control inflation and deficiency of funds	✓ It is used to manage cash-flow
✓ It involves the sale of securities which would be repurchased in future.	✓ It involves the transfer of money from one account to another

54. Retail Inflation (Inflation Concepts)

Context: India's retail inflation likely accelerated last month towards the upper limit of the RBI's target range as fruit and vegetable prices rose, a Reuters poll found.

What is Inflation?

- ✓ Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc.
- ✓ Inflation measures the average price change in a basket of commodities and services over time.
- ✓ The opposite and rare fall in the price index of this basket of items is called 'deflation'.
- ✓ Inflation is indicative of the decrease in the purchasing power of a unit of a country's currency.

The effects of Inflation

- ✓ The purchasing power of a currency unit decreases as the commodities and services get dearer.

- ✓ This also impacts the cost of living in a country. When inflation is high, the cost of living gets higher as well, which ultimately leads to a deceleration in economic growth.
- ✓ A certain level of inflation is required in the economy to ensure that expenditure is promoted and hoarding money through savings is demotivated.

What Is Retail Inflation or CPI-Based Inflation?

- ✓ When we talk about the rate of inflation, it often refers to the rate of inflation based on the consumer price index (CPI).
- ✓ The CPI tracks the change in retail prices of goods and services which households purchase for their daily consumption.
- ✓ To measure inflation, it estimates how much CPI has increased in terms of percentage change over the same period the previous year.
- ✓ If prices have fallen, it is known as deflation (negative inflation).
- ✓ The Central Bank (RBI) pays very close attention to this figure in its role of maintaining price stability in the economy.
- ✓ The CPI monitors retail prices at a certain level for a particular commodity; price movement of goods and services at rural, urban and all-India levels.
- ✓ The change in the price index over a period of time is referred to as CPI-based inflation, or retail inflation.
- ✓ Generally, CPI is used as a macroeconomic indicator of inflation, as a tool by the central bank and government for inflation targeting and for inspecting price stability, and as deflator in the national accounts.
- ✓ CPI also helps understand the real value of salaries, wages, and pensions, the purchasing power of the nation's currency, and regulating rates.
- ✓ CPI, one of the most important statistics to ascertain economic health, is generally based on the weighted average of the prices of commodities.
- ✓ It basically gives an idea of the cost of the standard of living.
- ✓ The CPI specifically identifies periods of deflation or inflation for consumers in their day-to-day living expenses. If there is inflation, the CPI will rise over a period of time. If the CPI drops, that means there is deflation, or a steady reduction in the prices of goods and services.
- ✓ It may be noted that persistently high levels of inflation could impact economic growth as rising prices of essential goods and services will force households to cut spending on discretionary items.

Reasons behind the inflation in India

- ✓ One of the factors leading to higher inflation is the rising food prices. Protein items, cereals and even vegetables have all witnessed increase in prices.
- ✓ Localised lockdowns by various states have possibly disrupted supply chains. However, supply side disruptions.
- ✓ The pandemic has resulted in significant increase in health expenses, consumption of household non-durable goods important for domestic hygiene and even intoxicants.
- ✓ As expected, the relentless surge in fuel prices has translated into higher prices for transportation (local conveyance) and fuel (electricity and even firewood chips).
- ✓ Global increase in raw material prices of cotton has also pushed up prices for clothing.
- ✓ Labour shortages are also resulting in steep increase in prices of labour for household services.
- ✓ Interestingly, the pandemic and the resultant lockdown and working from home have clearly resulted in rapid price surges in hitherto stable categories that include cable television, hobby goods and of course, mobile data, and laptops.

Role of RBI

- ✓ Maintaining price stability is the foremost objective of the monetary policy committee of RBI. However, during the pandemic, growth has taken centre stage and RBI has rightly cut interest rates.

- ✓ With the rise in inflation amidst a second wave, the balancing acumen of the MPC will now be sorely tested. Factors like rising commodity prices, supply chain disruptions are expected to raise overall domestic inflation.
- ✓ Traditionally, raising interest rates can lead to decline in prices by making credit more expensive and this is the tool that RBI employs. However, just raising interest rates to combat inflation may kill any incipient signs of recovery. So, RBI may prefer a wait-and-watch mode at least for now.
- ✓ On the other hand, repairing the supply chain remains the top priority – and on this RBI has little control.

About Inflation

- ✓ Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc.
- ✓ Inflation measures the average price change in a basket of commodities and services over time.
- ✓ The opposite and rare fall in the price index of this basket of items is called ‘deflation’.
- ✓ Inflation is indicative of the decrease in the purchasing power of a unit of a country’s currency.
- ✓ This is measured in percentage.

Measuring Inflation

- ✓ In India, the **Ministry of Statistics and Programme Implementation** measures inflation.
- ✓ In India, both WPI (Wholesale Price Index) and CPI (Consumer Price Index) are used to measure inflation.
- ✓ The CPI calculates the difference in the price of commodities and services such as food, medical care, education, electronics etc, which Indian consumers buy for use.
- ✓ On the other hand, the goods or services sold by businesses to smaller businesses for selling further are captured by the WPI.

Effects of Inflation

- ✓ The purchasing power of a currency unit decreases as the commodities and services get dearer.
- ✓ This also impacts the cost of living in a country.
- ✓ When inflation is high, the cost of living gets higher as well, which ultimately leads to a deceleration in economic growth.
- ✓ A certain level of inflation is required in the economy to ensure that expenditure is promoted and hoarding money through savings is demotivated.
- ✓ As money generally loses its value over time, it is important for people to invest the money.
- ✓ Investing ensures the economic growth of a country.
- ✓ Causes of Inflation
- ✓ An increase in the supply of money is the root of inflation, though this can play out through different mechanisms in the economy.

Demand-Pull Effect

- ✓ Demand-pull inflation occurs when an increase in the supply of money and credit stimulates overall demand for goods and services in an economy to increase more rapidly than the economy's production capacity.
- ✓ This increases demand and leads to price rises.
- ✓ With more money available to individuals, positive consumer sentiment leads to higher spending, and this increased demand pulls prices higher.
- ✓ It creates a demand-supply gap with higher demand and less flexible supply, which results in higher prices.

Cost-Push Effect

- ✓ Cost-push inflation is a result of the increase in prices working through the production process inputs.
- ✓ When additions to the supply of money and credit are channelled into a commodity or other asset markets and especially when this is accompanied by a negative economic shock to the supply of key commodities, costs for all kinds of intermediate goods rise.

- ✓ These developments lead to higher costs for the finished product or service and work their way into rising consumer prices.
- ✓ Built-in Inflation
- ✓ Built-in inflation is related to adaptive expectations, the idea that people expect current inflation rates to continue in the future.
- ✓ As the price of goods and services rises, workers and others come to expect that they will continue to rise in the future at a similar rate and demand more costs or wages to maintain their standard of living.
- ✓ Their increased wages result in a higher cost of goods and services, and this wage-price spiral continues as one factor induces the other and vice-versa.

55. Excise Duty (Types of Tax System in India)

Context: Government of India has announced an excise duty reduction on petrol and diesel on the eve of Diwali.

Know More about the Excise Duty

- ✓ It is a form of **tax imposed on goods for their production, licensing and sale.**
- ✓ **GST has now subsumed a number of indirect taxes including excise duty.** This means excise duty, technically, does not exist in India except on a few items such as liquor and petroleum.
- ✓ **The legal framework:** (extends to the whole of India)
 - ◆ Central Excise Act, 1944 and Central Excise Tariff Act, 1985
- ✓ Please refer to three kinds of excise duties existed before GST regime: **Basic Excise Duty, Additional Excise Duty and Special Excise Duty.**
- ✓ The Central Board of Excise and Customs (CBEC) is responsible for collecting excise duty (Functions under the leadership of the Finance Minister).

Excise duty	Custom duty
Tax is levied on goods produced or manufactured within the country	Applies to the goods that are sold in India but were produced in a different country
Paid by the manufacturer of the goods and not by the consumer.	Paid by the importer of the goods

56. Direct Tax& Indirect Tax (Types of Tax System)

Article: “Net direct tax revenue rose 68% till November 23: MoS” (Page 14)

Context: The net direct tax collection grew almost 68% during the April 1-November 23 period to more than ₹6.92 lakh crore, Minister of State for Finance Pankaj Chaudhary said on Monday.

Introduction

Tax is a mandatory fee imposed upon individuals or corporations by the Central and the State Government to help build the economy of a country by meeting various public expenses.

Taxes are broadly divided into two categories- Direct and Indirect taxes.

What is Direct Tax?

- ✓ It is a tax levied directly on a taxpayer who pays it to the Government and cannot pass it on to someone else.

What are the direct taxes imposed in India?

1. **Income Tax-** It is imposed on an individual who falls under the different tax brackets based on their earning or revenue and they have to file an income tax return every year after which they will either need to pay the tax or be eligible for a tax refund.
2. **Estate Tax-** Also known as Inheritance tax, it is raised on an estate or the total value of money and property that an individual has left behind after their death.
3. **Wealth Tax-** Wealth tax is imposed on the value of the property that a person possesses. However, both Estate and Wealth taxes are now abolished.

Advantage

- ✓ **It curbs inflation:** The Government often increases the tax rate when there is a monetary inflation which in turn reduces the demand for goods and services and as a result of descending demand, the inflation is bound to condense.
- ✓ **Social and economic balance:** Based on every individual's earnings and overall economic situation, the Government has well-defined tax slabs and exemptions in place so that the income inequalities can be balanced out.

What is Indirect Tax?

- ✓ It is a tax levied by the Government on goods and services and not on the income, profit or revenue of an individual and it can be shifted from one taxpayer to another.
- ✓ Earlier, an indirect tax meant paying more than the actual price of a product bought or a service acquired. And there was a myriad of indirect taxes imposed on taxpayers.
- ✓ Goods and Service Tax (GST) is one of the existing indirect tax levied in India. It has subsumed many indirect tax laws.
- ✓ Following are the few indirect taxes that were earlier imposed in India:
 - Customs Duty- It is an Import duty levied on goods coming from outside the country, ultimately paid for by consumers and retailers in India.
 - Central Excise Duty- This tax was payable by the manufacturers who would then shift the tax burden to retailers and wholesalers.
 - Service Tax- It was imposed on the gross or aggregate amount charged by the service provider on the recipient.
 - Sales Tax- This tax was paid by the retailer, who would then shifts the tax burden to customers by charging sales tax on goods and service.
 - Value Added Tax (VAT)- It was collected on the value of goods or services that were added at each stage of their manufacture or distribution and then finally passed on to the customer.

GST as Indirect Tax

- ✓ With the implementation of GST, we have already witnessed a number of positive changes in the fiscal domain of India. The various taxes that were mandatory earlier are now obsolete, thanks to this new reformed indirect tax. Not just that, GST is making sure the slogan "One Nation, One Tax, One Market" becomes the reality of our country and not just a dream.
- ✓ That said, with the dawning of the 'Goods & Services Tax (GST)', the biggest relief so far is clearly the elimination of the 'cascading effect of tax' or the 'tax on tax' quandary.
- ✓ **Cascading effect of tax** is a situation wherein the end-consumer of any goods or service has to bear the burden of the tax to be paid on the previously calculated tax and as a result would suffer an increased or inflated price.
- ✓ Under the GST regime, however, the customer is exempted from the tax they would otherwise pay as a result of the cascading effect.

57. Prompt Corrective Action Framework (Banking Sector)

Context: The Reserve Bank of India (RBI) has reviewed and revised the existing Prompt Corrective Action (PCA) framework for Scheduled Commercial Banks (SCBs), and the changes will be effective from 1 Jan, 2022.

About PCA framework

- ✓ PCA Framework refers to the central bank's watchlist of weak banks.
- ✓ The regulator will impose restrictions like curbs on lending on such banks.
- ✓ Applies only to commercial banks and does not cover cooperative banks and non-banking financial companies.
- ✓ It was introduced in December 2002 as a structured early intervention mechanism along the lines of the US Federal Deposit Insurance Corporation's PCA framework.
- ✓ The last PCA Framework was issued by the RBI on April 13, 2017, and implemented with respect to banks' financials as of March 31, 2017.

Revised PCA Framework

- ✓ The revised PCA framework will be effective from January 1, 2022.
- ✓ Capital, asset quality and leverage will be the key areas for monitoring in the revised framework.
- ✓ RBI has also revised the level of shortfall in total capital adequacy ratio that would push the lender to “risk threshold three” category.
- ✓ The RBI has specified certain regulatory trigger points with respect to three parameters for the initiation of the process: Inlcude CRAR, NPA and Return on assets.

