

MONTHLY CURRENT AFFAIRS MAGAZINE



- Disclaimer -

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

CONTENTS

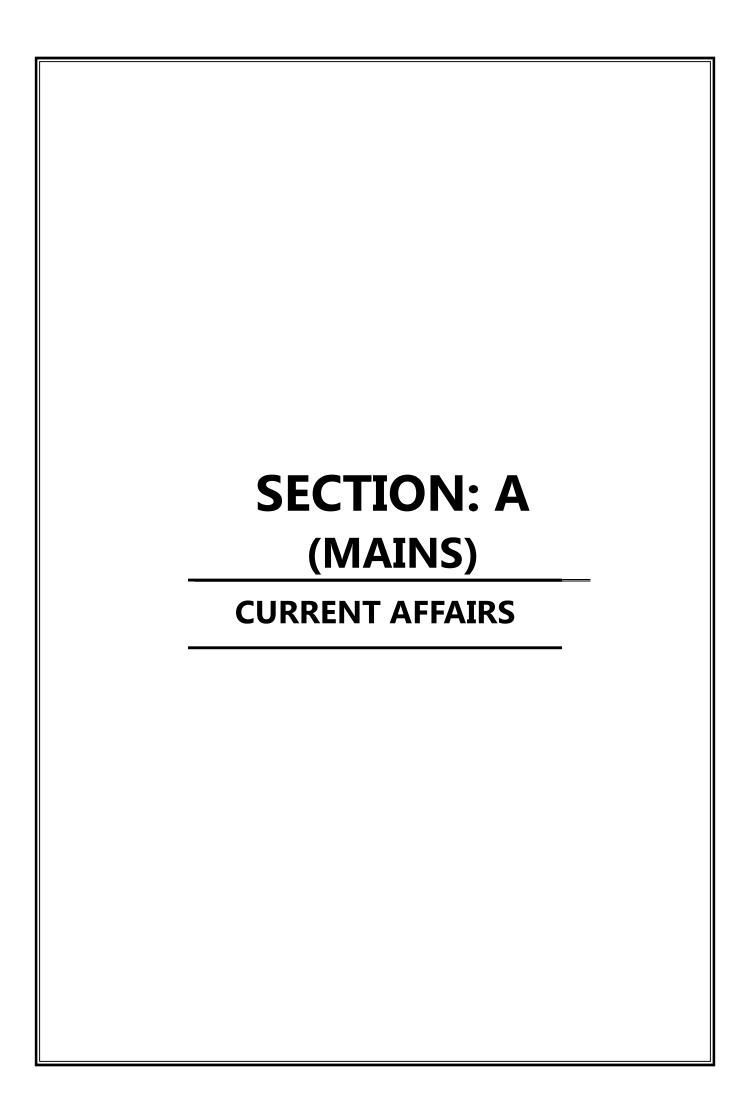
(APRIL, 2023)

Section - A: MAINS CURRENT AFFAIRS				
	Area of GS	Topics in News	Page No.	
		100 years of Vaikom Satyagraha	03	
GS I	HISTORY	Ambedkar's demand for Separate electorate and Reservation in present times	03	
	SOCIETY	India to have more people than China by mid-2023: UN	05	
		India-Armenia partnership	06	
		Bhutan 'desperate' to settle a dispute with China	06	
	INTERNATIONAL RELATIONS	U.K. joins Asia-Pacific trade treaty	08	
		Sudan Conflict	08	
		Bangladesh spells out Indo-Pacific priorities	10	
		EU's new crypto-legislation	10	
	POLITY & GOVERNANCE	India Justice Report 2022 (IJR)	11	
		Pakistan court strikes down colonial-era 'sedition' law	12	
		NCLAT upholds penalty on Google	12	
		Supreme Court celebrates 50 years of 'basic structure doctrine'	14	
		Extra Judicial Killings	15	
GS II		Amendments to IT rules to check 'Fake news'	16	
G2 II		IT Ministry regulates 'real money gaming' platforms	16	
		Powers of L-G	17	
		'Notion of man, woman not based on genitals': SC on same-sex marriages	18	
		ED initiates probe in BBC India's alleged foreign exchange violations	19	
		Guidelines for assessment of child suspects in 'heinous' offences	19	
		Mercy plea decisions and Delays	20	
		Union Cabinet approves National Medical Devices Policy	21	
		Ambiguities in India's nuclear liability law	22	
		Vibrant Villages Programme	23	
	Assam-Arunachal Pradesh end border dispute	24		

GS III	ECONOMY	Foreign Trade Policy 2023-2028	25
		• 5 BRICS nations contributing more than industrialised G7	26
		National Electricity Plan for 2022-27	28
		Livestock Insurance Scheme	28
		India among Top 10 Countries for Ease of Doing Business: EIU	
		India has almost wiped out extreme poverty: IMF	30
	SECURITY	Poonch attack	31
		50 Years of Project Tiger	32
	ENVIRONMENT	Open-source Seeds Movement	33
		Emerging hazards of radioactive contamination	34
		G7 vows to zero carbon	35
		ISRO releases images of Earth captured by its EOS-06 satellite	36
	SCIENCE &	India launches National Quantum Mission	36
	TECHNOLOGY	Genome sequencing and the Genome India Project	37
		Indian Space Policy – 2023	38
	Section - B:	CONTEMPORARY ISSUE BASED ESSAY	
Topics	in News		Page No.
• Life	should always be at th	ne top of our agenda, not just success.	42
	Section	a - C: PRELIMS CURRENT AFFAIRS	
	Area of GS	Topics in News	Page No.
		J & K's Basohli paintings get GI Tag	45
	ART & CULTURE	India hosts international Buddhist conference	46
		Kerala's Thirunelly temple's structures need protection	46
GS I		Pushkaralu festival returns to the Ganga	47
GS 1		The ancient art form of Bhoota Kola	48
	HISTORY	125th Anniversary of Sri Ramakrishna Math	48
	GEOGRAPHY INTERNATIONAL RELATIONS	Zojila tunnel and connectivity to Ladakh	49
		NISAR satellite to map Himalayas' seismic zones	50
		India elected to UN Statistical Commission	51
		G7 calls for extension of Black Sea grain deal Laborator Sea off COO communities and provide the Boundary	51
GS II	DOLITY 9.	Lokpal disposes off 68% corruption complaints: Report PM SVANiDHI Scheme	52 52
	POLITY & GOVERNANCE	Centre 'appropriate' party to respond to plea on	53
		disqualified lawmakers: EC	33

	POLITY & GOVERNANCE	Exemption for Rare Diseases drugs	54
GS II		Critical views on government policies not anti- establishment: SC	
		Government introduces Aquaculture Bill	
		26 States and UTs adopts Bhu-Aadhar: DoLR	
		Governors should clear bills as soon as possible: SC	
		Fill vacancy in NCSC expeditiously: SC	57
		Mission to map rural India's cultural assets	57
	ECONOMY	India rises on World Bank's Logistic Performance Index 2023	58
		Core inflation Calculation	59
		New Quality Control Orders for fibres	59
		ISRO launches Singapore's TeLEOS-2 satellite	60
		LockBit ransomware	60
	SCIENCE & TECHNOLOGY	DRDO, Indian Navy conducts successful trial of interceptor missile	61
GS III	TECHNOLOGY	NASA launches device to monitor air pollution from space	61
		New detailed map of dark matter	62
		ISRO tested Reusable Launch Vehicle	63
		Eravikulam National Park gets a fernarium	63
		First-ever waterbody census	64
	ENVIRONMENT	1 Crore Olive Ridley Turtles Hatch On Odisha Coast	64
	ENVIRONMENT	Protests in Hasdeo Aranya	65
		In a first, fly ash particles found in Antarctic ice	65
		 In a first, fly ash particles found in Antarctic ice Pittas find new haven in Odisha districts 	65 65
Topics i	in News	Pittas find new haven in Odisha districts	
	in News anche hits Sikkim's Nathu	Pittas find new haven in Odisha districts Section - D: QUICK BYTE	65 Page
Avala		Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No.
Avala Worl	anche hits Sikkim's Nathu	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	Page No.
AvalaWorkPatta	anche hits Sikkim's Nathu d's highest Frozen Lake m	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68
AvalaWorkPattaRama	anche hits Sikkim's Nathu d's highest Frozen Lake m nam ancient site	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68 68
AvalaWorkPattaRamaAdi S	anche hits Sikkim's Nathu d's highest Frozen Lake m nam ancient site anujacharya Jayanti	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68 68 68
AvalaWorkPattaRamaAdi SIdu N	anche hits Sikkim's Nathu d's highest Frozen Lake m anam ancient site anujacharya Jayanti Shankaracharya Jayanti	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68 68 68 69
AvalaWorkPattaRamaAdi SIdu NYang	anche hits Sikkim's Nathu d's highest Frozen Lake m nam ancient site anujacharya Jayanti Shankaracharya Jayanti Mishmis	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68 68 68 69 70
 Avala Worle Patta Rama Adi S Idu N Yang Thira 	anche hits Sikkim's Nathu d's highest Frozen Lake m nam ancient site anujacharya Jayanti Shankaracharya Jayanti Mishmis Ii festival	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La	65 Page No. 68 68 68 69 69 70
 Avala World Patta Rama Adi S Idu N Yang Thira Kama 	anche hits Sikkim's Nathu d's highest Frozen Lake m anam ancient site anujacharya Jayanti Shankaracharya Jayanti Mishmis Ii festival Dance Form	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La narathon	65 Page No. 68 68 68 69 70 70
 Avala Work Patta Rama Adi S Idu N Yang Thira Kama MP's 	anche hits Sikkim's Nathu d's highest Frozen Lake m anam ancient site anujacharya Jayanti Shankaracharya Jayanti Mishmis Ii festival Dance Form akhya Temple corridor	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La narathon	65 Page No. 68 68 68 69 70 70 71
 Avala Work Patta Rama Adi S Idu N Yang Thira Kama MP's Boha 	anche hits Sikkim's Nathu d's highest Frozen Lake m anam ancient site anujacharya Jayanti Shankaracharya Jayanti Mishmis li festival a Dance Form akhya Temple corridor Gond Painting gets GI Ta	Pittas find new haven in Odisha districts Section - D: QUICK BYTE La narathon	65 Page No. 68 68 68 69 70 70 71 71

•	Exercise Orion	73
•	Exercise INIOCHOS-23	74
•	'Cope India' Exercise	74
•	Turkey approves Finland NATO membership bid	74
•	10th edition of SLINEX-23 in Colombo	75
•	Caribbean Community and Common Market (CARICOM)	75
•	Malaria to become a notifiable disease	75
•	India's first 3D-printed post office	76
•	Election Commission grants national party status to AAP	76
•	India's First Water Metro	77
•	Hakki Pikki in Sudan Conflict	77
•	Sangathan Se Samriddhi campaign	77
•	Ninth Schedule of the Indian Constitution	77
•	Dabba trading	78
•	Utsa Patnaik wins Malcolm Adiseshiah Award 2023	78
•	India set to grow by 5.9% this fiscal: IMF	79
•	6 GHz spectrum	79
•	World Chagas Disease Day	80
•	Joint Military Exercise 'Ex KAVACH'	80
•	Pralay ballistic missiles	81
•	Marburg virus outbreak	81
•	India registers first case of plant fungus	81
•	NASA's Artemis II mission to Moon	82
•	Amogha-III Missile System	82
•	NASA's new computer model 'DAGGER'	82
•	Government launches SUPREME	83
•	UAE's Hope probe uncovers secrets of Deimos	83
•	Mark 54 anti-submarine torpedoes	83
•	Scientists identifies Electromagnetic Ion Cyclotron (EMIC) waves	84
•	West Bengal adds four new biodiversity heritage sites	84
•	SIDBI Launches 'Mission 50K-EV4ECO'	84
•	New species of bush cricket	85
•	Deepest-ever fish caught in Japan	85
•	Cumbum grapes gets GI Tag	86
•	'India's largest' aquarium, aviary to come up at Telangana's Eco-Park	86
•	Nagri Dubraj receives GI tag	86



100 YEARS OF VAIKOM SATYAGRAHA

CONTEXT:

The centenary celebrations of the Vaikom Satyagraha were jointly inaugurated by Kerala and Tamil Nadu state government. The centenary celebrations are going to last for 603 days.