Significance:

- ✓ **Financial health of a bank:** Helps RBI to monitor key performance indicators of banks, and taking corrective measures, to restore the financial health of a bank.
- ✓ Intended to help alert the regulator as well as investors and depositors if a bank is heading for trouble.

58. Real GDP and Nominal GDP (National Income - GDP)

Context: The Indian economy is expected to maintain real GDP growth of 9% both in FY22 and in FY23, amid the uncertainty triggered by the Omicron variant of the Covid-19-causing virus, ICRA said in a report.

About the Real GDP

- ✓ Real gross domestic product, or real GDP, is a measure of a country's output in terms of the value of its goods and services, its investments, its government spending, and its exports.
- ✓ The value taken at constant prices — that is prices for all products taken at an unchanged base year — is the real GDP.
- ✓ Real GDP takes nominal GDP and adjusts for inflation or deflation by comparing and converting prices to a base year's prices.
- ✓ By adjusting for price changes, the final number won't reflect false increases or decreases in GDP due to fluctuation in prices, and it is a more accurate representation of a country's economic activity.
- ✓ Real GDP growth measures how much the production of goods and services in the economy has increased in actual physical terms during a year.
- ✓ Formula for calculating real GDP is as follows: Real GDP = Nominal GDP / Deflator

What is nominal GDP?

- ✓ GDP is the total market value of all goods and services produced in the economy during a particular year, inclusive of all taxes and subsidies on products.
- ✓ The market value taken at current prices is the nominal GDP.
- ✓ Nominal GDP growth measures the increase in incomes resulting from rise in both production and prices.
- ✓ In calculating nominal GDP, it only use current quantities at current year prices. This is achieved by using a consumer price index of the country's basket of goods.
- ✓ Nominal GDP takes into account all the goods and services that are produced within a country's borders at these current prices.

What is GDP Deflator

- ✓ The GDP deflator, also called implicit price deflator, is a measure of inflation.
- ✓ It is the ratio of the value of goods and services an economy produces in a particular year at current prices to that of prices that prevailed during the base year.
- ✓ Using the GDP price deflator helps economists compare the levels of real economic activity from one year to another.

59. Anti-Dumping Duty (External Sector, IR - India & China Trade Relations)

Context: India has imposed antidumping duties on five Chinese products, including certain aluminium goods and some chemicals, for five years to guard local manufacturers from cheap imports from the neighbouring country. These duties were imposed following recommendations of the commerce ministry's investigation arm Directorate General of Trade Remedies (DGTR).

- ✓ The DGTR in separate probes have concluded that these products have been exported at a price below normal value in Indian markets, which has resulted in dumping.
- ✓ The domestic industry has suffered material injury due to the dumping, the DGTR has said.

What is Dumping

- ✓ Dumping in economics and commerce refers to the action of exporting market products to another country at a market price that is far below what is charged at the home country where such a product is manufactured. Such an action, while it seems irrational, has other motives. Generally, dumping such products in a nation can harm the GDP of the country.

About the Anti-Dumping Duty & Its Significance

- ✓ Trade policy regimes in most countries have transformed from inward oriented protectionist regimes to more outward and liberal trade regimes. However, any government that maintains a liberal trade policy is subject to pressures for temporary protection to specific industries.
- ✓ GATT therefore contains some contingent measures, which permit the signatories to withdraw their normal obligations under specified circumstances and impose higher protection against import of one or more goods from one or more countries. Contingent protection measures fall under three categories – anti-dumping, countervailing and safeguard measures.
- ✓ Almost all WTO member countries have adopted/amended their anti-dumping legislation largely in accordance with the GATT provisions to deal with dumped imports.
- ✓ Anti-dumping measures are taken to ensure fair trade and provide a level-playing field to the domestic industry.
- ✓ Both India and China are members of the Geneva-based World Trade Organisation (WTO).
- ✓ India has initiated maximum anti-dumping cases against dumped imports from China.
- ✓ India's exports to China during the April-September 2021 period were worth USD 12.26 billion while imports aggregated at USD 42.33 billion, leaving a trade deficit of USD 30.07 billion.

60. National Pension System & PFRDA (Economy & Social Sector Schemes)

Context: Savers concerned about the deleterious impact of inflation on their fixed retirement income may soon be able to buy indexed annuity products with returns linked to the pace of price rise, the Pension Fund Regulatory and Development Authority (PFRDA) chief signalled.

About the Pension Fund Regulator Development Authority (PFRDA)

- ✓ Based on the report of Old age social and income security, which was a national project that the Government of India had initiated to examine policies related to old age income security in India, the government decided to replace the then defined benefit pension system to defined contribution pension system with respect to all new joinees of Central/State Government except armed forces.
- ✓ Accordingly, the Interim pension fund regulatory and development Authority (IPRDA) bill was passed by Union parliament in February 2003, which established IPRDA to promote, develop, and regulate pension system in India.
- ✓ And the final system i.e., the Pension Fund Regulatory and Development Authority (PFRDA) was established with the President's assent on 19 September 2013 and was made a permanent Act.
- ✓ The PFRDA is a statutory regulatory body set up under PFRDA Act with an objective to promote old age income security and protect the interests of National Pension Scheme subscribers.
- ✓ **Objective/Vision:** To be a model Regulator for promotion and development of an organized pension system to serve the old age income needs of people on a sustainable basis.
- ✓ While the pension system was initially introduced for Government employees, it is now extended to all citizens of India and non-resident Indians including self-employed persons.

Composition of the Authority

- ✓ The Authority shall consist of a Chairperson and not more than six members, of whom at least three shall be Whole-Time Members, to be appointed by the Central Government.

- ✓ The pension regulator, which oversees the National Pension System (NPS) with retirement savings of ₹6.76 lakh crore, is working with the Insurance Regulatory Development Authority of India (IRDAI) to provide such an option to its more than 4.7 crore members that include government and private sector employees as well as self-employed and informal sector workers.

National Pension Scheme (NPS)

- ✓ National Pension System (NPS) is a voluntary, defined contribution retirement savings scheme designed to enable the subscribers to make optimum decisions regarding their future through systematic savings during their working life.
- ✓ NPS seeks to inculcate the habit of saving for retirement amongst the citizens.
- ✓ It is an attempt towards finding a sustainable solution to the problem of providing adequate retirement income to every citizen of India.
- ✓ It is introduced by PFRDA whereby subscribers' contributions are collected and accumulated in an individual pension account using various intermediaries.
- ✓ Under NPS, individual contributions are pooled together into a pension fund and are invested as per approved investment guidelines.
- ✓ Funds are generally invested in diversified portfolios consisting of government bonds, bills, corporate debentures, and shares, based on subscribers' choice.
- ✓ Subscribers also have an option, at the time of exit, to purchase a life annuity by using accumulated pension fund.
- ✓ Besides the NPS, some mutual funds and insurance companies also offer Pension plan or retirement plan, which are not under the jurisdiction of PFRDA.

NPS Trust

- ✓ PFRDA also established an **NPS Trust** under Indian Trust Act, 1882 in order to manage assets and funds under NPS in the best interest of subscribers.
- ✓ NPS Trust is managed by a Board of Trustees appointed by PFRDA who is the settler of the trust. Legal ownership of trust and funds is entrusted to the board of trustees.
- ✓ The Board consists of a Chairman and up to 5 members including the chairman, and the Board meets once in 3 calendar months.
- ✓ NPS Trust is responsible for executing individual pension accounts in its name with the subscriber, protecting the properties of NPS, safeguarding interest of NPS and its subscribers, approving various documents and reports, monitoring and evaluating operations of intermediaries, exit the subscriber from NPS etc.
- ✓ Pension fund is one of the intermediaries which has been granted a certificate of registration by PFRDA as an authority for receiving contributions, investing them, and paying the subscribers in a specified manner.

61. Payment Bank (Banking Sector)

Context: Paytm Payments Bank has gained central **bank approval to function as a scheduled payments bank**, Paytm said, helping it to expand its financial services operations.

About the Payment Banks

- ✓ Based on the recommendations of the **Nachiket Mor Committee**, Payments Bank was set up to operate on a smaller scale with minimal credit risk.
- ✓ The main objective is to advance financial inclusion by offering banking and financial services to the unbanked and under-banked areas, helping the migrant labour force, low-income households, small entrepreneurs etc.
- ✓ They are registered under the Companies Act 2013 but are governed by a host of legislations such as Banking Regulation Act, 1949; RBI Act, 1934; Foreign Exchange Management Act, 1999, Payment and Settlement Systems Act, 2007 and the like.
- ✓ India currently has 6 Payment Banks namely, Airtel Payment Bank, India Post Payment Bank, Fino, Paytm Payment Bank, NSDL Payment Bank and Jio Payment Bank.
- ✓ Payment bank is a type of bank which is not involved in any type of credit risk. This type of banks provides credit to smaller units such as Low-income household, migrant labour workforce,

small business units and unorganized sectors. It has no provision of issuing credit cards or advance loans to the customers.

Features of Payment Banks

- ✓ They are differentiated and not universal banks.
- ✓ These operate on a smaller scale.
- ✓ It needs to have a minimum paid-up capital of Rs. 100,00,00,000.
- ✓ Minimum initial contribution of the promoter to the Payment Bank to the paid-up equity capital shall at least be 40% for the first five years from the commencement of its business.

PAYMENT BANKS	
Activities Permitted By Payment Banks	Activities Not Permitted
<ul style="list-style-type: none"> ■ Payment banks can take deposits up to Rs. 2,00,000. It can accept demand deposits in the form of savings and current accounts. ■ The money received as deposits can be invested in secure government securities only in the form of Statutory Liquidity Ratio (SLR). This must amount to 75% of the demand deposit balance. The remaining 25% is to be placed as time deposits with other scheduled commercial banks. ■ Payments banks will be permitted to make personal payments and receive cross border remittances on the current accounts. ■ It can issue debit cards. 	<ul style="list-style-type: none"> ■ Payment banks receive a 'differentiated' bank license from the RBI and hence cannot lend. ■ Payment banks cannot issue credit cards. ■ It cannot accept time deposits or NRI deposits. ■ It cannot issue loans. ■ It cannot set up subsidiaries to undertake non-banking financial activities.

What does a scheduled bank status mean for Paytm Payments Bank?

- ✓ Scheduled banks refer to those banks which have been included in the Second Schedule of Reserve Bank of India Act, 1934.
- ✓ The Paytm Payments Bank has been upgraded to a scheduled bank by the RBI.
- ✓ This is expected to help the four-and-a-half years old bank expand its financial services operations as this makes it eligible to partner in government-run financial inclusion schemes.
- ✓ Other payments banks that have been added to the Second Schedule include Fino Payments Bank and India Post Payments Bank.
- ✓ As a scheduled bank, Paytm Payments Bank can take part in Request for Proposals issued by the government and other large corporations, primary auctions, fixed-rate and variable rate repos, and reverse repos, along with participation in marginal standing facility.
- ✓ It now becomes eligible for refinancing facility from the RBI at the bank rate, acquires membership to the clearing house, and gets access to currency storage facility.
- ✓ Banks which satisfy the RBI that their affairs are not being conducted in a manner detrimental to the interests of their depositors are included in the second schedule.
- ✓ Even with a status upgrade, being a payments bank, it still cannot lend or issue credit cards on its own.
- ✓ Payment banks would be eligible to become a small finance bank once they complete five years of operations. They can then undertake lending activities. This conversion is not automatic and requires the central bank's approval.
- ✓ According to RBI guidelines, the maximum balance an individual payments bank customer can hold is Rs 2 lakh. Therefore, a scheduled bank status will not fundamentally alter the way in which Paytm Payments Bank is conducting its business.

62. Mutual Funds (Capital Market)

Context: Net flows into equity mutual funds rose to a four-month high of ₹11,615 crore in November on a strong SIP book despite extreme volatility in markets.

What is a Mutual Fund?

- ✓ Simply put, the money pooled in by a large number of investors is what makes up a Mutual Fund.

- ✓ This money is then managed by a professional Fund Manager, who uses his investment management skills to invest it in various financial instruments.
- ✓ As an investor he/she own units, which basically represent the portion of the fund that the investor hold, based on the amount invested. Therefore, an investor can also be known as a unit holder.
- ✓ The increase in value of the investments along with other incomes earned from it is then passed on to the investors / unit holders in proportion with the number of units owned after deducting applicable expenses, load and taxes.

Type of Mutual Fund Schemes

- ✓ Mutual Fund schemes could be ‘open ended’ or close-ended’ and actively managed or passively managed. An open-end fund is a mutual fund scheme that is available for subscription and redemption on every business throughout the year, (akin to a savings bank account, wherein one may deposit and withdraw money every day). An open ended scheme is perpetual and does not have any maturity date.
- ✓ A closed-end fund is open for subscription only during the initial offer period and has a specified tenor and fixed maturity date (akin to a fixed term deposit). Units of Closed-end funds can be redeemed only on maturity (i.e., pre-mature redemption is not permitted). Hence, the Units of a closed-end fund are compulsorily listed on a stock exchange after the new fund offer, and are traded on the stock exchange just like other stocks, so that investors seeking to exit the scheme before maturity may sell their Units on the exchange.

63. Bharat Bond ETF (Capital Market)

Context: The Finance Ministry on Thursday said that the third tranche of Bharat Bond ETF was oversubscribed 6.2 times against the base issue size of ₹1,000 crore. “Overwhelming response seen in Bharat Bond ETF 2032 NFO.

About the Bharat Bond ETF

- ✓ An ETF or exchange traded fund invests in a basket of securities that mostly tracks a certain index. ETFs are similar to mutual funds, but the big difference is that can be bought and sold only through the stock exchanges.
- ✓ BHARAT Bond ETF is an initiative from the Indian government to raise money for various government organizations by issuing bonds.
- ✓ The corpus raised through these bonds will help the government cater to the borrowing requirements of those PSUs whose bonds the fund is holding.
- ✓ Edelweiss Asset Management has the mandate from the government to manage this BHARAT Bond ETF program.
- ✓ The government started this initiative in 2019. So far, there have been 4 issues of BHARAT Bond ETFs under 2 tranches – BHARAT Bond ETF 2023, BHARAT Bond ETF 2025, BHARAT Bond ETF 2030, and BHARAT Bond ETF 2031.
- ✓ BHARAT Bond ETF 2032 is the fifth issue in this series of ETFs.
- ✓ These BHARAT bond ETFs are issued for a fixed maturity. And that maturity is defined and indicated in the scheme name and practice. For example, BHARAT Bond ETF 2023 will mature in April 2023.
- ✓ Similarly, BHARAT Bond ETF 2032 will mature in April 2032. And you will get your principal investment as well as returns in 2032 (provided you hold it till maturity).

64. National Food Security Act, (NFSA) 2013 (Agriculture and Food Security)

Context: After the completion of an exercise for rectification of errors relating to the beneficiaries of the National Food Security Act (NFSA) through mapping and seeding, the Congress Government in Rajasthan has launched action to strike off the families ineligible to get food grains under the scheme. The State has also sought inclusion of more families in the purview of food security. This would help the poor and needy people get the food grains allocated under the scheme.

About the National Food Security Act, (NFS) 2013

- ✓ As passed by the Parliament, Government has notified the National Food Security Act, 2013 on 10th September, 2013 with the objective to provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity.

Salient features of the National Food Security Act, 2013

- ✓ **Coverage and entitlement under Targeted Public Distribution System (TPDS):** Upto 75% of the rural population and 50% of the urban population will be covered under TPDS, with uniform entitlement of 5 kg per person per month. However, since Antyodaya Anna Yojana (AAY) households constitute poorest of the poor, and are presently entitled to 35 kg per household per month, entitlement of existing AAY households will be protected at 35 kg per household per month.
- ✓ **State-wise coverage:** Corresponding to the all India coverage of 75% and 50% in the rural and urban areas, State-wise coverage will be determined by the Central Government. Planning Commission has determined the State-wise coverage by using the NSS Household Consumption Survey data for 2011-12 and also provided the State-wise "inclusion ratios".
- ✓ **Subsidised prices under TPDS and their revision:** Foodgrains under TPDS will be made available at subsidised prices of Rs. 3/2/1 per kg for rice, wheat and coarse grains for a period of three years from the date of commencement of the Act. Thereafter prices will be suitably linked to Minimum Support Price (MSP).
- ✓ In case, any State's allocation under the Act is lower than their current allocation, it will be protected upto the level of average offtake during last three years, at prices to be determined by the Central Government. Existing prices for APL households i.e. Rs. 6.10 per kg for wheat and Rs 8.30 per kg for rice has been determined as issue prices for the additional allocation to protect the average offtake during last three years.
- ✓ **Identification of Households:** Within the coverage under TPDS determined for each State, the work of identification of eligible households is to be done by States/UTs.
- ✓ **Nutritional Support to women and children:** Pregnant women and lactating mothers and children in the age group of 6 months to 14 years will be entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes. Higher nutritional norms have been prescribed for malnourished children upto 6 years of age.
- ✓ **Maternity Benefit:** Pregnant women and lactating mothers will also be entitled to receive maternity benefit of not less than Rs. 6,000.
- ✓ **Women Empowerment:** Eldest woman of the household of age 18 years or above to be the head of the household for the purpose of issuing of ration cards.
- ✓ **Grievance Redressal Mechanism:** Grievance redressal mechanism at the District and State levels. States will have the flexibility to use the existing machinery or set up separate mechanism.
- ✓ **Cost of intra-State transportation & handling of foodgrains and FPS Dealers' margin:** Central Government will provide assistance to States in meeting the expenditure incurred by them on transportation of foodgrains within the State, its handling and FPS dealers' margin as per norms to be devised for this purpose.
- ✓ **Transparency and Accountability:** Provisions have been made for disclosure of records relating to PDS, social audits and setting up of Vigilance Committees in order to ensure transparency and accountability.
- ✓ **Food Security Allowance:** Provision for food security allowance to entitled beneficiaries in case of non-supply of entitled foodgrains or meals.
- ✓ **Penalty:** Provision for penalty on public servant or authority, to be imposed by the State Food Commission, in case of failure to comply with the relief recommended by the District Grievance Redressal Officer.

65. National Company Law Appellate Tribunal (NCLAT) (Corporate Governance)

Context: The Department of Telecommunications (DoT) has moved the NCLAT against an NCLT order approving the consolidated resolution plan (RP) for 13 companies of Videocon Group, including Videocon Telecommunications.

About the NCLAT

- ✓ National Company Law Appellate Tribunal (NCLAT) was constituted under Section 410 of the Companies Act, 2013 for hearing appeals against the orders of National Company Law Tribunal(s) (NCLT), with effect from 1st June, 2016.
- ✓ NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016 (IBC), with effect from 1st December, 2016.
- ✓ NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by Insolvency and Bankruptcy Board of India under Section 202 and Section 211 of IBC.
- ✓ NCLAT is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI) – as per the amendment brought to Section 410 of the Companies Act, 2013 by Section 172 of the Finance Act, 2017, with effect from 26th May, 2017.
- ✓ NCLAT is also the Appellate Tribunal to hear and dispose of appeals against the orders of the National Financial Reporting Authority – as per the amendment brought to Section 410 (a) of the Companies Act, 2013 by Section 83 of the Companies (Amendment) Act, 2017, with effect from 7th May, 2018.
- ✓ As per Section 410 of Companies Act which states that the Central Government, by way of notification shall constitute an Appellate Tribunal to be known as the National Company Law Appellate Tribunal comprising Chairperson and Judicial and Technical members, for hearing appeals against the orders of the Tribunal.
- ✓ Recently, the Centre has appointed retired Supreme Court judge Ashok Bhushan as the Chairperson of the NCLAT.
- ✓ He has been given a **term of four years or until he attains the age of 70 years**, whichever is the earliest. The post of NCLAT Chairperson has been vacant since March 2020.

It is important to note that the **Company Law Board would cease to exist after** the establishment of National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT) as per **Section 466 of Companies Act, 2013**.

Difference between NCLT and NCLAT	
NCLT	NCLAT
■ NCLT is established as per Section 408 of Companies Act, 2013.	■ NCLAT is established as per Section 410 of Companies Act, 2013.
■ NCLT is a body having original Jurisdiction.	■ NCLAT is a body having Appellate Jurisdiction.
■ Cases can come to NCLT directly.	■ No case can come to NCLAT directly, it must either come from NCLT under Section 421 of Companies Act, 2013 or any other body given in Section 410 of Companies Act, 2013.
■ NCLT does not deal with cases involving Competition law or appeals from the National Financial Reporting Authority.	■ NCLAT is designated as appellate forum for orders passed by the National Financial Reporting Authority and Competition Commission of India as per powers granted to it under Section 410 (a) and 410 (b) of Companies Act, 2013 respectively.
■ NCLT has not replaced the Competition Appellate Tribunal.	■ NCLAT has replaced the Competition Appellate Tribunal.
■ NCLT has 16 benches throughout India.	■ NCLAT has two benches throughout India one at New Delhi and another at Chennai.

66. Asset Reconstruction Companies (ARCs) (Corporate Governance)

Context: To streamline the functioning of asset reconstruction companies (ARCs), a Reserve Bank panel has come out with a host of suggestions including the creation of an online platform for the sale of stressed assets and allowing ARCs to act as resolution applicants during the IBC process.

About ARCs

- ✓ It is a specialized financial institution that buys the Non Performing Assets (NPAs) from banks and financial institutions so that they can clean up their balance sheets. (Bad loan = NPA)
- ✓ It helps banks to concentrate in normal banking activities. Banks rather than going after the defaulters by wasting their time and effort, can sell the bad assets to the ARCs at a mutually agreed value.
- ✓ **Legal Basis for Seeting up of ARC:** The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002
- ✓ ARCs are regulated by RBI as a Non-Banking Financial Company under RBI Act, 1934.
- ✓ **100% foreign direct investment (FDI)** in ARCs is allowed under the automatic route.
- ✓ They are not permitted to undertake lending activities. They can only do securitization and reconstruction activities.

67. Insurance Regulatory and Development Authority (IRDA)(Corporate Governance)

Context: Life Insurance Corporation of India, General Insurance Corporation of India and New India Assurance remain Domestic Systemically Important Insurers (D-SIIs) and consequently subject to enhanced regulatory supervision.

- ✓ Given the nature of operations and systemic importance, they have to carry on efforts to raise the level of corporate governance besides identifying all relevant risks and promoting a sound risk management framework and culture, according to the Insurance Regulatory and Development Authority.

About the Insurance Regulatory and Development Authority (IRDA)

- ✓ The Government of India was the regulator for the insurance industry until 2000.
- ✓ However, to institute a stand-alone apex body, the Insurance Regulatory and Development Authority (IRDA)was established in 2000 following the recommendation of the Malhotra Committee report in 1999.IRDAs set up as autonomous body under the IRDA Act, 1999.
- ✓ The Authority acts as the regulator of the insurance industry in India and oversees the functioning of the Life Insurance and General Insurance companies operating in the country.
- ✓ It sets rules and regulations for the functioning of the insurance industry.
- ✓ The main objective of the IRDAI is to protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto.
- ✓ It also aims to monitors insurance sector activities for healthy development of the industry and protection of policyholders' interests.

68. OECD (Economy - International Institutions)

Context: The Organization for Economic Co-operation and Development (OECD) earlier had warned that the Omicron variant threatens the global economic recovery as it lowered the growth outlook for 2021 and appealed for a swifter roll-out of COVID vaccines.

About the Organisation for Economic Co-operation and Development (OECD)

- ✓ The OECD is an international organisation that works to build better policies for better lives.
- ✓ It aims to shape policies that foster prosperity, equality, opportunity and well-being for all.
- ✓ The OECD work on establishing evidence-based international standards and finding solutions to a range of social, economic and environmental challenges.
- ✓ It was established on 14th. December, 1960, by 18 European nations, plus the United States and Canada. It has expanded over time to include members from South America and the Asia-Pacific region. It includes most of the world's highly developed economies.

- ✓ Currently, it has 38 Member countries span the globe, from North and South America to Europe and Asia-Pacific.
- ✓ The OECD maintains a so-called "**black list**" of nations that are considered **uncooperative tax havens**, although there are not any nations currently on the list since by 2009, all nations on the original list had made commitments to implement the OECD standards of transparency.
- ✓ The OECD is leading an effort with the G20 nations to **encourage tax reform** worldwide and eliminate tax avoidance by profitable corporations.
- ✓ The group also provides consulting assistance and support to nations in central Asia and Eastern Europe that implement market-based economic reforms.
- ✓ The organization is headquartered in Paris, France.

69. Bureau of Indian Standards (BIS) (Economy - Quality Standards)

Context: The Government of India has made hallmarking of gold jewellery mandatory in the country. It is now being implemented by the Bureau of Indian Standards (BIS) in a phased manner.