Background (the old belief)



- Back then, the people of the oppressed classes especially the Ezhavas, were prohibited from walking on the four roads surrounding the Vaikom Mahadeva temple.
- Avarnas those without caste or 'untouchables' —
 had no right to set foot in the premises of Vaikom
 Mahadeva Temple or any other Brahmanical house
 of worship in Kerala, the country Parashurama claimed
 from the sea for the delight of the Brahmanas.

The Satyagraha:

- Vaikom Satyagraha lasted for 604 days (20 months) from March 30, 1924 to November 23, 1925.
- It was a mass Temple entry movement for lower caste people.
- o Leaders involved:
 - ► **Led by:** TK Madhavan, KP Kesava Menon, K Kelapaan (Congress Leaders)
 - Supported by: Mahatma Gandhi, Periyar, C Rajagopalachari, Chattampi Swamikal, Sree Narayana Guru
- The nonviolent movement demanded the right of members of lower castes to walk on the roads leading to the Vaikom Temple, now in the district of Kottayam.
- The authorities denied their request, stating that it would lead to social unrest and disturbance.

 This denial was met with widespread protests and demonstrations, which eventually led to the involvement of Mahatma Gandhi, who arrived in Vaikom in 1925.

- Gandhi was able to iron out a compromise: three out of the four roads surrounding the temples were opened up for everyone but the fourth, eastern road was kept reserved for Brahmins.
- Outcome: The protests eventually led to the historic Temple Entry Proclamation issued by the then king Chithira Thirunal Balarama Varma on November 12, 1936. It abolished the ban on 'lower castes' from entering Hindu temples in the Princely State of Travancore.

Understanding the social context of Travancore (at the dawn of the 20th century):

- Back then, the princely state of Travancore had a "feudal, militaristic, and ruthless system of custom-ridden government".
- In Travancore, the **idea of caste pollution** worked not only on the basis of touch but also sight.
- However, in the second half of the 19th century, a number of social and political developments would usher in social change much faster than ever before.
 - ➤ First, Christian missionaries, supported by the East India Company, had expanded their reach and many lower castes converted to Christianity to escape the clutches of an oppressive system that continued to bind them.
 - ➤ Second, westernised Maharaja Ayilyam Thirunal undertook many progressive reforms took place because of pressure from the British Resident.
 - ➤ Third, forces of capitalism and these reforms created new social hierarchies which were not always congruent with traditional ones.

AMBEDKAR'S DEMAND FOR SEPARATE ELECTORATE & RESERVATION IN PRESENT TIMES

CONTEXT:

On the occasion on Ambedkar Jayanti 2023, the issue of caste and the ideas of political representation for untouchables becomes the key focus.

Ambedkar Jayanti 2023:

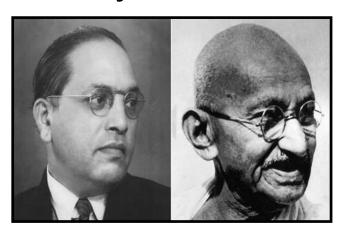
 Ambedkar Jayanti is celebrated in India to commemorate the birth anniversary of Dr Bhimrao Ambedkar, also known as Babasaheb Ambedkar,



who was an Indian jurist, economist, social reformer and politician and is best known as the **chief architect of the Indian Constitution**.

 Dr. B.R. Ambedkar, a towering figure in India's struggle for social justice and equality.

Historical Background:



- Against the rigid caste structure and raising voice for their rights and representation, B R Ambedkar has made many efforts and he was amongst few people with **Gandhi** to represent oppressed class issues in political way.
- The fundamental differences between Ambedkar and Gandhi were highlighted the most during the issue of 'separate electorates'.
- In the early 1930s, the issue of separate electorates for lower castes became a source of major debate.
- So, let us look at the issue of separate electorates which was asked by Dr. Ambedkar and the opposition to it from Gandhi, and how it was eventually 'rejected in favour of reservations'.

What does separate electorate means?

 Separate Electorates are that type of elections in which minorities select their own representatives separately, as opposed to Joint Electorates where people are selected collectively.

Ambedkar's views on caste:

- Unlike Gandhi, who advocated for reforming the caste system by abolishing untouchability, Dr Ambedkar held a more radical view which rejected the institution of caste itself.
- He saw the reformism advocated by contemporary upper caste Hindus as inadequate to undo millennia of discrimination.
- According to him, any revolt against the caste system would only be possible after the oppressed themselves rejected their condition and oppression as being divinely ordained.

- Thus, Ambedkar's political programme emphasised on lower castes obtaining political power.
- He suggested separate electorates as the form of affirmative action to empower lower castes.

Ambedkar's arguments for separate electorates:

- He argued during the First round table conference, the depressed classes form a group by themselves which is distinct and separate and, although they are included among the Hindus, they in no sense form an integral part of that community.
- He also highlighted that the Depressed Classes feel that they will get no shred of political power unless the political machinery for the new constitution is of a special make.

How separate electorate can help depressed classes?

- According to Ambedkar's demands, separate electorates with double vote – one for SCs to vote for an SC candidate and the other for SCs to vote for in the general electorate.
- While he had previously rejected communal electorates (i.e. separate electorates for Hindus and Muslims), his position changed over time, as he realised that while joint electorates might better help integrate lower castes into the Hindu fold, they would do little to challenge their subservient position.

Gandhi's opposition:

- Gandhi's opposition to separate electorates was ostensibly based on his view that they "do too little" for lower castes.
- Gandhi argued that rather than being restricted to just this measly share of seats, lower castes should aspire to rule "the kingdom of the whole world".
- However, the reality of lower castes' material and social condition was not likely to put them in a position to rule the world.

Gandhi's Argument:

- British had exploited internal divisions in Indian society for their own purposes.
- Separate electorates, according to him, would only help the British 'divide and rule'.
- Second, this was also a time when antagonism between **Hindus and Muslims** was rising.

Evolution of Reservation:

 The reservation system that exists today, in its true sense, was introduced in 1933 when British Prime-Minister Ramsay Macdonald presented the 'Communal Award'.



- The award made provision for separate electorates for Muslims, Sikhs, Indian Christians, Anglo-Indians, Europeans and the Dalits.
- After long negotiations, Gandhi and Ambedkar signed the 'Poona Pact', where it was decided that there would be a single Hindu electorate with certain reservations in it.

The Poona Pact:

- Poona Pact was signed by Dr. Babasaheb Ambedkar and Mahatma Gandhi on September 24, 1932, in the Yerwada Central Jail in Pune.
- Key agreements:
 - ➤ As part of a deal he reached with Mahatma Gandhi, Bhimrao Ambedkar agreed to have candidates from the underprivileged class chosen by a joint electorate.
 - ➤ In addition, **147 legislative seats**—nearly twice as many as the community award—were reserved for the oppressed classes.
 - ➤ The Poona Pact also guaranteed that underprivileged groups received fair representation in public services while providing a portion of subsidies for their education to continue their advancement. Higher-class Hindus publicly acknowledged with the Poona Pact that the underprivileged class was the most unfairly treated group in India
 - ➤ Additionally, it was decided that quick, severe action was required to help politically the underprivileged segment of society.
 - The treaty made the entire country ethically answerable for the moral uplift of the lower classes.

INDIA TO HAVE MORE PEOPLE THAN CHINA BY MID-2023: UN

CONTEXT

India is probably the world's most populous country already. The latest demographic data from the United Nations Population Fund's (UNFPA) say India's population is expected to surpass that of mainland China by around 3 million people by the end of June 2023.

Key-highlights of the UN Report

• The UN report estimates India's population will hit 1428.6 million my mid-2023, while China's (excluding Hong Kong and Macao, Special Administrative Regions of China, and Taiwan Province of China) is estimated to reach 1425.7 million. Asia's third-largest economy will soon house almost a fifth of humanity, more than the populations of Europe, Africa, or the Americas.

Grouping the population

- **25 percent** of India's population is estimated at below 14 years old
- **18 percent** is estimated in the 10-19 year age group
- 26 percent in the 10-24 year bracket
- **68 percent** in the 15-64 year age group
- 7 percent is estimated to be over 65 years old
- In contrast, 17% of China's population is estimated to be below 14 years of age, and 14 percent is estimated to be above 65 years old.
- Distant third: The United States is estimated to be a distant number three in the rankings, with nearly 340 million people.
- The report says eight countries will account for half the projected growth in global population by 2050: the Democratic Republic of the Congo (DRC), Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and Tanzania.

What does the Indian government's data show?

Data from the Indian government, meanwhile, says India's annual population growth has averaged 1.2 percent since 2011, compared with 1.7 percent in the 10 years previously.

Cause of Overpopulation

- Poor livelihood has encouraged the country's poor and illiterate population reproducing at a higher rate than their middle- and high-income counterparts.
- Lack of family planning/unawareness
- Poor contraceptives use
- Decline in death rate, better medical capabilities

What are the issues/challenges?

- Burden on resources: With a large population, prevalent job crisis and climate change directly affects its limited resources. India home to 18% of the global population has only 4 percent of its water resources.
- **Environmental degradation:** This rapid growth is putting immense pressure on India's resources, and is contributing to environmental degradation, poverty, and social unrest.
- **Burden on land:** With an increase in population, the land holdings will become smaller, also because land is likely to be diverted for non-farming purposes.



Looking at the positive side

 India could use this potential demographic advantage (half its population is under the age of 30) to become the world's fastest-growing major economy.

• The population needs to be seen as a source of innovation, new thinking and lasting solutions.

INDIA-ARMENIA PARTNERSHIP

CONTEXT:

As informed by the Armenian envoy in India, amid expanding defence cooperation, Armenia to soon have a Defence Attache at its embassy also in the country.

India-Armenia Relations:

- Background: After the breakup of the USSR, India recognized Armenia on December 26, 1991. The Protocol on establishment of Diplomatic relations between India and Armenia was signed on 31 August 1992. India opened its Embassy in Yerevan in 1999.
- Historical ties: Indian settlements in Armenia existed as early as 149 BC. Thomas Cana is said to be the first Armenian to have landed on the Malabar cost in 780 AD. During British government, they also entered Indian trade in varying relationships to the East India Company. The Armenians made some contributions in the areas of artisanship including gun-making and printing.
- Cultural ties: Indian classical singer Gohar Jaan, the first to be recorded on gramophone in 1902 was of Armenian origin.
- People-to-people ties: The Armenian language journal "Azdarar" published in Madras (Chennai) in 1794 was the first ever Armenian journal published anywhere in the world.
 - ➤ After India's independence, many Armenians migrated to Australia, USA and other places. The vestigial Armenian community in India is now mainly settled in Calcutta with sprinkling in Mumbai, Delhi, Agra and Chennai.
- Defence ties: Armenia recently signed a major defence deal with India for procurement of Pinaka multi-rocket launch systems and their ammunition, among others, in a deal worth around ₹2,500 crore. At present neither country has a dedicated DA in the other country.

ITEC programme is an on-going programme under which every year on average 35 slots are earmarked for Armenia for short and medium term courses which are extremely popular amongst Government and Public Sector officials.

- Developmental cooperation: Indian Technical and Economic Cooperation (ITEC) programme.
- Bilateral agreements: India and Armenia signed a Treaty on Friendship and Cooperation in 1995 in New Delhi.
 - In addition, there are over 30 Agreements/MoUs covering diverse areas of possible cooperation such as trade & commerce, culture, tourism, education, defense, science & technology, information technology, double tax avoidance, academic cooperation between institutes and Think Tanks.

BHUTAN 'DESPERATE' TO SETTLE A DISPUTE WITH CHINA

CONTEXT:

The Prime Minister of Bhutan, Lotay Tshering, has given China equal weightage among Delhi, Thimphu, and Beijing in settling the Doklam border dispute.