About BIS

- ✓ BIS is the National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental thereto.
- ✓ BIS has been providing traceability and tangibility benefits to the national economy in a number of ways – providing safe reliable quality goods; minimizing health hazards to consumers; promoting exports and imports substitute; control over proliferation of varieties etc. through standardization, certification and testing.
- ✓ BIS has its Headquarters at New Delhi and its Regional Offices are at Kolkata (Eastern), Chennai (Southern), Mumbai (Western), Chandigarh (Northern) and Delhi (Central).
- ✓ It is the national standards body of India working under the aegis of Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India.

70. Financial Stability Report (Indexes/Reports/Surveys in News)

Context: The gross non-performing asset (GNPA) of commercial banks may increase to 9.5% by September 2022 under a severe stress scenario, the Reserve Bank of India (RBI) said in its Financial Stability Report (FSR) on Wednesday.

About the Financial Stability Report (FSR)

- ✓ **Reserve Bank of India** released its latest Financial Stability Report of December 2021.
- ✓ Published twice each year, the FSR is one of the most crucial documents on the Indian economy as it presents an assessment of the health of the financial system.
- ✓ It allows the RBI to assess the state of the domestic economy, especially in a fast-changing global economy.
- ✓ The FSR also allows the RBI to assess the macro-financial risks in the economy. Macro-financial risks refer to the risks that originate from the financial system but affect the wider economy as well as risks to the financial system that originate in the wider economy.
- ✓ With this, the RBI tries to understand how a shock in one part of the financial system — say the banks — is affecting another part of the system — say the companies that finance housing loans.
- ✓ As part of the FSR, the RBI also conducts “stress tests” to figure out what might happen to the health of the banking system if the broader economy worsens.
- ✓ It also tries to assess how factors outside India — say the crude oil prices or the interest rates prevailing in other countries — might affect the domestic economy.

Highlights of the Latest Report:

- ✓ The global economic recovery has been losing momentum in the second half of 2021 in the face of resurfacing COVID-19 infections, the new variant Omicron, supply disruptions and bottlenecks, elevated inflationary levels and shifts in monetary policy stances and actions across advanced economies and emerging market economies.

- ✓ On the domestic front, progress in vaccination has enabled the recovery to regain traction after the debilitating second wave of the pandemic, notwithstanding signs of slowing pace more recently; the corporate sector is gaining strength and bank credit growth is improving.
- ✓ The capital to risk-weighted assets ratio (CRAR) of scheduled commercial banks (SCBs) rose to a new peak of 16.6 per cent and their provisioning coverage ratio (PCR) stood at 68.1 per cent in September 2021.
- ✓ Macro stress tests for credit risk indicate that the gross non-performing asset (GNPA) ratio of SCBs may increase from 6.9 per cent in September 2021 to 8.1 per cent by September 2022 under the baseline scenario and to 9.5 per cent under a severe stress scenario. SCBs would, however, have sufficient capital, both at the aggregate and individual levels, even under stress conditions.
- ✓ Emerging signs of stress in micro, small and medium enterprises (MSME) as also in the micro finance segment call for close monitoring of these portfolios going forward.

ECOLOGY, SCIENCE & TECHNOLOGY, DEFENSE AND SECURITY

71. National Green Tribunal (NGT) (Ecology - Conservation of Bodies/Tribunals etc.)

Context: The National Green Tribunal (NGT), Eastern Zone, has imposed a fine of ₹2 crore on the Jindal Steel and Power Limited (JSPL) for changing the natural course of Kurbadahali Nalla (water channel) in Odisha's Angul district.

About National Green Tribunal (NGT)

- ✓ The National Green Tribunal has been established on 18.10.2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.
- ✓ It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.
- ✓ The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.
- ✓ The Tribunal's dedicated jurisdiction in environmental matters shall provide speedy environmental justice and help reduce the burden of litigation in the higher courts.
- ✓ The Tribunal is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.
- ✓ Initially, the NGT is proposed to be set up at five places of sittings and will follow circuit procedure for making itself more accessible.
- ✓ New Delhi is the Principal Place of Sitting of the Tribunal and Bhopal, Pune, Kolkata and Chennai shall be the other four place of sitting of the Tribunal.

72. Panna Tiger Reserve (Ecology - Protected Areas)

Article: "Indian desert cat spotted in Panna Tiger Reserve" (Page 5)

Context: A tourist has shared the pictures taken by him of an Indian desert cat in the reserve's Akola buffer zone of the reserve recently during the night safari. Presence of this wild cat was not reported in the PTR's records earlier.

About Indian Desert Cat

- ✓ Found in deserts and can survive without water.
- ✓ The toes of the species have cushion like hair which help it balance the fluctuating desert temperatures.
- ✓ They are known to live near human settlements.
- ✓ It is fully protected only in India and Pakistan.
- ✓ The Indian Desert Cat has been poached extensively for its prized skin



About Panna Tiger Reserve

- ✓ Situated in the Vindhyan mountain range in the northern part of Madhya Pradesh, Panna Tiger Reserve is spread over the Panna and Chhatarpur districts.
- ✓ The terrain here consists of extensive plateaus and gorges. This reserve contains the last remaining tiger habitat of North Madhya Pradesh.
- ✓ Flowing from the south to the north through the reserve is the River Ken. These forests along with Ken Gharial Sanctuary form a significant part of the catchment area of this river.
- ✓ The reserve is also dotted with two-thousand-year-old rock paintings.

73. Indian Pangolin (Ecology - Protected Species in News)

Article: "Odisha radio-tags rescued Indian pangolin" (Front Page 1)

Context: The Odisha Forest and Environment Department has completed its first-ever radio-tagging of the Indian pangolin in an attempt to standardise the rehabilitation protocol for the animal in the State.



About Indian Pangolin

- ✓ The Indian pangolin or thick-tailed pangolin is a solitary, shy, slow moving, nocturnal mammal,
- ✓ Unlike other pangolin species, the Indian pangolin does not often climb trees.
- ✓ The adult male is about one-third larger than the female.
- ✓ A terminal scale is also present on the ventral side of the tail of the Indian Pangolin, which is absent in the Chinese Pangolin.
- ✓ Its sticky tongue, which is longer than its body, is specially adapted for reaching and lapping up insects in deep crevices.
- ✓ To tear open the anthills or termite mounds, it uses the powerful forelimbs that are armed with three disproportionately long claws.
- ✓ In sharp contrast, the hind legs have tough soles and short, blunt nails on the five toes.
- ✓ Indian pangolins are found through parts of South Asia, from eastern Pakistan, India, southern Nepal, Bangladesh and Sri Lanka.
- ✓ IUCN Status: Endangered
- ✓ It is listed under Schedule I, Part I of the Wildlife (Protection) Act, 1972.

Conservation Threats

- ✓ Major threats to pangolins in India are hunting and poaching for local consumptive use (e.g. as a protein source and traditional medicine) and international trade, for its meat and scales in East and South East Asian countries, particularly China and Vietnam.
- ✓ There is now greater evidence of its inclusion in illicit international trade, in particular its scales, from both India and Pakistan, with Myanmar and China comprising the most likely, final destinations.
- ✓ Seizure reports from the country suggest that between 2009 and 2013, over 3,000 pangolins were hunted. Media reports state that during the period, approximately 5,000 kg of pangolin scales were confiscated in 25 seizures.
- ✓ Inadequate information on population and distribution further accentuates the threats arising from hunting and poaching.

TRAFFIC and WWF-India Initiatives

- ✓ TRAFFIC is mapping pangolin trade hubs, conduits, transportation, high poaching areas and drivers in relation to poaching and illegal trafficking of pangolins.
- ✓ In February 2015, TRAFFIC, in partnership with WWF-India and Wildlife Crime Control Bureau (WCCB) launched a social media campaign to create awareness and divert efforts towards curbing illegal trade in pangolins.

Radio-Tagging of Indian Pangolin

- ✓ Radio-tagging involves attaching a transmitter to an animal to monitor its movements.
- ✓ Several wild animals — tigers, leopards and migratory birds — have been tagged over decades.

- ✓ The Odisha Forest and Environment Department has completed its first-ever radio-tagging of the Indian pangolin in an attempt to standardise the rehabilitation protocol for the animal in the State.
- ✓ The forest department said a male pangolin, which was rescued by the Paralakhemundi Forest Division last month, was radio-tagged and released in the Nandankanan Wildlife Sanctuary after treatment.
- ✓ The animal was screened for parasites and diseases during a month-long quarantine at the Nandankanan Zoological Park (NZP), which is the only conservation breeding centre for Indian pangolins in the world. The centre was established in 2009 to standardise the protocol for housing and husbandry of the endangered species. The centre has so far bred 10 animals in captivity.
- ✓ After Madhya Pradesh, Odisha is the second State in the country to release a radio-tagged Indian pangolin into the wild.

Chinese Pangolin

- ✓ Pangolins are the most trafficked mammals in the world, and the Chinese pangolin may be the most endangered of them all.
- ✓ The Chinese pangolin is distinguished from other Asian pangolins by its almost helmeted appearance, smaller scales than the Indian pangolin, a larger ear pinna, a post-anal depression in the skin, and a narrowing near the distal end of the tail.
- ✓ They are found in a wide range of habitats, including primary and secondary tropical forests, limestone forests, bamboo forests, grasslands and agricultural fields.
- ✓ They have poor vision, and therefore rely on their sense of smell to locate their prey, which consists exclusively of ants and termites.
- ✓ They are nocturnal, solitary, and like other pangolins, the Chinese pangolin is a good swimmer.
- ✓ The Chinese pangolins current range has undergone drastic changes due to poaching pressure, and its distribution is therefore not well known. It was previously widespread, occurring in southern China, Hainan, Taiwan, Hong Kong, the Himalayan foothills in eastern Nepal, Bhutan and northern India, northeastern Bangladesh, across Myanmar to northern Lao PDR and northern Vietnam, northern and northeastern Thailand.
- ✓ It is listed under Schedule I, Part I of the Wildlife (Protection) Act, 1972.
- ✓ IUCN Status: Critically Endangered.



74. COP26 (Climate Change Summit)

Article: “At COP26, T.N. teenager tells leaders that youth are angry” (Page 10)

Context: Vinisha Umashankar, a school going girl invited to COP26 for her innovating solar-powered ironing cart, which would replace the conventional charcoal ironing box that brought her laurels from around the world, including the prestigious Children’s Climate Prize in November 2021.

About COP26

- ✓ The COP26 event is a global **United Nations summit about climate change** and how countries are planning to tackle it.
- ✓ COP26 is now taking place in **Glasgow** between 31st October and 12th November 2021
- ✓ **India steps up to commit to a 'Net Zero' target by 2070 at COP 26**

Net Zero Emission

- ✓ Net-zero refers to a state where a **nation's emissions are compensated by the absorption and removal of greenhouse gases** from the atmosphere.
- ✓ Absorption of the emissions can be increased by creating more carbon sinks such as forests, while removal of gases from the atmosphere requires futuristic technologies such as carbon capture and storage.
- ✓ Net-zero emission is said to prevent a 3–4°C rise by the end of the century.

75. Root Bridge in Meghalaya (Ecology & Community)

Article: "Bridge with a life" (Page 1)

Context: A root bridge at Mawlynnong in Meghalaya have been fashioned by Khasi villagers over decades by weaving the roots of ficus trees.



About Ficus

- ✓ Collectively known as fig trees or figs, they are native throughout the tropics with a few species extending into the semi-warm temperate zone.
- ✓ The common fig (*F. carica*) is a temperate species native to southwest Asia and the Mediterranean region (from Afghanistan to Portugal), which has been widely cultivated from ancient times for its fruit, also referred to as figs.
- ✓ Figs are also of considerable cultural importance throughout the tropics, both as objects of worship and for their many practical uses.
- ✓ Ficus is a pantropical genus of trees, shrubs, and vines occupying a wide variety of ecological niches; most are evergreen, but some deciduous species.
- ✓ Figs are keystone species in many tropical forest ecosystems.

76. NSO Group & Pegasus (Cyber Security – Spywares in News)

Context: Alleged use of the Israeli firm NSO Group's Pegasus software to snoop on journalists, politicians and activists worldwide, including in the country.

About NSO Group and Pegasus

- ✓ NSO creates technology that helps government agencies prevent and investigate terrorism and crime to save thousands of lives around the globe.
- ✓ NSO technology is designed by telecommunications and intelligence experts who, positioned at the forefront of their fields, are dedicated to keeping pace with the ever-changing cyber world.

Pegasus

- ✓ Pegasus was developed in 2010 by the Israeli firm, the NSO Group.
- ✓ Pegasus spyware was first discovered in an iOS version in 2016 and then a slightly different version was found on Android.
- ✓ Pegasus spyware is able to read the victim's SMS messages and emails, listen to calls, take screenshots, record keystrokes, and access contacts and browser history.
- ✓ Hackers can hijack the phone's microphone and camera, turning it into a real-time surveillance device.
- ✓ Pegasus can send back to the hacker the target's private data, including, contact lists, calendar events, passwords, text messages, and live voice calls from popular mobile messaging apps".
- ✓ The target's phone camera and microphone can be turned on to capture all activity in the phone's vicinity, expanding the scope of the surveillance.
- ✓ Pegasus has evolved from a crude system that was reliant on social engineering to software that can compromise a phone without the user having to click on a single link. This is called Zero-click attack.

77. GAVI (Disease & Vaccine - International Alliance)

Context: Global vaccine-sharing network COVAX is still seeing strong demand for India-made doses of the AstraZeneca COVID-19 shot.

About GAVI

- ✓ Created in 2000, Gavi is an international organisation – a global Vaccine Alliance, bringing together public and private sectors with the shared goal of creating equal access to new and underused vaccines for children living in the world's poorest countries.
- ✓ Gavi brings together developing country and donor governments, the World Health Organization, UNICEF, the World Bank, the vaccine industry in both industrialised and developing countries,

- research and technical agencies, civil society, the Bill & Melinda Gates Foundation and other private philanthropists.
- ✓ It contributes to achieving the United Nations' Millennium Development Goals by focusing on performance, outcomes and results.

78. INSACOG (Disease - Covid 19)

Context: Omicron variant

About INSACOG

- ✓ INSACOG (Indian SARS-CoV-2 Genomics Consortium) is a national multi-agency consortium of Regional Genome Sequencing Laboratories (RGSLs) set up by the Indian Government in December 2020 to monitor the genomic variations in the covid-19 causing SARS-CoV-2 virus.
- ✓ The network carries out whole genome sequencing of SARS-CoV-2 virus across the nation, aiding the understanding of how the virus spreads and evolves. Any changes to the genetic code, or mutations, can be observed in the samples and provide information to aid public health response.
- ✓ Initially, ten Regional Genome Sequencing Laboratories (RGSLs) spread across the country were identified to carry out genome sequencing of positive samples from different states which is facilitated by the National Centre for Disease Control (NCDC), Delhi involving the Central Surveillance Unit (CSU) under Integrated Disease Surveillance Programme (IDSP).

79. Zero Covid Policy (Covid 19 Pandemic Policies)

Context: Hong Kong is one of the last few places in the world that is still following a stringent 'zero COVID' policy.

About the Zero Covid Policy

- ✓ It's the point where Covid-19 has been driven down as close as possible to zero through strict control measures. This strategy has led to toughest quarantine and testing measures worldwide.
- ✓ This zero Covid strategy involves strict lockdowns (even after the detection of just one or a handful of cases) and extensive testing, heavily controlled or closed borders, as well as robust contact tracing systems and quarantine mandates.
- ✓ The objective of this strategy is to keep transmission of the virus as close to zero as possible and ultimately to eliminate it entirely from particular geographical areas.

About Hong Kong's "Zero-covid" strategy

- ✓ While the new Omicron variant has renewed anxiety around the world, leading some countries to tighten travel curbs, Hong Kong and mainland China remain among the few places sticking to a zero-tolerance policy on any coronavirus infections.
- ✓ **Impact:** International business groups have repeatedly warned that the city could lose talent and investment due to its travel restrictions, which can involve up to three weeks in mandatory quarantine. Now recruiters and relocation firms say an outflow of talent is well under way.

80. ZyCoV-D (Disease - Covid 19 Vaccine)

Context: Union Health Secretary Rajesh Bhushan asked seven States to identify high-priority districts where the three-dose ZyCoV-D vaccine could be launched initially.

About the ZyCoV-D Vaccine

- ✓ It is the world's first DNA vaccine, ZyCov-D.
- ✓ Produced by pharmaceutical company Zydus Cadila, the vaccine has received Emergency Use Authorisation and is also the first in the country to be approved for children above the age of 12.
- ✓ "ZyCov-D is a "plasmid DNA" vaccine — or a vaccine that uses a genetically engineered, non-replicating version of a type of DNA molecule known as a 'plasmid'.
- ✓ The plasmids in this case are coded with the instructions to make the spike protein of SARS-CoV-2, the coronavirus that causes Covid-19.
- ✓ Vaccination gives the code to cells in the recipient's body, so they can begin making the spiky outer layer of the virus.

- ✓ The immune system is expected to recognize this as a threat and develop antibodies in response.
- ✓ Most Covid-19 vaccines currently are given in two doses, with a couple of single-shot ones also available.
- ✓ ZyCov-D by contrast, will be given in three doses, with an interval of 28 days between the first and second and second and third shots.
- ✓ The other unique thing about the vaccine is the way it is given. No needle is used — instead, a spring-powered device delivers the shot as a narrow, precise stream of fluid that penetrates the skin.

81. Asiatic Elephant (Ecology - Wildlife Protection & Conservation Projects)

Context: RTI reply reveals that 741 elephants died from electrocution in the country.

About Asiatic Elephant

- ✓ The Asian elephant, also known as the Asiatic elephant, is the only living species of the genus *Elephas* and is distributed throughout the Indian subcontinent and Southeast Asia, from India in the west, Nepal in the north, Sumatra in the south, and to Borneo in the east
- ✓ It is the largest living land animal in Asia
- ✓ The Asian elephant has been listed as Endangered on the IUCN Red List
- ✓ It is primarily threatened by loss of habitat, habitat degradation, fragmentation and poaching

About Elephant Corridors

- ✓ Elephant corridors are narrow strips of land that connect two large habitats of elephants.
- ✓ Elephant corridors are crucial to reduce animal fatalities due to accidents and other reasons.

About Project Elephant

- ✓ Government of India launched “Project Elephant” in 1992 as a Centrally Sponsored Scheme of the Ministry of Environment and Forests.
- ✓ It was intended to provide financial and technical support to the elephant range states of India for the protection of elephants, their habitats and corridors and address issue of human- animal conflict.
- ✓ The following objectives of the Project includes :
 - To protect elephants, their habitat & corridors
 - To address issues of man-animal conflict
 - Welfare of captive elephants
- ✓ Presently the Project is being implemented in 22 States/UTs, viz. Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Odisha, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal, Rajasthan, Andaman & Nicobar, Bihar, Punjab, Gujarat and Haryana (where an elephant rescue centre has been set up supported by Project Elephant).

About Gaj Yatra

- ✓ ‘Gaj Yatra’, a nationwide campaign to protect elephants rolled out from Tura, was launched on the occasion of World Elephant Day in 2017.
- ✓ The campaign was planned to cover 12 elephant range states. The elephant is part of India’s animal heritage and the Government celebrates this day to spread awareness about the conservation of the species
- ✓ The campaign was led by the Wildlife Trust of India (WTI) that aims to create awareness about elephant corridors to encourage free movement in their habitat.

82. CAMPA Fund (Ecological Conservation - Afforestation)

Context: The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) has so far disbursed ₹48,606 crore to 32 States, according to the Environment Ministry.

About CAMPA

- ✓ It seeks to mitigate the impact of diversion of forest land for non-forest purposes by making sure through a well-defined institutional mechanism, that the funds are released and utilized quickly, efficiently and transparently.

- ✓ The CAMPA law is applicable to States, Union Territories, and the Centre as well.
- ✓ The Supreme Court of India in 2002 (TN Godhavarman Vs Union of India case) had ordered the creation of CAMPA fund.
- ✓ CAMPA was established in 2004 to manage the Compensatory Afforestation Fund (CAF) and it acts as the custodian of the CAMPA fund.
- ✓ National Compensatory Afforestation Fund under the Public Account of India and State Compensatory Afforestation Fund under the Public Account of each state was created.
- ✓ The State Funds will receive 90% of the payments while the National Fund will receive the remaining 10%.
- ✓ All states except Nagaland have set up state CAMPAs following this notification, as of November 2019.
- ✓ CAMPA funds are part of long-pending dues of the Compensatory Afforestation Fund (CAF), a ₹54,000-crore tranche collected for nearly a decade as environmental compensation from industry, which has razed forest land for its business plans.

83. Great Indian Hornbill (Ecology & Culture - Species in News)

Context: Mon district in Nagaland observed a shutdown in protest against the killing of 14 civilians by the security forces, while the State Government called off a major ongoing festival as a mark of respect to the deceased.



About the Great Indian Hornbill

- ✓ The Great Hornbill, also known as the Concave-casqued Hornbill, Great Indian Hornbill or Great Pied Hornbill, is one of the largest members of the hornbill family. It is found in the Indian subcontinent and south-east Asia.
- ✓ Its impressive size and color have made it important in many tribal cultures and rituals.
- ✓ The bird is characterised by black and white hues, enormous horn shaped yellow and black coloured bill, surrounded by peculiar broad double peck.
- ✓ During the breeding season they become very vocal. The courting couples engage in a loud duet turning to a rapid mixture of roars and barks. With heavy beating of wings these birds can fly at great height.
- ✓ Great Hornbills have lived for up to 50 years in captivity.
- ✓ They are known as the ‘farmers of the forest’ due to the role they play in dispersing the seeds of numerous fruit trees. They carry the seeds of the fruit they eat in their droppings, thereby transporting the seeds elsewhere and helping the forest regenerate. They will also prey on small mammals, reptiles and birds.
- ✓ Males and females are similar except that the irises of the male are red, while those of the female are red, and males have slightly larger bills and casques.

Habitat

- ✓ Great Hornbills are arboreal and depend on tall, dense old growth (unlogged) forests in hilly regions. Trees that extend beyond the height of the canopy are preferred for nesting and the tree must have a natural cavity large enough to hold the female and her chicks. The same nesting site is used year after year if possible. They require large stretches of forest, unlike many of the smaller hornbills.
- ✓ They are found in the forests of the North eastern region of India, Bhutan, Nepal, Mainland Southeast Asia, Indonesian Island of Sumatra. They are also found in a few forest areas in the Western Ghats.
- ✓ Around nine hornbill species can be found in India, of which four are found in the Western Ghats:
 - Indian Grey Hornbill (endemic to India),
 - The Malabar Grey Hornbill (endemic to the Western Ghats),
 - Malabar Pied Hornbill (endemic to India and Sri Lanka) and
 - The widely distributed Great Hornbill.

- ✓ India also has one species that has one of the smallest ranges of any hornbill: the Narcondam Hornbill, found only on the island of Narcondam.
- ✓ The Great Hornbill is the state bird of Kerala and Arunachal Pradesh in India.

Threats & Conservation

- ✓ While the Great Hornbill occurs in several protected areas, it is generally declining in numbers.
- ✓ The biggest threat is habitat destruction and particularly the removal of the old growth trees that they require for nesting.
- ✓ Their large size makes them easy targets for hunters who value them for their meat, feathers and casque, which is used for ornamental purposes in tribal cultures.
- ✓ It is protected at the highest level under Schedule I of the Wildlife Protection Act, 1972.
- ✓ They are listed on CITES Appendix I which restricts trade of the species.
- ✓ They are listed as Vulnerable under the IUCN Red List.

About the Hornbill Festival

- ✓ The “Hornbill Festival” takes place between the 1st December (which happens to be the Nagaland Formation Day), till the 7th of December, annually.
- ✓ The aim of the festival is to revive and protect the rich culture of Nagaland and display its extravaganza and traditions.
- ✓ Organized by the State Tourism and Art & Culture Departments of Nagaland, Hornbill Festival showcases a mélange of cultural displays under one roof at a model village built at Kisama, a western Angami location situated 12 kms away from Kohima.
- ✓ The Hornbill Festival has contributed significantly to enhancing the state's tourism brand. Tourism promoters believe that the Hornbill Festival in Nagaland allows tourists to have an insight into the different tribes of Nagaland.

84. Vaccine for Emergency Use in India (Covid 19 Vaccine)

Context: India has approved two more COVID-19 vaccines and the antiviral drug Molnupiravir under emergency use authorisation, Union Health Minister Mansukh Mandaviya tweeted on Tuesday. Currently, India uses **Covishield, Covaxin and Sputnik V** for vaccination.