Background of Border issues between Bhutan and China:

Major locations in Bhutan

- Bhutan shares a 477 km-long border with China.
 China claims certain territories from Bhutan:
 - ➤ **North** Pasamlung and Jakarlung valleys; both of these places are culturally vital for Bhutan.
 - ➤ **West** Doklam, Dramana, and Shakhatoe, Yak Chu and Charithang Chu, and Sinchulungpa and Langmarpo valleys.
- These places are pasture-rich and strategically located in the Bhutan-India-China tri-junction, lying close to India's Siliguri Corridor.
- In 2020, China made new claims on **Bhutan's East** in the **Sakteng sanctuary**.
- Eastern Bhutan in the list of disputed territories presently.
- Early Chinese territorial claims on Bhutan: Chinese claims on Bhutanese territory were first made when Mao Zedong declared in the original 1939 version of the Chinese Revolution and the Communist Party that "the correct boundaries of China would include Burma, Bhutan, and Nepal".
- The annexation of Bhutanese enclaves: In July 1959, along with the occupation of Tibet, the Chinese People's Liberation Army occupied several Bhutanese enclaves in western Tibet which were under Bhutanese administration for more than 300 years and had been given to Bhutan by a Ladakhi King Singye Namgyal.



- Chinese map claiming territories in Bhutan: A
 Chinese map published in 1961 showed China claiming territories in Bhutan, Nepal, and the Kingdom of Sikkim.
 - ► Incursions by Chinese soldiers and Tibetan herdsmen also provoked tensions in Bhutan.
 - ➤ Imposing a cross-border trade embargo and closing the border, Bhutan established extensive military ties with India.
- Engagement: Until the 1970s, India represented Bhutan's concerns in talks with China over the broader Sino-Indian border conflicts.
 - Obtaining membership in the United Nations in 1971, Bhutan began to take a more independent course in its foreign policy.
 - ➤ In 1984, China and Bhutan began annual, direct talks over the border dispute.
 - ➤ However, China's building of roads on what Bhutan asserts to be Bhutanese territory, allegedly in violation of the 1998 agreement, has provoked tensions.

On 11 August 2016 Bhutan Foreign Minister Damcho Dorji visited Beijing, capital of China, for the **24**th **round of boundary** talks with Chinese Vice President Li Yuanchao.

 Both sides made comments to show their readiness to strengthen co-operations in various fields and hope of settling the boundary issues.



Sakteng Wildlife Sanctuary: Beijing objected to the grant for Sakteng Wildlife Sanctuary (SWS) in eastern Bhutan's Trashigang district bordering India and China, claiming that the location was disputed,

- during the virtual meeting of the Global Environment Facility (GEF).
- The Doklam issue: Doklam, or Donglang in Chinese, is an area spread over less than a 100 sq. km comprising a plateau and a valley at the trijunction between India, Bhutan and China.
 - ▶ It is surrounded by the Chumbi Valley of Tibet, Bhutan's Ha Valley and Sikkim.

Why Doklam is important for India?

Strategic location:

- ➤ Doklam is strategically located close to the **Siliguri Corridor**, which connects mainland India with its **north-eastern region.**
- ➤ The corridor, also called **Chicken's Neck**, is a vulnerable point for India.
- India views Chinese presence near Doklam as a major security concern close to the strategic Siliquri corridor.

• Extending Chinese territory:

- ➤ The Chinese have a deep interest in Doklam, which would give them a commanding view of and an easy access to both the Chumbi Valley and the Siliguri Corridor.
- ➤ The Chinese government **released a map** to accuse India of trespassing into its territory.

India-Bhutan Relations:

- Diplomatic relations between India and Bhutan were established in 1968 with the appointment of a resident representative of India in Thimphu.
- The basic framework of India Bhutan bilateral relations is the Treaty of Friendship and Cooperation of 1949 between the two countries, which was updated and signed during the visit to India of Jigme Khesar Namgyel Wangchuck in February 2007.
- The King of Bhutan Jigme Khesar Namgyel Wangchuck recently visited New Delhi, where he met with Prime Minister of India.

Points of Discussion:

➤ India agreed to extend an additional standby credit facility. This would be over and above the two existing standby credit facilities that are operating between the two countries.

Standby credit facility (SCF) provides **financial assistance** to low-income countries (LICs) with short-term balance of payments needs.

India is going to set up the first Integrated Check Post (ICP) along India-Bhutan border.



- ➤ The proposed **Kokrajhar-Gelephu rail link project** through Government of India support in consultation with Bhutan.
- In the field of hydro-power, India has agreed to an upward revision of the tariff of the Chhukha hydro-electric project.

U.K. JOINS ASIA-PACIFIC TRADE TREATY

CONTEXT:

The United Kingdom (UK) has recently acceded to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Asia-Pacific trade treaty:

- Asia-Pacific Trade Agreement (APTA) is a preferential regional trade agreement formerly known as the Bangkok Agreement.
- APTA aims to promote economic development of its members through the adoption of mutually beneficial trade liberalization measures that contribute to regional trade expansion and economic cooperation.
- Over time it refocused from the initial negotiation of tariff concessions on merchandise trade to at present negotiating liberalization in investment, services trade and trade facilitation.
- It is also continuously working on improving and modernizing its Rules of origin for trade in goods.

Member countries:

- Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore and Vietnam.
- The CPTPP was signed by the 11 countries on 8 March 2018 in Santiago, Chile.
- It accounts for nearly 13% of global GDP.

Significance:

- Boost to GDP: The deal would add GDP 1.8 billion (\$2.2 billion) annually to the U.K. economy in the long run. This, however, translates to a modest boost of 0.08% to GDP.
- Post Brexit Freedom: Prime Minister Rishi Sunak describing the outcome as an example of "post-Brexit freedoms", which will help Britain's economy.
- Gateway to Indo-pacific: The government said the deal was a "gateway" to the Indo-Pacific region which would account for a majority (54%) of global economic growth in the future.

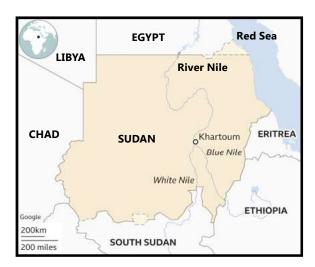
 Benefits to companies: Once Britain becomes a member of the bloc, U.K. firms will not need to establish a local office or be resident to provide services and will be able to operate on a par with firms in host countries.

SUDAN CONFLICT

CONTEXT

India launched 'Operation Kaveri' to return its people from Sudan, which has been witnessing fierce fighting as a result of a power struggle between the regular army and a paramilitary team.

Where is Sudan?



- Sudan is in north-east Africa and is one of the largest countries on the continent, covering 1.9 million square kilometres.
- It is also one the poorest countries in the world, with its 46 million people living on an average annual income of \$750 (£606) a head.
- The population of Sudan is predominantly Muslim and the country's official languages are Arabic and English.
- Sudan borders the Red Sea, the Sahel region and the Horn of Africa.
- Its strategic location and agricultural wealth have attracted regional power plays, complicating the chances of a successful transition.

Who is fighting who in Sudan?

- **What's happening?** In Sudan, powerful rival military factions are battling for control.
- Who is fighting? The fight is between the army and the powerful paramilitary group, the Rapid Support Forces (RSF).
 - ▶ Both groups were allies. Together, they seized power in a 2021 coup.



- But tensions increased over the proposed integration of the RSF into the military.
- The key question is who is in control and who would be the military's commander-in-chief during an integration period.
- Main players on the ground: Since the 2021 coup, Sudan has been run by a council of generals, led by the two military men at the centre of this dispute:

Rapid Support Forces

- The RSF was formed in 2013 and has its origins in the notorious Janjaweed militia that brutally fought rebels in **Darfur**, where they were accused of ethnic cleansing.
- Since then, Gen Dagalo has built a powerful force that has intervened in conflicts in Yemen and Libya. He has also developed economic interests including controlling some of Sudan's gold mines.
- The RSF has been accused of human rights abuses, including the massacre of more than 120 protesters in June 2019.
- Such a strong force outside the army has been seen as a source of instability in the country.

- ➤ **Gen Abdel Fattah al-Burhan**, the head of the armed forces and in effect the country's president
- And his deputy and leader of the RSF, Gen Mohamed Hamdan Dagalo, better known as Hemedti.
- They have disagreed on the direction the country is going in and the proposed move towards civilian rule.
- The main sticking points are plans to include the 100,000-strong RSF into the army, and who would then lead the new force.

What is at stake?

- No end to conflict: The popular uprising had raised hopes that Sudan and its population of 46 million could emerge from decades of autocracy, internal conflict and economic isolation under Bashir. The current fighting could not only destroy those hopes.
- Destabilisation of region: It could destabilise a volatile region bordering the Sahel, the Red Sea and the Horn of Africa.
- Increasing competition among strong powers: It could also play into competition for influence in the region between Russia and the United States, and between regional powers who have courted different actors in Sudan.

THE NAME GAME

• 'Operation Kaveri' is named on the same lines as that the PM chose to name the operation in Ukraine as Operation Ganga.

- Rivers reach their destination irrespective of barriers.
- The Kaveri is one of the major Indian rivers flowing through the southern states of Karnataka and Tamil Nadu.

Major evacuation operations

- **Operation Ganga**: In a mission to evacuate stranded Indians from wartorn Ukraine, the Indian government kicked off Operation Ganga in February 2022
- **Operation Devi Shakti:** An evacuation operation by the Indian Armed Forces (IAF) was kicked off in August 2021 to safely bring back Indian nationals from Afghanistan after the collapse of the Islamic Republic of Afghanistan and the fall of Kabul, the capital city of the Taliban.
- **Vande Bharat Mission:** Special flights were operated across to globe in this mission to bring back the nationals who were left stranded in foreign countries due to the coronavirus pandemic.
- **Wuhan Airlift:** In one of the most difficult evacuation flights, India airlifted its citizens safe from China's coronavirus-hit city Wuhan in January 2020.
- **Operation Maitri**: The government of India carried out this mission to safely bring the nationals from Nepal after the deadly earthquake in 2015.
- **Operation Raahat:** Hundreds of Indians and other nationals were rescued under this operation during the unrest at Yemen's capital Sana'a after the complete takeover by Houthi rebel fighters in January 2015
- **Operation Amnesty Airlift:** The mission was carried out in September 1996 to bring back the Indian nationals who did not have valid permits from the United Arab Emirates.
- **Kuwait Airlift**: In one of the massive operations in Indian history, the Indian Air Force joined hands with Air India in airlifting stranded Indian nationals in Kuwait in August 1990.





BANGLADESH SPELLS OUT INDO-PACIFIC PRIORITIES

CONTEXT

Bangladesh has decided to work with all stakeholders for peacekeeping, peace building and counter-terrorism initiatives in the region.

Key-highlights

- The announcement on Dhaka's Indo-Pacific priorities was made for the first time in a document titled "Bangladesher Indo-Pacific Ruprekha" (Indo-Pacific outlook).
- Bangladesh will aim for "inclusive development by strengthening free, transparent and rules-based international order.
- Along with the stakeholders concerned of the Indo-Pacific region, Bangladesh plans to make meaningful contributions to international disarmament, peacekeeping, peace building and counter-terror programmes and uphold the international values.
- This announcement is the first time that Bangladesh has spelt out its clear goals on the Indo-Pacific region and has adopted several conceptual parameters that are part of the thinking championed by India, U.S., Japan and Australia.
- The document also announced that Bangladesh will uphold the United Nations Convention on the Law of the Sea (UNCLOS) that establishes rights and responsibilities of the UN member states while using the oceans of the world.

Why Bangladesh assumes significance?

- Bangladesh's geographic location in the centre of the Indo-Pacific as well as its close proximity to the Bay of Bengal's important maritime corridor gives it a distinct competitive edge.
- As Bangladesh is a significant player in the Indo-Pacific region since its participation both in the Indian Ocean Rim Association (IORA) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), geostrategic location, regional integration, social and economic development has made it important to Indo-Pacific region.

What is the message behind?

The use of terms like "Indo-Pacific" as opposed to "Asia-Pacific" that are favoured by Beijing and Moscow indicates Bangladesh is trying to send a message to the leading western powers in the Indo-Pacific region.

What is Indo-Pacific Strategy?

- Indo-Pacific Strategy is a geographical approach; seeks to strengthen regional stability as well as economic development and security (both traditional and nontraditional) and partnerships through participation and cooperation within the Indo-Pacific region.
- The United States firstly took the initiative; introduced in November, 2017, after which other countries including Japan, Australia, South Korea, United Kingdom (UK), Canada, ASEAN have followed the same suit.

EU'S NEW CRYPTO-LEGISLATION

CONTEXT

The **European Parliament**, the legislative body of the 27-country block European Union, has approved the world's first set of comprehensive rules to bring largely unregulated cryptocurrency markets under the ambit of regulation by government authorities.

What is in the new legislation?

- The regulation is called the Markets in Crypto Assets (MiCA). MiCA is the most comprehensive regulatory framework for digital assets to date.
- The rules will impose a number of requirements on crypto platforms, token issuers and traders around transparency, disclosure, authorization, and supervision of transactions.
 - Platforms will be required to inform consumers about the risks associated with their operations, while sales of new tokens will also come under regulation.
- Coverage: The MiCA legislation will apply to 'cryptoassets' (Bitcoin, Ethereum and stablecoins)
 - Cryptoassets can be understood as a digital representation of a value or a right that uses cryptography for security and is in the form of a coin or a token or any other digital medium which may be transferred and stored electronically, using distributed ledger technology or similar technology
- Stablecoins: It will apply not only to traditional cryptocurrencies like Bitcoin and Ethereum but also to newer ones like stablecoins. MiCA will establish new rules for three types of stablecoins-

Stablecoins are digital tokens that aim to stay pegged in value with a more stable asset — a fiat currency like the U.S. dollar or other stable cryptocurrencies.

 asset-referenced tokens, which are linked to multiple currencies, commodities or cryptocurrencies.



- e-money Tokens, which are linked to a single currency.
- utility tokens, which are intended to provide access to a good or service that will be supplied by the issuer of that token.

Out of coverage

- MiCA's scope will not regulate digital assets that would qualify as transferable securities and function like shares or their equivalent and other cryptoassets that already qualify as financial instruments under existing regulation.
- It will also for the most part, exclude nonfungible tokens (NFTs).
- MiCA will also not regulate central bank digital currencies issued by the European Central Bank and digital assets issued by national central banks of EU member countries when acting in their capacity as monetary authorities, along with cryptoassets-related services offered by them.

What is the need of such regulation?

- Concentration of crypto industry: About 22% of the global crypto industry was concentrated in central, northern and western Europe, which received \$1.3 trillion worth of cryptoassets.
- **Rise in size:** The investments and the size of the crypto industry have grown at unprecedented rates.
- Increasing Distability: The year 2022 saw some of the biggest failures and wipeouts in the crypto industry involving bankruptcies and fraud scandals, be it the collapse of the crypto exchange FTX and its spat with Binance or the failure of Terra LUNA cryptocurrency and its associated stablecoin.

Regulation of cryptocurrency in India

- India is yet to have a comprehensive regulatory framework for cryptoassets. A draft legislation on the same is reportedly in the works.
- However, the Indian government has taken certain steps to bring cryptocurrencies under the ambit of specific authorities and taxation.
 - ➤ In Budget 2022, the Finance Ministry said that cryptocurrency trading in India has seen a "phenomenal increase" and imposed a 30% tax on income from the "transfer of any virtual digital asset."
 - ➤ In March 2023, the government placed all transactions involving virtual digital assets under the purview of the **Prevention of Money Laundering Act (PMLA).**

INDIA JUSTICE REPORT 2022 (IJR)

CONTEXT:

The India Justice Report (IJR) 2022 released recently highlights the issues in the Indian Judicial system with pendency of cases, lack of staff and Judges and overburdening of cases in courts day by day.

About the report:

- Released by: IJR is a collaborative effort undertaken in partnership with DAKSH, Commonwealth Human Rights Initiative, Common Cause, and Centre for Social Justice, Vidhi Centre for Legal Policy and TISS-Prayas.
- The report is released as a measure to find the comparison between high courts and lower courts/ District courts and also amongst same level courts.

Key highlights of the report:

- **Lack of Judges:** As of December 2022, against a sanctioned strength of 1,108 judges, **the High Courts** were functioning with only 778 judges.
 - ➤ The **subordinate courts** were found functioning with **19,288 judges** against a sanctioned strength of **24,631 judges**.
- **Rising pendency**: Correspondingly, the number of cases pending per judge is rising in most States over **last five years** while the sanctioned strength has remained more or less the same.
- At High Court level, Uttar Pradesh has the highest average pendency; cases remain pending for an average of 11.34 years, and in West Bengal for 9.9 years.
- The **lowest average High Court pendency** is in Tripura [1 year], Sikkim [1.9 years] and Meghalaya [2.1 years].

• Increasing caseload:

- ➤ The **number of cases** a judge has to deal with has also steadily increased.
- Between 2018 and 2022, the caseload per judge increased in 22 States and Union Territories.

The **case clearance rate (CCR)**, or the number of **cases disposed of in a year**, measured against the number filed in that year is a common metric used to determine the rate at which cases are disposed of.

• A CCR of more than **100% indicates** that the number of pending cases is reducing.



➤ The IJR report found that High Courts are increasingly **clearing more cases** annually than subordinate courts.

➤ The High Courts of **Kerala and Odisha** have higher case clearance rates — **156% and 131%** respectively — while the High Courts of **Rajasthan [65%] and Bombay [72%]** have the lowest case clearance rates.

PAKISTAN COURT STRIKES DOWN COLONIAL-ERA 'SEDITION' LAW

CONTEXT:

Recently, the Lahore High Court (LHC) annulled Section 124-A of the Pakistan Penal Code (PPC) dealing with sedition. The Act was enacted in 1860 which was a sign of British colonial rule.

About India's Sedition Law:

- India's sedition law is enshrined in Section 124A of the Indian Penal Code (IPC).
- Thomas Macaulay, who drafted the Indian Penal Code, had included the law on sedition; it was not added in the code enacted in 1860.
- Later in 1890, sedition was included as an offence under section 124A IPC through the Special Act XVII.
- The punishment prescribed then, transportation "beyond the seas for the term of his or her natural life", was amended to life imprisonment in 1955.
- According to the section 124A, the charges could be put on whomever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards, the Government established by law in India.
 - "He/She shall be punished with imprisonment for life, to which a fine may be added; or, with imprisonment which may extend to three years, to which a fine may be added; or, with fine."

Legal challenges to IPC Section 124A:

As early as 1950, the Supreme Court in Romesh Thapar v State of Madras held that "criticism of the government exciting disaffection or bad feelings towards it, is not to be regarded as a justifying ground for restricting the freedom of expression and of the press.

- Subsequently, two high courts the Punjab and Haryana High Court in Tara Singh Gopi Chand v. The State (1951), and the Allahabad High Court in Ram Nandan v. State of Uttar Pradesh (1959) — declared that Section 124A of the IPC was primarily a tool for colonial masters to quell discontent in the country and declared the provision unconstitutional.
- However, in 1962, the issue came up before the Supreme Court in Kedarnath Singh v State of Bihar.
- Kedar Nath Singh versus State of Bihar (1962):
 - ➤ In Kedar Nath Singh versus State of Bihar (1962), the Supreme Court had made it clear that 'strong words used to express disapprobation of the measures of the Government with a view to their improvement or alteration by lawful means' did not amount to sedition.
 - ➤ This ruling puts the onus on law enforcers to come up with indisputable evidence of incitement to violence or disturbance of public peace.
 - ➤ The court also issued seven "guidelines", underlining when critical speech cannot be qualified as sedition.

Law Commission of India on Sedition Law:

 In August 2018, the Law Commission of India published a consultation paper recommending that it is time to re-think or repeal the Section 124A of the Indian Penal Code that deals with sedition.

Sedition laws in other countries

- In the United Kingdom, the sedition law was officially repealed under Section 73 of the Coroners and Justice Act, 2009, citing a chilling effect on freedom of speech and expression.
- Australia repealed its sedition law in 2010.
- In 2021, **Singapore** also repealed the law citing that several new legislations can sufficiently address the actual need for sedition law without its chilling effects.

NCLAT UPHOLDS PENALTY ON GOOGLE

CONTEXT:

The National Company Law Appellate Tribunal (NCLAT) has upheld a penalty imposed by Competition commission of India (CCI) on Google for its anti-competitive conduct in the Android ecosystem.

Key-highlights of the ruling:

The tribunal held that a number of Google's practices pointed to an abuse of dominance, which in some cases, had also stalled scientific development.



Abuse of dominance

- In simple terms 'dominant position' means something in a superior position as compared to others based on some factors.
- Abuse of dominant position includes:
 - > Imposing unfair condition or price
 - Predatory pricing
 - Limiting production/market or technical development
 - Certain barrier to entry
- It held that mandating pre-installation of its entire Google Mobile Suite (GMS) – a family of key Google apps and services– amounted to "imposing unfair conditions on Original equipment manufacturer (OEMs) which is an abuse of dominant position" by the company.
- By bundling products like its search engine or the Chrome browser, Google had perpetuated its dominant position.
- NCLAT stated that the CCI in its order against Google did not violate the **principles of "natural justice"** and based it on relevant material submitted to it.

What is Android?

Android is an open-source mobile Operating System (OS), which was acquired by Google in 2005. Smartphones need an OS to run applications and programs. Google's Android is the dominant mobile OS, powering over 95 per cent of India's smartphones.

Restrictions placed by Google

- Google licences Android as well as its various applications (Play Store, Search, YouTube, Maps, Gmail, etc.) to smartphone OEMs for pre-installation in mobile devices, through various agreements viz., MADA, AFA/ ACC and RSA.
- Mobile Application Distribution Agreement (MADA)
 - OEMs are required to pre-install the entire Google Mobile Suite (GMS) covering 11 applications of Google as a bundle, and place these apps on the home screen of the device.
 - GMS is a collection of Google applications and Application Programme Interface (APIs) that help support functionality across devices.

- ➤ GMS includes wide range of key Google apps such as Google Maps, Gmail, YouTube, etc.
- Anti-fragmentation Agreement (AFA): The OEMs which have chosen to pre-install Google's apps on their mobile devices are restricted from manufacturing and marketing not only smart mobile devices but also any smart device (viz. smart speakers, smart watches, smart TVs, smart navigation system, etc.), on alternative versions of Android.
- Revenue Sharing Agreement (RSA): Google pays share from its advertisement revenue to OEMs in exchange for exclusive installation of its search services on their smart mobile devices.

CCI's allegations on Google:

- Competition commission of India earlier found Google guilty for undertaking anti-competitive practices.
 - ➤ Google was found abusing its dominant position in multiple markets with its Android mobile operating system (OS).
 - It has used its dominant position in the online search market, resulting in the denial of market access to competing apps.
 - ➤ It has done the same in the Android app store market to protect its position in online general search, which violates competition law.

About Organisations

National Company Law Appellate Tribunal (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.

Competition Commission of India (CCI):

- CCI is a **statutory body** responsible for enforcing the Competition Act, of 2002.
- It was duly constituted in March 2009.
- The Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act) was repealed and replaced by the Competition Act, 2002, on the recommendations of the Raghavan committee.
- Composition: The Commission consists of one Chairperson and six Members who shall be appointed by the Central Government.



50 YEARS OF 'BASIC STRUCTURE DOCTRINE'

CONTEXT

April 24th marked the 50th anniversary of the Kesavananda Bharati judgment which expounded the basic structure doctrine. It is the most celebrated constitutional case of the country.

Who was Kesvananda Bharti?

- He was a monk from Adi Shankaracharya's tradition born in 1940.
- Kesavananda Bharati took sanyas at the age of 19 and headed to the Edneer Mutt, a Hindu monastery in Kasargod, Kerala.
- In 1961, still only 21, he was appointed as the head of the Mutt, a position he held till his death in 2020.

The Edneer Mutt is believed to have been established by **Totakacharya**, one of four original disciples of **Adi Shankaracharya** (credited to have synthesised the non-dualistic philosophy of **Advaita Vedanta.**)

- He fought against the Kerala government's land reforms and aims when he took the Kerala government to court in February 1970.
- Rather, he was challenging the 1969 Land Reforms enacted by the communist C. Achuta Menon government which had affected his Mutt. Under the reforms, Edneer Mutt lost a large chunk of its property, which contributed to its financial woes.
- Filing a writ petition in the Supreme Court, Kesavananda Bharati argued, that this action violated his fundamental rights in particular, his fundamental right to religion (Article 25), freedom of religious denomination (Article 26), and right to property (Article 31).

What does the Basic Structure mean?

- The Constitution of India defines its 'basic structure' in terms of federalism, secularism, fundamental rights and democracy.
- The Constitution of India provides for 'judicial review' to safeguard the citizens' liberties and to preserve the ideals on which the Constitution is based.