About the New Vaccine

- ✓ **Corbevax** is a **protein sub-unit vaccine**. It has been co-developed by Hyderabad-based Biological E, the Baylor College of Medicine in Houston, U.S., and the U.S. company Dynavax Technologies.
- ✓ **Covovax** is a **nanoparticle-based vaccine**. It is produced by the Serum Institute of India under licence from Novavax, a U.S.-based biotechnology company.
- ✓ The vaccine has been **approved by the World Health Organization (WHO) under its Emergency Use Listing** and, therefore, will be available globally as part of the COVAX initiative to ensure that at least 40% of world is vaccinated on priority.
- ✓ There are no studies so far to show how effective the new vaccines will be in giving protection against symptomatic infection when employed as a third dose.

How Corbevax works

- ✓ Corbevax is a “recombinant protein sub-unit” vaccine, which means it is made up of a specific part of SARS-CoV-2 — the spike protein on the virus’s surface.
- ✓ The spike protein allows the virus to enter the cells in the body so that it can replicate and cause disease.
- ✓ However, when this protein alone is given to the body, it is not expected to be harmful as the rest of the virus is absent.
- ✓ The body is expected to develop an immune response against the injected spike protein.
- ✓ Therefore, when the real virus attempts to infect the body, it will already have an immune response ready that will make it unlikely for the person to fall severely ill.

- ✓ Although this technology has been used for decades to make hepatitis B vaccines, Corbevax will be among the first Covid-19 vaccines to use this platform.

How Corbevax is different

- ✓ Other Covid-19 vaccines approved so far are either mRNA vaccines (Pfizer and Moderna), viral vector vaccines (AstraZeneca-Oxford/Covishield, Johnson & Johnson and Sputnik V) or inactivated vaccines (Covaxin, Sinovac-CoronaVac and Sinopharm's SARS-CoV-2 Vaccine—Vero Cell).
- ✓ Inactivated vaccines, which include killed particles of the whole SARS-CoV-2 virus, attempt to target the entire structure of the virus. On the other hand, Corbevax, like the mRNA and viral vector Covid-19 vaccines, targets only the spike protein, but in a different way.
- ✓ Viral vector and mRNA and vaccines use a code to induce our cells to make the spike proteins against which the body have to build immunity. In this case, the Corbevax, actually giving the protein.
- ✓ Like most other Covid-19 vaccines, Corbevax is administered in two doses. However, as it is made using a low-cost platform, it is also expected to be among the cheapest available in the country.

Biological E, the manufacturer of Corbevax

- ✓ Biological E, headquartered in Hyderabad, was founded by Dr D V K Raju in 1953 as a biological products company that pioneered the production of heparin in India.
- ✓ By 1962, it forayed into the vaccines space, producing DPT vaccines on a large-scale.
- ✓ Today, it is among the major vaccine makers in India and, by its own claim, the “largest” tetanus vaccine producer in the world.

How does Covovax work?

- ✓ Like several other Covid-19 vaccines, Covovax targets the spike protein on the surface of the SARS-CoV-2 coronavirus — the protein that allows the virus to penetrate the human cell.
- ✓ Novavax has achieved this by engineering copies of the spike protein in the lab using the cells of a moth.
- ✓ Modified spike genes are placed in a baculovirus, which is known to infect insects. This virus is then used to infect the moth cells, carrying the spike gene into the cell. The cells then create the spike proteins, which are harvested. After they are purified, a certain dosage of these spike proteins are used as the vaccine.
- ✓ Once a person is given a shot of this vaccine, their body is expected to recognise these copies of the spike proteins as a foreign substance and build immunity against them.
- ✓ When the real virus tries to infect the cell, the body is expected to be able to fight it off.

About Molnupiravir

- ✓ Molnupiravir, which was approved this month by the U.S. Food and Drugs Administration (USFDA), close on the heels of Paxlovid by Pfizer Inc, is said to be a promising drug for those with mild and moderate disease and also easily administered as a pill.
- ✓ Thirteen companies in India are set to manufacture it. It has been approved under emergency use authorisation for treating adults with COVID-19 “who have high risk of progression to disease”.
- ✓ Cipla, one of the licencees, said in a statement that it planned to launch Molnupiravir under the brand name Cipmolnu.
- ✓ Paxlovid is yet to be approved in India.



Vaccination for children in the 15-18 age group

- ✓ The Bharat Biotech's Covaxin will be the only vaccine that will be administered to eligible recipients in the age group of 15-18 years.
- ✓ Children born in 2007 and earlier shall be eligible to receive the vaccine.

What is the difference between a booster shot and an additional Covid-19 vaccine?

- ✓ An additional dose, originally called a third dose, is given to people with moderately or severely compromised immune systems to improve their response to the initial vaccine series.

- ✓ The term “third dose” was used to refer to additional doses for the two mRNA vaccines, but now the term is “additional dose” because those who received a Johnson & Johnson “one dose” vaccine may also be eligible for a dose based on their immune systems.
- ✓ People with weakened immune systems might not develop enough immunity after vaccination with two doses of a vaccine. This additional dose is intended to improve immunocompromised people’s response to their initial vaccine series.
- ✓ Experts say that offering such beneficiaries a third dose could help them match up an immune response similar to generalized, healthy populations.

What is a booster shot?

- ✓ A booster shot is means to strengthening one’s immune system against a particular pathogen.
- ✓ It may be exactly the same original vaccine, in which case its goal is to increase the magnitude of protection by producing more antibodies.
- ✓ The booster shot is an additional dose after the protection provided by the original shot(s) has started to decrease over time.
- ✓ The booster is designed to help people maintain their level of immunity for longer.
- ✓ What a booster shot does is that it gives the memory cells the crucial signal to re-engage when the virus attacks.

85. Green Hydrogen (Science and Technology)

Article: “Boosting green hydrogen” (Page 9)

Context: Hydrogen is the most promising solution to decarbonise sectors like cement, steel, and refineries.



- ✓ A few key sectors with low transition costs, such as refineries, fertilizers and natural gas, should be mandated to use hydrogen to bring down costs as part of near-term goals
- ✓ A few key sectors with low transition costs, such as refineries, fertilizers and natural gas, should be mandated to use hydrogen to bring down costs as part of near-term goals.
- ✓ New demand from steel, cement and road mobility should be mandated as part of medium-term goals. Heavy-duty vehicles should receive State and Central incentives.
- ✓ Shipping, aviation, energy storage and solutions towards power intermittency should be mandated to use green hydrogen in the long run.
- ✓ Enforcing time-bound mid- and long-term policies would inspire the private sector to invest more in green hydrogen and give the boost it requires in its nascent stages.
- ✓ India should replace grey with green hydrogen and reduce dependence on imported ammonia
- ✓ India has already taken the first step with the Indian Oil Corporation floating a global tender to set up two green hydrogen generations units at the Mathura and Panipat refineries.

About Green Hydrogen

- ✓ Hydrogen generated entirely from renewable power sources is called green hydrogen. In the last process, electricity generated from renewable energy is used to split water into hydrogen and oxygen.
- ✓ Green hydrogen has specific advantages.
 - **Environment Friendly:** Green Hydrogen as energy source is seen as the next big thing as its usage would lead to zero emissions
 - **Potential to Decarbonise various sectors:** It is a clean burning molecule, which can decarbonise a range of sectors including iron and steel, chemicals, and transportation.
 - **Efficient utilization of Renewable Energy:** Renewable energy that cannot be stored or used by the grid can be channelled to produce hydrogen.
 - **Reduced Dependence on Rare Minerals:** Green Hydrogen also holds the key to clean electric mobility that doesn’t depend on rare minerals. Green Hydrogen helps achieve long-term vision of reduced dependency on minerals and rare-earth element-based battery as energy storage.

- **Helps Achieve Paris Goal:** Green hydrogen energy is vital for India to meet its Nationally Determined Contributions and ensure regional and national energy security, access and availability
- **Energy Security:** Green energy helps reduce import dependency on fossil fuels

86. IN-SPACe (Science and Technology)

Article: “*A launch window for India as a space start-up hub*” (Page 8)

Context: The sector is in an embryonic stage and there is scope to build a feasible business model

Read the article

About IN-SPACe:

- ✓ Indian National Space Promotion and Authorization Center (IN-SPACe) is an independent nodal agency under Department of Space for allowing space activities and usage of DOS owned facilities by NGPEs as well as to prioritise the launch manifest.
- ✓ Existing ISRO infrastructure, both ground- and space-based, scientific and technical resources, and even data are planned to be made accessible to interested parties to enable them to carry out their space-related activities
- ✓ IN-SPACe is supposed to be a facilitator, and also a regulator. It will act as an interface between ISRO and private parties, and assess how best to utilise India's space resources and increase space-based activities.

87. Tiangong - Chinese Space Station (Science & Technology - Space Science)

Context: Beijing on Tuesday accused the U.S. of irresponsible and unsafe conduct in space over two “close encounters” between the Chinese space station and satellites operated by Elon Musk’s SpaceX.



About the Issue

- ✓ Tiangong, China’s new space station, had to manoeuvre to avoid colliding with one Starlink satellite in July and with another in October, according to a note submitted by Beijing to the UN space agency. The note said the incidents “constituted dangers to the life or health of astronauts aboard the China Space Station”.
- ✓ Starlink, a division of SpaceX, operates a constellation of close to 2,000 satellites. SpaceX is a private American company, independent of the U.S. military and civilian space agency NASA.

About the Tiangong

- ✓ Tiangong is the successor to China’s Tiangong-1 and Tiangong-2 space laboratories, launched in 2011 and 2016, respectively. The space station that the Chinese Manned Space Agency (CMSA) is building in low Earth orbit.
- ✓ It will be built on a modular design, similar to the International Space Station operated by the United States, Russia, Japan, Canada and the European Space Agency.
- ✓ In May 2021, China launched Tianhe, the first of the orbiting space station’s three modules, and the country aims to finish building the station by the end of 2022.
- ✓ Tiangong will be much smaller than the International Space Station (ISS), with only three modules compared with 16 modules on the ISS.
- ✓ Tiangong will also be lighter than the ISS, which weighs about 400 tons (450 metric tons) following the recent addition of Russia’s Nauka module.
- ✓ It will be possible to spot Tiangong from Earth, just as it sometimes is with the ISS. Tiangong will orbit at an altitude of between 211 and 280 miles (340 to 450 kilometers) above Earth and between 43 degrees north and south, and the space station should be a fixture in the sky for at least a decade.

88. 5G Technology (Science and Technology)

The uses of 5G Technology

- ✓ Its use is a chance for Indian policy-makers to educate and empower citizens and businesses, and transform existing cities into smart and innovative cities.
- ✓ Allow citizens and communities to get socio-economic benefits and comforts delivered by a well-advanced, more data-intensive, digital economy.
- ✓ The uses of 5G in India may encompass **enhanced outdoor and indoor broadband, the Internet of things, smart cities, smart agriculture, energy monitoring, remote monitoring, smart grids, Tele-health, industrial automation, remote patient monitoring and industrial automation** to name some of the areas.

Deployment of 5G in India

- ✓ Needs to be carefully planned after a cost benefit analysis by independent experts which will create a level-playing field through market mechanism such as facilitating, simulating, auctioning, ensuring competition, functioning markets, etc.
- ✓ As the deployment of **5G network is expensive**, both the Central and State governments may need to consider measures which stimulate fibre investment, attract investment through public private partnerships (PPPs) and facilitate investment funds on a nominal interest basis.
- ✓ Also needs to address information asymmetry and negative externalities through laws and regulations/taxes and subsidies.
- ✓ The deployment of 5G technology will also **need right of access to government infrastructure** such as traffic lights, lamp posts, etc. where wireless operators can deploy electronic small cell apparatus

DIFFERENCE BETWEEN 5G AND 4G	
5G	4G
Data bandwidth is above 1gbps and operates at higher frequency band to allow faster data transmission	Data bandwidth lies between 2mbps to 1gbps and operates at lower frequency band than 5G
Consumption of battery is less	Consumption of battery is comparatively more

89. System on a Chip (SoC) (Science & Technology)

Context: India is aiming to manufacture silicon semiconductor chips. It has intensified efforts to set up a semiconductor fabrication plant with the help of Taiwan, the market leader, for which the government is investing over \$7.5 billion.

About System on a Chip (SoC)

- ✓ A system on a chip, also known as an SoC, is essentially an integrated circuit or an IC that takes a single platform and integrates an entire electronic or computer system onto it. It is, exactly as its name suggests, an entire system on a single chip.
- ✓ Primary goal is to reduce energy waste, save up on spending costs, as well as reduce the space occupied by large systems.
- ✓ They are used in most, if not all, portable tech such as smartphones, cameras, tablets, and other wireless technologies.