Evolution of Kesvananda Bharti case:

 Parliament's authority to amend the Constitution, particularly the chapter on the fundamental rights of citizens, was challenged as early as 1951.

- After independence, several laws were enacted in the states with the aim of reforming land ownership and tenancy structures.
- This was in keeping with the implementation of the socialistic goals of the Constitution [contained in Article 39(b) and (c) of the Directive Principles of State Policy] that required equitable distribution of resources of production among all citizens and prevention of concentration of wealth in the hands of a few.
- Parliament added the Ninth Schedule to the Constitution through the very first amendment in 1951 as a means of immunising certain laws against judicial review.
- Under the provisions of Article 31, which themselves were amended several times later, laws placed in the Ninth Schedule -- pertaining to the acquisition of private property and compensation payable for such acquisition -- cannot be challenged in a court of law on the ground that they violated the fundamental rights of citizens.
- The Ninth Schedule was created with the primary objective of preventing the judiciary - which upheld the citizens' right to property on several occasions from derailing the Congress party-led government's agenda for a social revolution.

Article 13 (2) provides for the protection of the fundamental rights of the citizen.

- Parliament and the state legislatures are clearly prohibited from making laws that may take away or abridge the fundamental rights guaranteed to the citizen.
- They argued that any amendment to the Constitution had the status of the law as understood by **Article 13 (2)**.

What does the case exactly say?

- Constituent power is superior to ordinary legislative power:
 - Unlike the British Parliament which is a sovereign body (in the absence of a written constitution), the powers and functions of the Indian Parliament and State legislatures are subject to limitations laid down in the Constitution.
 - ➤ The Constitution does not contain all the laws that govern the country. Parliament and the state legislatures make laws from time to time on various subjects, within their respective jurisdictions.
 - ➤ The general framework for making these laws is **provided by the Constitution**.
 - Parliament alone is given the power to make changes to this framework under Article 368.



 Unlike ordinary laws, amendments to constitutional provisions require a special majority vote in Parliament.

- Declared that Parliament's constituent power was subject to inherent limitations:
 - ➤ The Parliament could not use its amending powers under Article 368 to 'damage', 'emasculate', 'destroy', 'abrogate', 'change' or 'alter' the 'basic structure' or framework of the Constitution.

EXTRA JUDICIAL KILLINGS

CONTEXT

The murder of gangster-turned-politician Atiq
Ahmed and his brother by assailants while in
police custody, and the 'encounter' deaths of
Atiq's son Asad and an accomplice have generated
a lot of heat and debate in India on custodial
deaths and extra-judicial killings.

What are extra-judicial killings?

- Extra-judicial killings are those when the accused person is killed or executed illegally by the police officials in charge of the accused person before the judgment of the trial arrives.
- No law in India exclusively defines encounter killings but it is still classified under "Cases Registered against State Police Personnel for Human Right Violation" in the National Crime Records Bureau.

The increasing numbers

While India has seen a 15% decline in encounter killing cases registered in the six years between 2016-17 and 2021-22 – till March 10, 2022 – the cases shot up by 69.5% in the last two years.

Why is it a threat?

- Shaking the values of constitution: Extra-judicial killings are a gross violation of not just human rights, but also the very rule of law that forms the bedrock of our Constitution. It shakes the values the Constituent Assembly attempted to imbibe within the country's grundnorm to the very core.
- Questioning the separation of power: Extrajudicial violence does away with separation of powers in a democracy.
- Threat to law: It is a threat to the rule of law.
 - ➤ The **principles of natural justice** had been held to be an inherent part of Article 21 by the

Supreme Court in its judgment in **Kartar Singh vs. State of Punjab (1961)**. Extra-judicial killings, by executing punishment on the spot, deny the accused their right to be given a notice of charge and an opportunity to be heard, defying the principle of *audi alteram partem* and therefore, **Article 21.**

- Furthermore, they allow the police to revel in lawlessness, avoid the scrutiny of courts and violate the principle of 'innocent until proven guilty'.
- **Violates human rights:** It straight away violates the human rights of individuals, denying them any opportunity of contacting their legal representatives or legal advisors.
- Violates fundamental rights: Encounter or extrajudicial killings violate the fundamental rights of offenders given in the Constitution of India, which mandates that every person has a right to life and liberty and equality before law. The fundamental rights which are violated because of these unlawful killings under the Constitution of India are:
 - ➤ Article 14- the right to equality
 - ➤ **Article 21** the right to life and personal liberty except according to procedure established by law
 - ➤ **Article 22** the right to be protected against arrest and detention

Why people do not oppose?

- Decreasing faith in democracy: In reality, extrajudicial killings are vigilantism under the garb of 'instant justice'. People, rather than opposing this blatant disregard of due process, end up adulating it due to the increasing downfall of the faith the public reposed in the judiciary.
 - ➤ Instances of pendency of cases, matters getting caught up and convictions getting reversed due to administrative technicalities force the people to seek speedy justice desperately and think of encounters as a way to obtain it.

The Exception

- However, as per Right to Private Defence under Sections 96-106 in the Indian Penal Code, 1860, there are certain circumstances when a death in an encounter shall not be counted as an offence in India.
 - ➤ This law applies to every citizen of the country and not just police officials
- Self-defence: Under this law, death in an encounter will not amount to a criminal offence when it is caused by an action taken to defend yourself.



➤ This means police officials may injure the criminal in order to defend themselves or for maintaining peace and order, but their motive must be scrutinised.

• If the death cannot be justified under the law then the police must be tried under **culpable homicide**.

AMENDMENTS TO IT RULES TO CHECK 'FAKE NEWS'

CONTEXT:

Social media platforms and other intermediaries on the Internet are now required to make sure that "fake news" articles about the Union Government which are not declared by the Press Information Bureau (PIB), are taken down from their platforms when they are alerted to such posts.

What is Fake news?

 Fake news is news, stories or hoaxes created to deliberately misinform or deceive readers.

About the development:

- The new amendment of the IT Rules 2021 states that media platforms will no longer enjoy legal immunity on content posted by their users and they can now be called 'as a party' in court proceedings.
- The changes were already being notified through the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023, amending the IT Rules, 2021.
- Ministry of Information & Broadcasting (MIB) sources had mentioned that the 'fact check unit' would reach out to relevant government departments to get their view on whether a piece of news is 'fake or not', and take a call accordingly.

The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021:

- The Information Technology Act, 2000 (IT Act) was amended in 2008 to provide an exemption to intermediaries from liability for any third party information.
- Following this, the IT (Intermediary Guidelines) Rules, 2011 were framed under the IT Act to specify the due diligence requirements for intermediaries to claim such exemption.
- These rules are made by amending the provisions under IT rules 2011.

The key additions under the 2021 Rules include additional due diligence requirements for certain social media intermediaries, and a framework for regulating the content of online publishers of news and current affairs, and curated audio-visual content.

Press Information Bureau (PIB):

The Press Information Bureau (PIB) is the nodal agency of the Government of India to disseminate information to the print and electronic media on government policies, programmes, initiatives and achievements.

IT MINISTRY REGULATES 'REAL MONEY GAMING' PLATFORMS

CONTEXT:

The Information and Technology (IT) Ministry has made amendment which may allow platforms that involve depositing money for winnings in games to avoid the 'betting and gambling' tag, if they are deemed permissible by a self-regulatory body.

Background:

- An inter-ministerial task force was set up in 2022, by the Ministry of Electronics and Information Technology (MeitY) to propose contours of a national-level legislation to regulate online gaming.
- The task force has proposed the creation of a central regulatory body for the sector, clearly defining what games of skill and chance are, and bringing online gaming under the purview of the Prevention of Money Laundering Act, 2002, among other things.

The task force included the CEO of government think tank NITI Aayog, and secretaries of ministries including IT, Home, Finance, Information and Broadcasting, and Consumer Affairs, among others.

About the development:

- The Ministry of Electronics and Information Technology (MeitY) has released an amendment to the IT Rules, 2021, to regulate "online real money games" where users have to risk money to play.
- The ministry has also issued a fresh advisory warning media entities, platforms and online intermediaries against airing advertisements of betting and gambling platforms.



- In the new advisory, the ministry took strong exception to the recent instances of mainstream English and Hindi newspapers carrying advertisements and promotional content of betting websites.
- For Real money gaming:
 - ➤ MeitY's Information Technology (Intermediary Guidelines and Digital Media Ethics Code)

 Amendment Rules, 2023 require real money gaming platforms to register with a self-regulatory body (SRB) that will determine whether or not the game is "permissible".
 - Under this provision, three SRBs will be recognized soon.
- The government would be constrained to take appropriate legal action against any noncompliance.
- The advisory has been issued to all media formats, including newspapers, television channels, and online news publishers.

What if the games were not getting permission by regulatory bodies?

- If these games are not deemed 'permissible', they will
 not get the protection of the amendment, and States
 may be able to take action against them for being
 betting or gambling platforms.
- As such, games that are deemed permissible will be allowed to operate legally, even if they involve deposits against an expectation of winnings.
- Video games where money is not involved need not to approach an SRB, putting to rest a concern the traditional gaming industry had around the draft version of the Rules.

Online Gaming Market in India:

- The online gaming industry in India grew at a compounded annual growth rate (CAGR) of 38% between 2017-2020, as opposed to 8% in China and 10% in the US.
- India's percentage of new paying users (NPUs) in gaming has been the fastest growing in the world for two consecutive years, at 40% in 2020 and 50% in 2021.
- The revenue of the **Indian mobile gaming industry** is expected to reach \$5 billion in 2025.

Real Cash Games in India: MPL, Ludo Empire, Zupee, Junglee Rummy, Dream 11, Winzo, Paytm First Games, GAMEE, Rummy Circle and GetMega.

POWERS OF L-G

CONTEXT:

The Supreme Court (SC) has orally observed regarding the action of Lieutenant Governor (L-G) to make decision 'without aid and advice' of the Council of Ministers in nominating 10 members to the Municipal Corporation of Delhi.

About Supreme Court's Observation:

- The top court, which had earlier issued notice on the plea of the Delhi government, has granted 10 days to the office of the L-G to file the response to the petition seeking quashing of the nomination of the 10 members.
- A Bench comprising Chief Justice D. Y. Chandrachud and Justices P. S. Narasimha and J. B. Pardiwala has made these observations on LG's decision of nominating the members without any consultation with the members of legislative assembly.

Who is a Lieutenant Governor (L-G)?

- The full form of LG is Lieutenant Governor. In India,
 LG is in charge of a 'Union Territory (U.T)'.
- However, the rank of Lieutenant Governor is only available in the 3 U.T of India, i.e. the Andaman and Nicobar Islands, Delhi and Puducherry.

Role of LG:

- L-G is a representative of the President and acts on the aid and recommendation of the Council of Ministers.
- The Section 41 of the GNCT (Government of national capital territory) of Delhi Act, 1991 states that the L-G shall act in his discretion during a matter that falls outside the range of the powers conferred on the Legislative Assembly.
- In respect of matters related to Police, Public order and Land, L-G exercises his authority to the extent delegated to him by the President.

Discretionary Powers of L-G: If in the Legislative assembly elections no single party seeks a majority, L-G is sovereign to act on his own and ask the leaders of the single largest party or the chosen leader of two or more parties to form the government.



Eligibility criteria to become Lieutenant Governor:

- The candidate should be an Indian citizen
- Candidate should be at least 35 years old
- Shouldn't be a part of parliament house or state legislature house
- Should not keep other profitable offices.
- Under the President's rule, L-G behaves as executive head of the government and has the power to appoint a group of advisors who act as the council of ministers.

Constitutional Backing:

- Articles 239 and 239AA of the Constitution, as well as the Government of National Capital Territory of Delhi Act, 1991, clearly underline that the role of Centre is more prominent in the UT of Delhi, where the L-G is the eyes and ears of the Centre.
- Under the constitution, the Delhi Assembly has the power to legislate on all subjects except law & order and land.

Complexity in administration of Delhi:

- The very nature of the administrative set up in Delhi seems to give rise to a dispute between the CM (and the Council of Ministers) and the LG.
- Article 239AA clearly states that the Council of Ministers and the CM shall aid and advice the LG in his executive functions while the legislative assembly is to handle the law making process.
- It also says that in case of a difference between the LG and any minister (particularly with regard to the Chief Minister), the President's decision shall be sought by the LG.
- If this is unavailable and the matter is an urgent one, the LG may use his discretion to take a decision and initiate action in the matter as he deems fit.
- Over the past few years, the power tussle between the Delhi government and the office of the Lieutenant-Governor has been based on the interpretation of this article.
- The government claims that the LG is bound by the advice of the Council of Ministers, meaning that the governance of Delhi is the responsibility of the state government while the LG's office claims that the ministers remain in an advisory capacity and the ultimate decision should be the LG's.

'NOTION OF MAN, WOMAN NOT BASED ON GENITALS': SC ON SAME-SEX MARRIAGES

CONTEXT

The Supreme Court bench hearing petitions seeking legal recognition of same-sex marriages made it clear that it will not go into personal laws governing marriages and said the very notion of a man and a woman, as referred to in the Special Marriage Act, is not 'an absolute based on genitals'.

Key-highlights

- Bench's points: Terming the issue involved in the pleas as 'complex', the bench asked the lawyers appearing in the matter to advance arguments on the Special Marriage Act, a religion neutral statue.
 - ➤ The bench said it is not the question of 'genitals' and the very notion of the special law having 'man and woman' is not restricted to the genitals.
- Centre's Objection: Centre raised preliminary objections to the Supreme Court hearing, says parliament is the only constitutionally permissible forum to decide on creation of a new social relationship.

What is the Special Marriage Act?

- The Special Marriage Act (SMA), 1954 is an Indian law that provides a legal framework for the marriage of people belonging to different religions or castes.
 - ► It governs a civil marriage where the state sanctions the marriage rather than the religion.
 - ➤ The Indian system, where both civil and religious marriages are recognised, is similar to the laws in the UK's Marriage Act of 1949.

Applicability:

➤ The applicability of the Act extends to the people of all faiths, including **Hindus**, **Muslims**, **Sikhs**, **Christians**, **Sikhs**, **Jains**, **and Buddhists**, across India.

Recognition of Marriage:

- ➤ The Act provides for the registration of marriages, which gives legal recognition to the marriage and provides a number of legal benefits and protections to the couple, such as inheritance rights, succession rights, and social security benefits.
- It forbids polygamy and declares a marriage null and void if either party had a spouse living at



the time of the marriage or if either of them is incapable of giving valid consent to the marriage due to unsoundness of mind.

Written Notice:

- ➤ **Section 5 of the Act** specifies that the parties must give written notice to the Marriage Officer of the District and that at least one of the parties must have lived in the district for at least 30 days immediately before the date of such notification.
- ➤ **Section 7 of the Act** allows any person to object to the marriage before the expiration of 30 days from the date of the notice's publication.

o Age Limit:

The minimum age to get married under the SMA is 21 years for males and 18 years for females.

ED INITIATES PROBE IN BBC INDIA'S ALLEGED FOREIGN EXCHANGE VIOLATIONS

CONTEXT:

The Enforcement Directorate has initiated an inquiry into the British Broadcasting Corporation (BBC) India under the Foreign Exchange Management Act (FEMA) for suspected violations.

Background

- February 2023: The move came about two months after the Income-Tax Department had surveyed the Delhi and Mumbai office of the BBC, which allegedly revealed multiple irregularities, including nonpayment of tax on certain remittances that were not disclosed to the authorities as income in India.
 - ➤ The **Income-Tax Department** had then said that the income/profits shown by various group entities were not commensurate with the scale of operations in India.
- January 2023: The tax surveys came after the BBC had released a controversial documentary on the 2002 Gujarat riots titled *India: The Modi Question*.

Where has BBC India faltered?

- Violation of FDI rules: In September 2019, the Indian government capped FDI in digital media at 26 percent and issued a clarification the next October, which specified which entities were required to comply.
 - ➤ The **Information and Broadcasting Ministry** reinforced this in November 2020 asking "entities involved in uploading/streaming of news and current affairs through digital media" to comply with the decision.
 - ➤ This means that a foreign investor cannot have more than a 26 per cent stake in a digital media entity.

Primary legislation governing the foreign exchange regime in India

- Foreign Exchange Management Act, 1999 (as amended from time to time) (FEMA)
- Foreign Exchange Management (Non-Debt Instruments) Rules, 2019 (NDI Rules)
- Foreign Exchange Management (Mode of Payment and Reporting of Non-Debt Instruments) Regulations, 2019
- Consolidated Foreign Direct Investment Policy, 2020

Reason behind the move

 So that, foreign companies do not "control" news organisations in the country.

The British Broadcasting Corporation (BBC):

- The BBC World Service India Private Limited is the subsidiary of the British broadcaster in the country.
 The parent company is called BBC World Service.
- British Broadcasting Corporation (BBC), the publicly financed broadcasting system in Great Britain, operates under royal charter.
- The Indian subsidiary is reportedly 100 per cent owned by the parent firm with no other investor.

The **British monarch** appoints the members of the BBC Trust, an **independent 12-member panel**, governed by a chairman that oversees day-to-day operations.

GUIDELINES FOR ASSESSMENT OF CHILD SUSPECTS IN 'HEINOUS' OFFENCES

CONTEXT:

The National Commission for Protection of Child Rights (NCPCR) has issued guidelines for the first time for conducting "preliminary assessment" to determine whether a child should be treated as a minor or not in criminal cases.

About the move:

 Criminal Cases by children come under the "heinous" offences category of the Juvenile Justice (Care and Protection of Children) Act, 2015.

The JJ Act, 2015 was amended to include "serious" offences as a separate category apart from the existing categories of "heinous" offences and "petty" offences.



 The main aim of the guidelines is to determine whether the accused should be treated as a minor or not during the trial.

Need of assessment:

 The sole aim of preliminary assessment is to determine whether the child in the age of 16-18 years should be tried as an adult in case of heinous offence.

- There are two essential conditions that call for preliminary assessment.
 - First, the offence is in the category of "heinous" as defined in the Act.
 - ➤ Second, the child who has allegedly committed the crime is in **the age group of 16-18 years**.

What makes difference amongst type of Crime?				
Heinous offences	Petty offences	Serious offences		
includes crimes for which the minimum punishment is imprisonment for seven years or more	includes crimes for which the maximum punishment is imprisonment up to three years	includes crimes for which the punishment is a minimum imprisonment for a term more than three years and not exceeding seven years		

Provision of Juvenile Justice (JJ) Act 2015:

- Definition of 'a child':
 - ➤ The child is defined in the **JJ Act, 2015** as a person who has not completed **18 years of age**, there is a specific provision under which initiation of an inquiry into a heinous crime has been differentiated based on **age of the child.**
- According to Section 15(1) of the Act, in case of a heinous offence alleged to have been committed by a child who has completed or is above the age of 16, the Juvenile Justice Board (JJ) shall conduct a preliminary assessment with regard to his mental and physical capacity to commit such offence, ability to understand the consequences of the offence and the circumstances in which he allegedly committed the offence.

Role of JJ Board:

- The Juvenile Justice Board (JJB) is solely responsible for conducting preliminary assessment, which it must complete within three months from the date of first production of the child before it.
- In case the Board determines that there is a need for a trial of the child as an adult, it will then transfer the case to the Children's Court.
- The Board may then pass an order that there is a need for trial of the child as an adult.

How the exact age is determined by the board?

- To determine the offender's age, the JJ Board would either obtain **the date of birth certificate** from the school, or the **matriculation or equivalent certificate** from the concerned examination Board in the absence of the birth certificate given by a civic body.
- Only in cases age shall be determined by an ossification test or any other latest medical age determination test" conducted on the orders of the JJ Board.

National Commission for Protection of Child Rights (NCPCR):

- NCPCR is a statutory body under the Commissions for Protection of Child Rights (CPCR) Act, 2005. It comes under the administrative control of the Ministry of Women & Child Development, Government of India.
- The Child is defined as a person in the 0 to 18 years age group.
- The commission's mandate is to ensure that all laws, policies, programmes, and administrative mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.
- Composition:
 - This commission has a chairperson and six members of which at least two should be women.
 - ➤ All of them are appointed by the Central Government for three years.
 - ➤ The maximum age to serve in commission is 65 years for Chairman and 60 years for members.

MERCY PLEA DECISIONS & DELAYS

CONTEXT:

The Supreme Court directed all State Governments to ensure that mercy petitions in death penalty cases are decided and disposed of at the earliest.

Points made by the Supreme Court

 Issue: The apex court has highlighted that death row convicts were taking advantage of an inordinate delay in deciding mercy petitions.



- Inordinate delay in not deciding on mercy pleas will "frustrate the object and purpose of the death sentence."
- Required measure: The efforts shall be made by the state government and/or the concerned authorities to see that the mercy petitions are decided and disposed of at the earliest, so that even the accused can also know his fate and even justice is also done to the victim.
 - The court while directing the states also relied on the SC ruling on Jagdish vs. State of Madhya Pradesh wherein the court commuted the death sentence to life imprisonment after taking into consideration the delay in disposal of the mercy petition of above five years.

What is a Mercy petition?

- The mercy petition talks about the power to pardon the convict under a few sections of the criminal code of procedure.
- Mercy Petition lies in saving an innocent person from being punished due to miscarriage of justice or in cases of doubtful conviction.

Constitutional backing:

- Under Article 72 of the Constitution, the President has the power to grant pardons and decide on mercy petitions.
- Under Article 161 of the Indian Constitution, the Governor of State also possess the power to grant pardons, reprieves, respites and remission or suspend, remit or commute the sentence of a convict against state law.

Procedure to apply for mercy petition:

- A convict under the sentence of death is allowed to file a mercy petition within a period of seven days after the date on which the Superintendent of Jail informs him about the dismissal of the appeal or special leave to appeal by the Supreme Court.
- The petitions are to be presented to the President of India. The President office seeks the cabinet advice.
- The appeal is examined by the Ministry of Home Affairs and the Ministry before giving recommendations to the President, takes the view of State concerned.
- There is **no written procedure** to deal with mercy petition.
- Judicial review:
 - President's pardon/rejection/delay is also subjected to judicial review.

➤ However, if a court finds that the process of the decision taken by the President under Article 72 was **not arbitrary or unreasonable**; the decision then cannot be interfered with.

A **curative petition** is the last judicial corrective measure which can be pleaded in any judgment or decision passed by the Supreme Court which is normally decided by Judges in-chamber.

Who else can give pardon?

- In **Dhananjoy Chatterjee alias Dhana v State of**West Bengal, 1994 case the Supreme Court has said that "The power under **Articles 72 and 161 of the**Constitution can be exercised by the Central and State Governments, not by the President or Governor on their own".
- The advice of the appropriate Government binds the Head of the state.

UNION CABINET APPROVES NATIONAL MEDICAL DEVICES POLICY

CONTEXT

The Union Cabinet approved the National Medical Devices Policy, 2023.

Current state of medical device sector in India

- The medical devices sector in India is a sunrise sector which is growing at a fast pace.
- The market size of the medical devices sector in India is estimated to be \$11 billion (approximately, ₹ 90,000 Cr) in 2020 and its share in the global medical device market is estimated to be 1.5%.

What is the National Devices Policy, 2023?

- The National Medical Devices Policy, 2023 is expected to facilitate an orderly growth of the medical device sector to meet the public health objectives of access, affordability, quality and innovation.
- Salient Features of National Medical Devices Policy, 2023:
 - ➤ **Vision:** Accelerated growth path with a patient-centric approach and to emerge as the global leader in the manufacturing and innovation of medical devices by achieving 10-12% share in the expanding global market over the next 25 years. Policy is expected to help the Medical Devices Sector grow from present \$11 Bn to \$50 Bn by 2030.
 - Mission: Policy lays down a roadmap for



accelerated growth of the medical devices sector to achieve the following missions viz, Access & Universality, Affordability, Quality, Patient Centred & Quality Care, Preventive & Promotive Health, Security, Research and Innovation and Skilled manpower.