90. Application Programming Interface (API) (Information Technology)

Context: Amazon's cloud service, Amazon Web Services (AWS), suffered a massive outage last week. The interruption affected a multitude of services like Netflix and Disney's streaming platforms. The issue was related to API.

About API

- ✓ Application programming interface (API) is a set of protocols for building and integrating application software.

- ✓ Example of API includes universal login which is the function that enables people to log in to websites by using their Facebook, Twitter, or Google profile login details.
- ✓ Another most common example of a good API is the Google Maps service.
- ✓ Each Tweet contains descriptive core attributes, including an author, a unique ID, a message, a timestamp when it was posted, and geolocation metadata. Twitter makes public Tweets and replies available to developers and allows developers to post Tweets via the company's API.

91. National Investigation Agency (NIA) (Polity & Security)

Context: The Supreme Court on Tuesday refused to interfere with a Bombay High Court order granting default bail to advocate Sudha Bharadwaj in the Bhima Koregaon case, paving the way for her release from jail after a span of three years. A Bench of Justices declined the arguments made by the National Investigation Agency (NIA).

About the National Investigation Agency (NIA)

- ✓ Over the past several years, India has been the victim of large scale terrorism sponsored from across the borders. There have been innumerable incidents of terrorist attacks, not only in the militancy and insurgency affected areas and areas affected by Left Wing Extremism, but also in the form of terrorist attacks and bomb blasts, etc., in various parts of the hinterland and major cities, etc.
- ✓ With these internal and external security concerns, it was felt that there was a need for setting up of an Agency at the Central level for investigation of offences related to terrorism and certain other Acts, which have national ramifications.
- ✓ Several experts and Committees, including the Administrative Reforms commission in its Report, had made recommendations for establishing such an Agency.
- ✓ The Government after due consideration and examination of the issues involved, proposed to enact a legislation to make provisions for establishment of a National Investigation Agency in a concurrent jurisdiction framework, with provisions for taking up specific cases under specific Acts for investigation.
- ✓ Accordingly, the National Investigation Agency (NIA) was established on 31st December, 2008, in the aftermath of the traumatic Mumbai Terror Attack (MTA) on 26th November, 2008, to create an elite agency dedicated towards the investigation and prosecution of offences affecting sovereignty, security and integrity of India.
- ✓ It is the designated National Counter Terrorism Law Enforcement Agency in India.

Objectives

- ✓ The National Investigation Agency aims to be a thoroughly professional investigative agency matching the best international standards.
- ✓ The NIA aims to set the standards of excellence in counter terrorism and other national security related investigations at the national level by developing into a highly trained, partnership oriented workforce.
- ✓ NIA aims at creating deterrence for existing and potential terrorist groups/individuals.
- ✓ It aims to develop as a storehouse of all terrorist related information.

Headquarters and Regional Offices

- ✓ With its headquarters in New Delhi, over the past 12 years, the NIA has expanded its footprint and established its branch offices in different locations including Hyderabad, Guwahati, Mumbai, Kochi, Lucknow, Kolkata, Raipur, Jammu, Chandigarh, Ranchi, Chennai and Imphal to investigate offences under its mandate in particularised theatres with customised sophistication.
- ✓ Over the past 13 years, NIA has made its presence felt in all the theatres of Counter Terrorism including North Eastern States, Jammu and Kashmir and Left Wing Extremism affected states.
- ✓ NIA has investigated diverse types of cases related to Terror Financing- FICN, Jihadi terrorism, Global terror outfits like ISIS and Al Queda, Khalistan Extremism, Espionage and Human Trafficking.

National Investigation Agency (Amendment) Bill, 2019

- ✓ The Act was amended with the objective of speedy investigation and prosecution of certain offences, including those committed outside India.
- ✓ The NIA (Amendment) Bill, 2019 was passed by Lok Sabha on July 15, 2019, and by Rajya Sabha on July 17, 2019.
- ✓ The 2019 amendment in the law focused on three main areas.
 - **Offences Outside India:** The original Act allowed NIA to investigate and prosecute offences within India. The amended Act empowered the agency to investigate offences committed outside India, subject to international treaties and domestic laws of other countries. The NIA special court in New Delhi will have jurisdiction over these cases.
 - **Widened Scope of Law:** The NIA can investigate and prosecute offences under the Acts specified in the Schedule of the NIA Act. The Schedule originally had The Atomic Energy Act, 1962, The Unlawful Activities (Prevention) Act, 1967, and The Anti-Hijacking Act, 1982, among other entries. The amendment has allowed the NIA to investigate, in addition, cases related to (i) human trafficking, (ii) counterfeit currency or banknotes, (iii) manufacture or sale of prohibited arms, (iv) Cyber-terrorism, and (v) offences under the Explosive Substances Act, 1908.
 - **Special Courts:** The 2008 Act constituted Special Courts for conducting the trial of offences under the Act. The 2019 amendment allowed the central government to designate Sessions Courts as Special Courts for the trial of scheduled offences under the Act. The central government is required to consult the Chief Justice of the High Court under which the Sessions Court is functioning, before designating it as a Special Court. When more than one Special Court has been designated for any area, the seniormost judge will distribute cases among the courts. State governments too, may also designate Sessions Courts as Special Courts for the trial of scheduled offences.

About State Investigation Agency (SIA)

- ✓ The SIA will be a nodal agency for coordinating with the National Investigation Agency (NIA) and other Central agencies.
- ✓ The head of the CID wing shall be the ex-officio Director of the SIA.

92. Chief Defence Staff (CDS) (Defense Sector)

Context: The tragic and untimely death of the country's first Chief of the Defense Staff, General Bipin Rawat, in a helicopter crash has created a vacuum at the highest levels of India's military hierarchy. The ambitious reform of the armed forces into integrated theatre commands, for which Gen. Rawat had set ambitious targets, also remains incomplete.

About the Chief Defence Staff (CDS)

- ✓ The Kargil Review Committee, headed by **Shri K Subrahmanyam** in 1999 had recommended comprehensive review of the National Security frame work for improved decision-making in defense matters.
- ✓ The Committee also recommended that the mechanisms established between the Defense Ministry and the Service Headquarters and the interface between them, should be holistically studied and reorganised. Based on Shri K Subrahmanyam Committee Report, a Group of Ministers (GoM) in 2001 recommended creation of the post of the **Chief of Defense Staff (CDS)**.
- ✓ Although the Group of Ministers recommended creation of the Chief of Defense Staff in 2001, no Government brought this significant reform in the country's Higher Defense Organisation.
- ✓ Later, the Prime Minister Shri Narendra Modi announced the Government's intention to create the post of Chief of Defense Staff during his address to the Nation on 15th August 2019.
- ✓ And then, the Cabinet Committee on Security on 24th December 2019 took the historic decision to create the post of the CDS to enhance the quality of Military Advice to Political Leadership through integration of Service inputs.

- ✓ This historic step aims to develop and foster expertise in defense matters for better and more informed decision making.

Role and Functions of CDS

- ✓ The Chief of Defense Staff is the Permanent Chairman of the Chiefs of Staff Committee and acts as the Principal Military Adviser to Raksha Mantri on all tri-services matters so as to provide impartial advice to the political leadership.
- ✓ CDS is the professional service chief, head of the Indian Armed Forces and the senior-most uniformed military adviser to the Government of India.
- ✓ General Bipin Rawat was appointed as the country's first Chief of Defense Staff on 31st December 2019. The tragic and untimely death of the country's first CDS, in a helicopter crash has created a vacuum at the highest levels of India's military hierarchy.

93. Mi-17V5 (Defense Sector - Defense Technologies)

Context: The chopper that crashed with the Chief of the Defence Staff (CDS), General Bipin Rawat, his wife Madhulika Rawat and 12 others on board is considered one of the most trusted and safest aircraft of the Indian Air Force (IAF).

About Mi-17V5

- ✓ Mi-17V-5 (domestic designation Mi-8MTV-5) is a military transport variant in the Mi-8/17 family of helicopters.
- ✓ It is produced by Kazan Helicopters, a subsidiary of Russian Helicopters.
- ✓ Designed to transport cargo inside the cabin and on an external sling, the Mi-17V-5 is one of the world's most advanced transport helicopters. It can also be deployed in troop and arms transport, fire support, convoy escort, patrol, and search-and-rescue (SAR) missions.
- ✓ Mi-17V-5 medium-lifter was designed based on the Mi-8 airframe. The helicopter retains the outstanding performance characteristics of its predecessors and can fly in tropical and maritime climates, as well as desert conditions.



94. Defence Acquisition Council (DAC)

Context: The Defense Acquisition Council, which met on Tuesday, cancelled a tender for procurement of naval guns from the U.S. and added the quantity to an existing upgraded Super Rapid Gun Mount (SRGM) being manufactured by Bharat Heavy Electricals Ltd. (BHEL).

About Defense Acquisition Council (DAC)

- ✓ It is the **highest decision-making body** in the **Defense Ministry** for deciding on new policies and capital acquisitions for the three services (Army, Navy and Air Force) and the Indian Coast Guard.
- ✓ **Minister of Defense is the Chairman of the Council.**
- ✓ It was formed, after the Group of Ministers recommendations on 'Reforming the National Security System', in 2001, post Kargil War (1999).

95. Defence Production and Export Promotion Policy (DPEPP) 2020 (Defence Sector)

Context: The Ministry of Defense is expected to put out the final version of the Defense Production and Export Promotion Policy (DPEPP) 2020, the draft of which has been released for public feedback.

About the Defence Production and Export Promotion Policy (DPEPP) 2020

- ✓ DPEPP flows out from the concept of 'Atmanirbhar Bharat'. The key word in this macro concept is 'self-reliance'. This is proposed to be achieved following the twin-track approach of enhancing boosting defence production and catalyzing defence exports.
- ✓ The policy aims to make India amongst the leading countries of the world in Defence sector, including Aerospace and Naval Shipbuilding sectors, from design to production, with active

participation of public and private sector and thus fulfilling the twin objectives of self-reliance and exports.

Goals & Objectives

- ✓ The policy has the following goals and objectives:
 - ✓ To achieve a turnover of Rs 1,75,000 Crores (US\$ 25Bn) including export of Rs 35,000 Crore (US\$ 5 Bn) in Aerospace and Defence goods and services by 2025.
 - ✓ To develop a dynamic, robust and competitive Defence industry, including Aerospace and Naval Shipbuilding industry to cater to the needs of Armed forces with quality products.
 - ✓ To reduce dependence on imports and take forward "Make in India" initiatives through domestic design and development.
 - ✓ To promote export of defence products and become part of the global defence value chains.
 - ✓ To create an environment that encourages R&D, rewards innovation, creates Indian IP ownership and promotes a robust and self-reliant defence industry
- ✓ The Department of Defence Production would be the nodal department for coordination on various components of the DPEPP-2020 including obtaining approvals of the competent authorities for various schemes, programs and projects outlined in the strategies to achieve the objectives set in this Policy.
- ✓ The progress on various stipulations of the Policy would be periodically reviewed and monitored by Defence Minister.
- ✓ Unless there is an 'attitudinal change' and there is a will to address the very many imperatives that lie in the way of implementation of the policy guidelines, self-reliance will remain an elusive dream. What is required now is an effective implementation of the policy in order to achieve the aims and objectives of the drafted Policy.

96. Types of Security Covers in India (Security of India)

Context: Days after joining the BJP, Rana Gurmit Singh Sodhi, former Congress Minister in Punjab, was accorded "Z" category security by the Union Ministry of Home Affairs.

Types of Security Covers in India

- ✓ There are as many as six categories of security cover: X, Y, Y-plus, Z, Z-plus, and SPG (Special Protection Group).

Who decides the level of protection that is to be given to an individual?

- ✓ The level of security needed by any individual is decided by the Ministry of Home Affairs, based on inputs received from intelligence agencies which include the Intelligence Bureau (IB) and Research and Analysis Wing (R&AW).
- ✓ It is also granted to any individual by MHA based on the recommendation of the state government.
- ✓ It can be seen that the agencies mostly provide a subjective measure of the threat to life or injury to a person from terrorists or any other group, based on information generated from their sources.
- ✓ The information can include intercepts of phone conversations, human intelligence, or a credible analysis of an open threat.
- ✓ Some individuals, by the positions they hold in government, are automatically entitled to have a security cover. They include the Prime Minister and his immediate family. The Home Minister and officials such as the National Security Advisor too, generally get security cover because of the positions they occupy.