Strategies to Promote Medical Device Sector:

Medical devices sector will be facilitated and guided through a set of strategies that will be cover six broad areas of policy interventions:

- Regulatory Streamlining: In order to enhance ease of doing research and business and further to balance patient safety with product innovation measures such as creation of a Single Window Clearance System' for Licensing of Medical Devices coopting all the stakeholder departments / organizations such as AERB, MeitY, DAHD, etc, enhancing the Role of Indian Standards like BIS and designing a coherent pricing regulation, will be followed.
- Enabling Infrastructure: The establishment and strengthening of large medical device parks, clusters equipped with world class common infrastructure facilities in proximity to economic zones with requisite logistics connectivity as envisioned under the National Industrial Corridor Program and the proposed National Logistics Policy 2021 under the ambit of PM Gati Shakti, would be pursued with the State Governments and Industry for better convergence and backward integration with medical device Industry
- Facilitating R&D and Innovation: The policy envisages to promote Research & Development in India and complement the Department's proposed National Policy on R&D and Innovation in the Pharma-MedTech Sector in India. It also aims at establishing Centres of Excellence in academic and research institutions, innovation hubs, 'plug and play' infrastructures and support to start-ups.
- Attracting Investments in the Sector: Along with resent schemes and interventions like Make in India, Ayushman Bharat program, Heal-in-India, Start-up mission, the policy encourages private investments, series of funding from Venture Capitalists, and also Public-Private Partnership (PPP).
- Human Resources Development: The scheme aims to have a steady supply of skilled work force across the value chain such as scientists, regulators, health experts, managers, technicians, etc.
- Brand Positioning and Awareness Creation:
 The policy envisages the creation of a dedicated Export Promotion Council for the sector under the Department which will be an enabler to deal with various market access issues.

AMBIGUITIES IN INDIA'S NUCLEAR LIABILITY LAW

CONTEXT

The issues regarding India's nuclear liability law continue to hold up the more than a decadeold plan to build six nuclear power reactors in Maharashtra's Jaitapur, the world's biggest nuclear power generation site under consideration at present.

What is the law governing nuclear liability in India?

- Compensation for nuclear disaster: Laws on civil nuclear liability ensure that compensation is available to the victims for nuclear damage caused by a nuclear incident or disaster and set out who will be liable for those damages.
- International nuclear liability regime: The international nuclear liability regime consists of multiple treaties and was strengthened after the 1986 Chernobyl nuclear accident.
- Convention on Supplementary Compensation (CSC): The umbrella Convention on Supplementary Compensation (CSC) was adopted in 1997 with the aim of establishing a minimum national compensation amount.
 - ➤ The amount can further be increased through public funds, (to be made available by the contracting parties), should the national amount be insufficient to compensate the damage caused by a nuclear incident.
 - ➤ Even though India was a signatory to the CSC, Parliament ratified the convention only in 2016.
- Civil Liability for Nuclear Damage Act (CLNDA): To keep in line with the international convention, India enacted the Civil Liability for Nuclear Damage Act (CLNDA) in 2010, to put in place a speedy compensation mechanism for victims of a nuclear accident
 - ➤ The CLNDA provides for strict and no-fault liability on the operator of the nuclear plant, where it will be held liable for damage regardless of any fault on its part.
 - ➤ It also specifies the amount the operator will have to shell out in case of damage caused by an accident at ₹1,500 crore and requires the operator to cover liability through insurance or other financial security.
 - In case the damage claims exceed ₹1,500 crore, the CLNDA expects the government to step in and



has limited the government liability amount to the rupee equivalent of 300 million Special Drawing Rights (SDRs) or about ₹2,100 to ₹2,300 crore.

➤ The Act also specifies the limitations on the amount and time when action for compensation can be brought against the operator.

India currently has 22 nuclear reactors with over a dozen more projects planned. All the existing reactors are operated by the state-owned **Nuclear Power Corporation of India Limited (NPCIL).**

What does the CLNDA say on supplier liability?

- The international legal framework on civil nuclear liability, including the annex of the CSC is based on the central principle of exclusive liability of the operator of a nuclear installation and no other person.
- Making supplier responsible would hinder growth: In the initial stages of the nuclear industry's development, it was agreed that excessive liability claims against suppliers of nuclear equipment would make their business unviable and hinder the growth of nuclear energy.
- Shifting responsibility to operator: It became an accepted practice for national laws of countries to channel nuclear liability to the operators of the plant with only some exceptions.
- Section 10 of the annex of the CSC lays down "only" two conditions under which the national law of a country may provide the operator with the "right of recourse", where they can extract liability from the supplier —
 - ▶ if it is expressly agreed upon in the contract
 - ▶ if the nuclear incident "results from an act or omission done with intent to cause damage"

Who introduced the concept of supplier liability (for the first time)?

- However, India, going beyond these two conditions, for the first time introduced the concept of supplier liability over and above that of the operator's in its civil nuclear liability law, the CLNDA.
- The architects of the law recognised that defective parts were partly responsible for historical incidents such as the Bhopal gas tragedy in 1984 and added the clause on supplier liability.

Why is the supplier liability clause an issue in nuclear deals?

 Foreign suppliers of nuclear equipment from countries as well as domestic suppliers have been wary of operationalising nuclear deals with India as it has the only law where suppliers can be asked to pay damages. Sticking point for suppliers: Concerns about potentially getting exposed to unlimited liability under the CLNDA and ambiguity over how much insurance to set aside in case of damage claims have been sticking points for suppliers.

VIBRANT VILLAGES PROGRAMME

CONTEXT

Centre's ambitious Vibrant Villages Programme (VVP) which aims to develop infrastructure and open up villages to tourists along the China border will be integrated with the Prime Minister Gati Shakti mega project.

What is 'Vibrant Villages Programme'?

- The Vibrant Village Program aims to-
 - ➤ raise the standard of living of the residents in the border communities
 - encouraging them residents to remain there, reversing migration from villages
 - enhancing border security
- **Focus area:** As per the programme, the focus areas would be improving road connectivity, providing drinking water, electricity, mobile and internet connectivity, building tourist centres, multi-purpose centres, healthcare infrastructure, and wellness centres.
- Coverage: The programme aims to cover 2,967 villages in 46 border blocks of 19 districts in four States and one Union Territory Arunachal Pradesh, Himachal Pradesh, Sikkim, Uttarakhand and Ladakh along the China border.
 - Out of these, 662 villages will be prioritised for coverage.
- Fund allocation: The scheme has been allocated ₹4,800 crore for the financial years 2023-24, 2024-25 and 2025-26. The amount allocated for road construction is ₹2,500 crore.
- Nodal Ministry: Ministry of Home Affairs

PM Gati Shakti:

- The Pradhan Mantri Gati Shakti National Master Plan is a central government project, aimed to revolutionise infrastructure in India.
- The digital platform of Gati Shakti brings 16
 Ministries including Railways and Roadways
 together for integrated planning and coordinated
 implementation of infrastructure connectivity
 projects and allows government departments to
 break operational silos.



Why Kibithoo is significant?

- Kibithoo, located in Arunachal Pradesh, is the first village to be part of the Centre's Vibrant Villages programme.
- Kibithoo in Anjaw district is in the easternmost administrative circle in India.
- Housing dozens of villages within the 10 km range of the McMohan line, the villagers are fluent in Hindi because of their regular interaction with the security forces but do not have proper connectivity with the mainland.

Concerns:

- Depopulation is a case of concern in the border villages in all areas of India.
- Backwardness, illiteracy, and lack of basic facilities and infrastructure are also concerning.

India's response to China

- The VVP is India's response to the 628 model 'xiaokang' (moderately well-off) villages built by China along the LAC in China-occupied Tibet (CoT).
- China started building these villages, which have a dual civilian-military use, in 2017 and completed them in 2021 at a whopping cost of Rs 3.76 lakh crore.
- These villages are close to the Line of Actual Control (LAC), opposite Uttarakhand, Sikkim and Arunachal Pradesh.

Claim game

- Beijing claims about 90,000 sq km of areas in Arunachal Pradesh of India to be a part of the territory of China.
- The Chinese call Arunachal Pradesh as "Zangnan" or south Tibet.
- While China may stake claim to the entire state, one area is of particular significance to Beijing —
 Tawang.
 - ➤ Tawang houses **Tawang Ganden Namgyal Lhatse or Tawang Monastery** the second largest monastery of Tibetan Buddhism in the world. China cites historical ties between the Tawang monastery and Tibet's Lhasa monastery to bolster its claims over Arunachal Pradesh.
- Arunachal Pradesh shares international borders with Tibet to the north, and northwest, Bhutan towards the west and Myanmar to the east.

ASSAM-ARUNACHAL PRADESH END BORDER DISPUTE

CONTEXT

Assam and Arunachal Pradesh chief ministers signed an agreement to settle the decades-old inter-state boundary dispute between the two states.

What was the dispute about?

- Assam and Arunachal Pradesh, which was earlier a part of undivided Assam, share an 804 km long boundary.
- While there were no tensions reported initially, frequent issues eventually came up.
- During British rule, there was a law which involved setting boundaries between plains and hills. This was later known as North East Frontier Tracts (NEFT).
- However, after independence, the Assam government was in control of the NEFT. This, in 1954, became the North East Frontier Agency (NEFA) and in 1972 became Arunachal Pradesh.
- It is essential to note that Arunachal Pradesh was a Union Territory in 1972 and gained statehood only in 1987.
- However, a 1951 report claimed that over 3,000 sq km of the area from Arunachal Pradesh had been transferred to Assam.
- While Arunachal Pradesh has constantly held that this area was transferred without the consent of its people, Assam has maintained that the transfer was legally carried out.

What is in the pact?

- The pact will bring settlement to 123 villages located along areas the two north-eastern states share.
- Under the pact, both the state governments have agreed that it will be final with regards to these 123 disputed villages and neither of the states will make any new claim related to any area or village in future.

Removal AFSPA: The government has withdrawn the Armed Forces (Special Powers) Act from most of places in Assam, 15 police stations in 6 districts in Manipur, all but 3 districts in Arunachal Pradesh, 7 districts in Nagaland, and entire Tripura and Meghalaya.

Who has the power to resolve Inter-state disputes?

Article 131 is the main provision in the constitution regarding centre-state / inter-state disputes



- The Parliament has the sole responsibility to take decision for altering any region of any state.
- However, the consultation of states is to be taken, which is not binding on the Parliament.
- The decision of parliament is also not binding on the states
- To solve inter-state disputes, the Supreme Court has the sole power to make decision.

FOREIGN TRADE POLICY 2023-2028

CONTEXT:

The Commerce and Industry Ministry unveiled the new Foreign Trade Policy 2023-2028.

What is Foreign Trade Policy?

- Foreign trade policy are a set of guidelines and instructions which are established by **Directorate General of Foreign Trade (DGFT)** related to import and export of goods in India. This is announced after every 5 years.
- It creates various expectations for exporters, traders and manufacturers.
- India's foreign trade policy is guided by the Foreign Trade (Development and Regulation) Act, 1992, which was adopted when the economic policy reforms were initiated.
- Foreign Trade Policy (2023) is based on continuity of time-tested schemes facilitating exports as well as a document which is nimble and responsive to the requirements of trade.
 - ➤ It is based on principles of 'trust' and 'partnership' with exporters.
- It replaced the extant policy ". The new FTP comes into effect from April 1, 2023.

Features of New Foreign Trade Policy 2023:

- Motto: Long term excellence and productivity.
- Aim: New policy aims to almost triple India's goods and services exports to 2 trillion dollars by 2030, from an estimated 760 billion dollars in 2022-23.
- Internationalisation of the rupee trade: The major highlight of this policy was the internationalisation of the rupee trade.

No Sunset date:

- ➤ The new policy will have **no sunset date** and will be tweaked based on the emerging world trade scenario and industry feedback.
- While the policy will be open-ended, the schemes sanctioned under it will be time bound.

 One time Amnesty: The new FTP is introducing a one-time Amnesty Scheme for exporters to close the old pending authorizations and start afresh.

SALIENT FEATURES

- Targets **\$2 trillion** exports by 2030
- Continuous and responsive framework with no end date
- Making rupee a global currency
- Making India a trade
- Digitisation and faster processing of applications
- Amnesty scheme for shortfall in export obligations
- Restructuring of Department of Commerce
- Over 50% reduction in threshold for recognition of star trade houses
- New growth areas: Opening up a new area of potential exports, the policy has included "merchanting trade" within its ambit.
 - Exporters in India can source goods from another country and send them to a third country without touching Indian shores.
 - ➤ This will also enable exports of restricted goods.

Advance authorization Scheme:

- ➤ A **Special advance authorisation scheme** is being launched for the clothing and apparel sector so that they can react to market demands and fashion trends faster.
- ➤ Other mechanisms like **star ratings to recognise exporters** will be rejigged to lower qualification thresholds.