The Process of Security Cover

- ✓ The Central Reserve Police Force (CRPF) and Central Industrial Security Force (CISF) are the two forces tasked with providing security to VIPs.
- ✓ While ministers get Central security cover due to their position in the government, a call on such security to private individuals is taken by the Home Ministry based on inputs from intelligence agencies.
- ✓ However, since these agencies do not report to any statutory body, VIP security has sometimes been alleged to be a political decision rather than one based on real threat.

How the security cover works

X category:

- ✓ This is the lowest level of security cover having two armed personnel and no commandos. Two personal security officers round the clock, which means around six PSOs assuming an 8-hour shift.
- ✓ There are many people who have been granted this kind of protection. Mainly it includes lawyers who investigate high profile cases or advocates who have some sort of threat.

Y category:

- ✓ In this case, 11 personnel are detained for the security of the individual. It also includes 1 or 2 Commandos and police personnel. Out of these, five personnel (one commander, four constables) are stationed at the residence of the protectee while three armed PSOs are deployed with the protectee on a rotation basis in three shifts.

Y + category:

- ✓ Under the Y+ security cover, five personnel — a CRPF commander and four constables — are stationed at a protectee's residence. Six personal security officers (PSOs) are deployed with the protectee on a rotational basis in three shifts. This means that two PSOs are with the protectee at all times.
- ✓ Few VIPs have been granted this security for eg. Kangna Ranaut nowadays have been granted Y+ security cover by the Ministry of Home Affairs on the recommendation of the Himachal Pradesh State government.

Z category:

- ✓ Z security cover consists of 22 personnel out of which 4 or 5 personnel are NSG commandos. The extra security is provided by the state government and CRPF and there is always one escort car in the convoy of Z security.
- ✓ Usually, commandos are equipped with sub-machine guns and other modern equipment.
- ✓ Currently, more than 60 people have been granted this Z security which includes senior supreme court lawyers, chief justice of India etc.

Z+ category:

- ✓ It is a security detail of 55 personnel. It includes more than 10 National Security Guard commandos and police personnel. Other Central Security Forces like CISF, CRPF, ITBP etc. are also accorded whenever the needed.
- ✓ Protectees under this category get a bulletproof car, escort in three shifts and additional security when required.
- ✓ Current protectees include Union Home Minister Amit Shah and the Gandhis — protectees get a 55-strong security detail comprising personnel of the Railway Protection Force (RPF), the Indo-Tibetan Border Police (ITBP) and 10 commandos of the elite National Security Guard (NSG) along with local police.

Special Protection Group (SPG)

- ✓ The Special Protection Group was raised in 1985 with a motive to provide proximate security cover to the Prime Minister of India and their family members.
- ✓ SPG commandos are highly trained and they also specialize in hand-to-hand combat they work on the directives and the guidelines of the CIA and Secret Service of America.
- ✓ SPG protection is given to the prime minister of India. Currently Narendra Modi has this security cover annual budget of this security is more than 600 crore and there is more than 4000 personnel in SPG and they are like the shadow of the PM. They are equipped with state of the art lethal weapons and they also specialize in hand to hand combat and martial arts.

NSG (National Security Guard)

- ✓ It was founded on 16 October 1984 under the National Security Guard Act, 1986, following Operation Blue Star, the Golden Temple attack and the assassination of Indian Prime Minister Indira Gandhi, for combating terrorist activities and protect states against internal disturbances.

- ✓ Later the NSG (popularly known as Black Cats) was used to protect the Prime Minister and other Prominent VVIP of Govt of India. NSG is modelled on British Special air service and GSG 9 of Germany.

97. Aravalli Ranges (Ecology & Climate Change - Mountains/Ranges/Glaciers in News)

Context: Along with the gradual destruction of the Aravalli ranges, the mighty Thar desert in western Rajasthan is expanding fast because of migration of people, changes in the rainfall pattern, spread of sand dunes and unscientific plantation drives. The degradation of land is posing a threat to the desert ecology, while the climate change has contributed to the spread of arid region.

About the Aravalli Ranges

- ✓ Spread over an area of 692 km, the Aravallis cover the states of Gujarat, Rajasthan, Delhi and Haryana. In the latter, they are found in the southwest part of the state, covering five divisions — Gurgaon, Faridabad, Mewat, Mahendargarh, and Rewari.
- ✓ The system is divided into two sections: the Sambhar-Sirohi ranges, taller and including Guru Peak on Mount Abu, the highest peak in the Aravalli Range and the Sambhar-Khetri ranges, consisting of three ridges that are discontinuous.
- ✓ The Aravalli Range is rich in natural resources (including minerals) and serves as a check to the growth of the western desert.
- ✓ The range hosts significant mineral deposits of base metals (copper, lead and zinc), noble metals (gold and silver) and building material such as marble, granite and more.
- ✓ It gives rise to several rivers, including the Banas, Luni, Sakhi, and Sabarmati.
- ✓ Though heavily forested in the south, it is generally bare and thinly populated, consisting of large areas of sand and stone and of masses of rose-coloured quartzite.



Environmental Concerns

- ✓ It is also the most “degraded” forest range in India, according to a study of the Aravalli hills in southern Haryana by the Wildlife Institute of India (WII).
- ✓ The study found that “most of the indigenous plant species have disappeared... and the most serious threat to wildlife and forests is developmental activities, which are gradually destroying the remnants of the Aravallis”.
- ✓ For more than 3 billion years, the Aravallis have stood strong against the advance of the Thar desert towards fertile soils of eastern Rajasthan and the Indo Gangetic plains. But today, they are not just one of the oldest mountain chains in the world but also probably the most degraded.

98. Coral Reef [Environment- Biodiversity]

Context: The management authority of the world’s largest coral reef system, Australia’s Great Barrier Reef, confirmed on March 25 that the reef is experiencing a mass coral bleaching event. This is the sixth time that the coral reef system is being hit by a widespread and damaging bleaching event and the fourth time in six years that such an event has occurred.

About Coral Reef:

- ✓ A coral reef is an underwater ecosystem characterized by reef-building corals.
- ✓ Reefs are formed of colonies of coral polyps held together by calcium carbonate.
- ✓ Coral belongs to the class Anthozoa in the animal phylum Cnidaria, which includes sea anemones and jellyfish.
- ✓ Corals share a symbiotic relationship with single-celled algae called zooxanthellae.
- ✓ The algae provide the coral with food and nutrients, which they make through photosynthesis, using the sun’s light. In turn, the corals give the algae a home and key nutrient.
- ✓ The zooxanthellae also give corals their bright colour.
- ✓ Australia’s Great Barrier Reef is the world’s largest reef system stretching across 2,300 km. It hosts 400 different types of coral, gives shelter to 1,500 species of fish and 4,000 types of mollusc.
- ✓ Most reefs grow best in warm, shallow, clear, sunny and agitated water.
- ✓ Sometimes called rainforests of the sea, shallow coral reefs form some of Earth’s most diverse ecosystems.

- ✓ They occupy less than 0.1% of the world's ocean area, yet they provide a home for at least 25% of all marine species, including fish, mollusks, worms, crustaceans, echinoderms, sponges, tunicates and other cnidarians
- ✓ Coral reefs have declined by 50% since 1950, partly because they are sensitive to water conditions
- ✓ Coral reefs deliver ecosystem services for tourism, fisheries and shoreline protection.

About Coral Bleaching

- ✓ Bleaching happens when corals experience stress in their environment due to changes in temperature, pollution or high levels of ocean acidity
- ✓ Under stressed conditions, the zooxanthellae or food-producing algae living inside coral polyps start producing reactive oxygen species, which are not beneficial to the corals.
- ✓ So, the corals expel the colour-giving zooxanthellae from their polyps, which exposes their pale white exoskeleton, giving the corals a bleached appearance.
- ✓ This also ends the symbiotic relationship that helps the corals to survive and grow.
- ✓ Over the last couple of decades, climate change and increased global warming owing to rising carbon emissions and other greenhouse gases have made seas warmer than usual.
- ✓ The first mass bleaching event had occurred in 1998 when the El Niño weather pattern caused sea surfaces in the Pacific Ocean to heat up; this event caused 8% of the world's coral to die.
- ✓ The second event took place in 2002. In the past decade, however, mass bleaching occurrences have become more closely spaced in time, with the longest and most damaging bleaching event taking place from 2014 to 2017.

About Global Coral Reef Monitoring Network (GCRMN):

- ✓ The main activities of the Global Coral Reef Monitoring Network (GCRMN) are the preparation of regional periodic assessments which draw on monitoring, research and other data, and the establishment of regional GCRMN committees which, where possible draw on existing nodes and are linked to existing Regional Seas mechanisms
- ✓ Goals and objectives include:
 - Improve understanding of coral reef status and trends, globally and regionally.
 - Analyze and communicate coral reef biophysical, social and economic trends, providing science-based recommendations in support of raising awareness, management and policy development
 - Enable and facilitate greater utilization of coral reef data, including in research.
 - Build human and technical capacity to collect, analyse and report biophysical and socio-economic data on coral reefs.

About The Great Barrier Reef

- ✓ The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres over an area of approximately 344,400 square kilometres
- ✓ The reef is located in the Coral Sea, off the coast of Queensland, Australia, separated from the coast by a channel 100 miles wide in places and over 200 feet deep
- ✓ It supports a wide diversity of life and was selected as a World Heritage Site in 1981. CNN labelled it one of the seven natural wonders of the world in 1997
- ✓ Other environmental pressures on the reef and its ecosystem include runoff, climate change accompanied by mass coral bleaching, dumping of dredging sludge and cyclic population outbreaks of the crown-of-thorns starfish.

99. Prevention of Cruelty to Animals Act, 1960 [Ecology & Species Conservation – Acts in the News]

Context: From stabbing a stray dog for turning aggressive to “harassment” over feeding them, the Capital has reported at least three incidents in March alone, where canines have been brutally attacked even causing their death.

About Prevention of Cruelty to Animals Act, 1960

- ✓ This act provides for punishment for causing unnecessary cruelty and suffering to animals.
- ✓ This act defines animals and different forms of animals.
 - According to Section 2(a) of this Act; animal refers to any living creature excluding a human being. Therefore, this definition is comprehensive and exhaustive.
 - This enactment also speaks about domestic & captive animals.

- ✓ This Act enshrines the provisions relating to the establishment of an animal welfare board, its constitution, powers, and functions.
- ✓ This act provides the guidelines relating to experimentation on animals for scientific purposes.
- ✓ This act enshrines the provisions relating to the exhibition of the performing animals, and offences committed against the performing animals.
- ✓ This Act provides for the limitation period of 3 months beyond which no prosecution shall lie for any offences under this Act.

People for the Ethical Treatment of Animals (PETA)

- People for the Ethical Treatment of Animals (PETA) is the largest animal rights organization in the world
- PETA opposes speciesism, a human-supremacist worldview, and focuses its attention on the four areas in which the largest numbers of animals suffer the most intensely for the longest periods of time: in laboratories, in the food industry, in the clothing trade, and in the entertainment business.
- They also work on a variety of other issues, including the cruel killing of rodents, birds, and other animals who are often considered “pests” as well as cruelty to domesticated animals.
- PETA works through public education, investigative newsgathering and reporting, research, animal rescue, legislation, special events, celebrity involvement, and protest campaigns.

100. International Space Station [Space Science]

Context: A record-breaking U.S. astronaut and two Russian cosmonauts returned to Earth from the International Space Station, with tensions between Moscow and the West soaring over Ukraine.

About International Space Station (ISS)

- ✓ The International Space Station (ISS) is a modular space station (habitable artificial satellite) in low Earth orbit.
- ✓ It is a multinational collaborative project involving five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada).
- ✓ The ISS consists of pressurised habitation modules, structural trusses, photovoltaic solar arrays, thermal radiators, docking ports, experiment bays and robotic arms.
- ✓ Major ISS modules have been launched by Russian Proton and Soyuz rockets and US Space Shuttles.
- ✓ The station is serviced by a variety of visiting spacecraft: the Russian Soyuz and Progress, the SpaceX Dragon 2, and the Northrop Grumman Space Systems Cygnus, and formerly the European Automated Transfer Vehicle (ATV), the Japanese H-II Transfer Vehicle, and SpaceX Dragon 1.
- ✓ The Dragon spacecraft allows the return of pressurized cargo to Earth, which is used, for example, to repatriate scientific experiments for further analysis.