Towns of Export Excellence:

- ➤ Four towns in Uttar Pradesh Faridabad, Moradabad, Mirzapur and Varanasi were announced as centres of export excellence for their performance in the apparel, handicrafts, handmade carpets and handlooms, respectively.
- The new trade policy will make all the PM Mitra textile parks eligible to get benefits as common services providers.
- Recognition of Exporters: Exporter firms recognized with 'status' based on export performance will now be partners in capacity-building initiatives on a bestendeavor basis.

Others:

- PM Mega Integrated Textile Region and Apparel Parks additional scheme to claim benefits under CSP.
- ➤ The dairy sector gets benefits and will be exempted from maintaining the average export obligation.
- Battery electric vehicles, vertical farming equipment are added to the green technology product.



- Wastewater treatment and recycling, rainwater harvesting system added to green technology products.
- ➤ Rainwater filters and green hydrogen added to green technology products.
- Green technology products eligible for reduced export obligation requirement under the EPCG scheme.

Issues/Gaps in the policy

- Ineffective at the present juncture: India's foreign trade policy continues to be largely structured on the earlier policy documents, and draws its legal basis from the three-decade-old Foreign Trade (Development and Regulation) Act, its incongruence with the needs of present times is obviously huge.
- Lack of utilisation of FTAs: The government was unable to use the rules of the multilateral trading system as well as a majority of the 13 free trade agreements (FTA) that India has signed thus far.
 - ➤ In most of these agreements, India's trade deficit has ballooned and this is simply because the exporters have been unable to take advantage of the preferential market access that have been offered by the trade partners.

In 2021, the Indian government launched the "One Nation, One Standard" scheme with the aim of synergizing standards adopted by various Standard Development Organizations in India.

Lack of preparedness related to regulatory standards: There is current pressure with India to devise Indian-specific standards, which is creating barriers to trade in a range of industry sectors. India frequently fails to notify the WTO of new standards and often does not allow time for discussion with its trading partners prior to implementation.

5 BRICS NATIONS CONTRIBUTING MORE THAN INDUSTRIALISED G7

CONTEXT:

Data shows that, beginning 2020, the BRICS nations as a whole now contribute more towards global Gross Domestic Product (GDP) than the G7 industrialised nations do, in terms of purchasing power parity (PPP).

Key-highlights of IMF's Report

- The International Monetary Fund's (IMF) GDP data across countries over time depicts that since 1992, there has been a steady decline in the share of the G7 in global GDP, and an equally steady rise in the contributions of the BRICS nations.
- By 2019, the contributions of the two groupings had become nearly equal, with the G7 contributing 31.5 per cent to global GDP, and the BRICS accounting for 30.7 per cent.

A quick comparison

BRICS G7

- The BRICS countries comprise Brazil, Russia, India, China, and South Africa, and represent the largest developing economies.
- The G7 countries have historically been among the largest economies in the world.



- The G7 are the largest industrialised economies and consist of the US, the UK, Germany, France, Japan, Italy, and Canada.
- The BRICS nations especially China and India
 — have been and continue to be the most populous.
- The G7 nations account for about 10 per cent of the world's population.
- Just India and China, with 140-141 crore people each, together make up about 35 per cent.





- It was in 2020, however, that the G7-BRICS dynamic flipped. That year, the BRICS (31.4 per cent) overtook the G7 (30 per cent).
- Expansion: The BRICS is also expanding Bangladesh, Egypt and the UAE have all just joined the BRICS New Development Bank, with numerous other countries poised to do the same.

What factors are responsible for the growth?

- COVID-19 Pandemic
- Russia-Ukraine War
- Macroeconomic stability
 - responsible monetary policy
 - decreased sovereign debt
 - increasing international reserves

What are the likely impacts?

Persistent challenges (for BRICS)

- Lack of soft power and military power (China, for example, can't challenge US naval power in their coastal waters)
- Slowing growth
- · Lack of robust internal institutions
- The combined economies of Brazil, Russia, India and China (BRICs) could emerge as a **dominant economic block** in the world.
- The growth increases the opportunities for economic and political influence in order to:
 - strengthen and reform the multilateral system, including international economic organizations, to ensure that it is more inclusive, democratic and representative
 - to enhance participation of developing countries

and states with emerging markets in the process of international decision-making

Role of BRICS

- Change the world economic system-BRICS is actively involved in the efforts to change the world economic system by increasing the number of non-Western states in international financial institutes despite frantic opposition by the traditional distributors of world money.
- New Development Bank and Currency pool- The BRICS countries decided to create the \$100 billion BRICS Development Bank and a reserve currency pool worth over another \$100 billion to offer an alternative to countries in the non-Western world when it comes to choosing the sources of funding for development or coping with serious economic crises.
- Alternative to West- The current crisis in Ukraine will consolidate BRICS as the group will make further efforts to become a real alternative to the West to create a real multipolar world.

Understanding Western Differences of BRICS

- Socialist Tendencies- Brazil, which represents Latin America and has strong left socialist tendencies, disagrees with the West on social issues.
- Abetting the old order -The situation in South Africa where the local communists belong to the ruling coalition while the West is accused of abetting the old order.
- **Repelled by moral values-** In Russia and India, people are not so much repelled by the political as by the moral values of the West.

ORGANISATIONAL INFO

About BRICS

- Founded in: 2006
- BRICS is a group of five major emerging economies comprising Brazil, Russia, India, China and South Africa.
- It is pertinent to note that the countries together represent 41% of the world's population, around 25% of global GDP and around 20% of world trade.
- Subsidiary: New Development Bank
- Aim: The BRICS mechanism aims to promote peace, security, development and cooperation.
- The five nation powerful grouping has been discussing and deliberating on **issues of common concern for all developing countries.**
- BRICS countries have regularly called for reform of the multilateral system in order to make it more representative and inclusive.

Group of Seven (G7)

- It is an intergovernmental organisation that was formed in 1975.
- The bloc meets annually to discuss issues of common interest like **global economic governance**, **international security and energy policy**.



- The G7 countries are the UK, Canada, France, Germany, Italy, Japan and the US.
- All the G7 countries and India are a part of G20.
- The G7 does not have a formal charter or a secretariat. The presidency, which rotates among member countries each year, is in charge of setting the agenda. Sherpas, ministers and envoys hammer out policy initiatives before the summit.

NATIONAL ELECTRICITY PLAN FOR 2022-27

CONTEXT:

The National Electricity Plan (NEP) 2022-27 has been rolled out which marks a discernible reversal in the policy thrust from its last edition.

Need of the initiative:

- India is now amongst the fastest developing countries in the world in terms of GDP as well as the electricity consumption.
- The challenge is to meet the energy needs of high economic growth & electricity consumption of about 1.3 billion people.
- The development of an efficient, coordinated, economical and robust electricity system is essential for smooth flow of electricity from generating station to load centers (as per Electricity Act, 2003).
- Also, optimum utilization of resources in the country, in order to provide reliable, affordable, un-interruptible (24x7) and Quality Power for All.

Highlights of the draft:

- The coal energy thrust: The fresh draft, in a tacit admission of the ground realities, cites the need for fresh coal-based capacity ranging from 17 GW to nearly 28 GW till 2031-32.
 - This would be over and above an underconstruction coal-based capacity of 25GW (1 giga watt or GW is equal to 1000 megawatts or MW).
 - ➤ An increase in the **plant load factor** (PLF) of coal fired plants from 55% up to 2026-27 to 62% in 2031-32.
- The renewable energy thrust: A projected battery storage requirement in 2031-32 of between 51 GW to 84GW with a daily usage rate of 5-hours.
 - ➤ Estimated to be Rs.10 crore per MW, this could translate into investments into battery storage between Rs.5 8 lakh crore over the next ten years as backup for renewable capacity.
- Battery Energy Storage System: Battery Energy Storage systems (BESS) especially based on Lithium ion batteries are one of the storage options.
- Hybrid generation models: This will basically perform solar energy shifts and provide backup power.

Mydro-based plants:

➤ It also said that in the event of delay in achievement of hydro-based plants, which are in concurred/under construction stage, there is additional requirement of coal of around 4 GW in capacity mix in 2026-27.

What are the challenges ahead?

- The continued reliance on old, inflexible coal-fired plants for base load capacity.
 - ➤ India's vast fleet of coal-fired thermal power plants of 200 MW series are more than 25 years old, run-on old technology and do not promise robust reliability.
- Lack of clarity on how the renewables-dominated grid will be actually managed, despite a pronounced reliance on renewable generation for meeting capacity additions.
- The inertia, which imparts stability to the grid, has been declining due to poor progress of hydro power and zero inertia solar generators.
- There is also no assessment of ramping rate for thermal plants under various scenarios of solar generation going out.
- If battery storage is to be relied on, the total fund requirement for the period 2022-27 is estimated to be 14.30 lakh crore.
 - ► However, the CEA report has given a budget of 8 lakhs crore for BESS for a 10 year period.

LIVESTOCK INSURANCE SCHEME

CONTEXT:

According to information by a Parliamentary
Standing Committee (PSC) regarding zero
insurance coverage of livestock in 2022-23,
Centre is considering a comprehensive livestock
insurance scheme modelling the Prime Minister's
Fasal Bima Yojana.

The Livestock Numbers:

India has rich Livestock resources which can be seen in following manner:

World's highest livestock owner at about 535.78 million



- First in the **total buffalo population** in the world 109.85 million buffaloes
- Second in the population of goats 148.88 million goats
- Second largest poultry market in the world
- Second largest producer of fish and also second largest aquaculture nation in the world
- Third in the population of sheep (74.26 millions)
- Fifth in in the population of ducks and chicken (851.81 million)
- Tenth in camel population in the world 2.5 lakhs

Findings of the Parliamentary panel:

- At present, less than 1% of the country's cattle population is insured and the average yearly premium is 4.5% of the insured amount.
- The report also highlighted that not even a single livestock was insured during 2022-23, whereas during 2021-22, 1, 74,061 animals were insured.
- The Committee asked Department of Animal Husbandry to explore the possibility of developing an App-based Livestock Insurance facility for livestock owners.
- Committee noted that high policy premium rate and general economic conditions of farmers are reasons for lower enrolment in such schemes.

About Livestock Insurance scheme:

- The Livestock Insurance Scheme, a centrally sponsored scheme was implemented on a pilot basis during 2005-06 and 2006-07.
- The scheme was later implemented on a regular basis from 2008-09 in 100 newly selected districts of the country.
- The scheme was later subsumed under the Submission on 'Innovation and Extension: on livestock development of National Livestock Mission'.
- **Coverage**: The scheme is implemented in all the districts of the Country from 21.05.2014.

o Animals covered:

➤ The indigenous / crossbred milch animals, pack animals (Horses, Donkey, Mules, Camels, Ponies and Cattle/Buffalo Male), and Other Livestock (Goat, Sheep, Pigs, Rabbit, Yak and Mithun etc.) are covered under the purview of this component.

Other related Initiatives:

 Rashtriya Gokul Mission (RGM): To undertake breed improvement programme for indigenous breeds so as to improve the genetic makeup and increase the stock. ➤ **E-Pashu Haat Portal**: This portal is for connecting breeders and farmers regarding availability of quality bovine germplasm.

- ➤ National Animal Disease Control Programme: It has been launched for Foot and Mouth Disease (FMD) and Brucellosis with a total outlay of Rs.13, 343 crore to ensure 100% vaccination of cattle, buffalo, sheep, goat and pig population.
- ➤ National Livestock Mission: IT is for intensive development of livestock, especially small livestock along with adequate availability of quality feed and fodder.
- ➤ **Livestock** Health & Disease Control Scheme: Assistance is provided for prevention and control of animal diseases like Foot and Mouth Disease (FMD) etc.
- ➤ **Disease Protection of Livestock**: For livestock protection, the diagnostic kits against Japanese Encephalitis (JE) and Bluetongue (BT) diseases and Subviral Particle based Infectious Bursal Disease Vaccine were developed.

INDIA AMONG TOP 10 COUNTRIES FOR EASE OF DOING BUSINESS: EIU

CONTEXT

In a report published by the Economist Intelligence Unit (EIU), India seems to have inched ahead in terms of ease of doing business.

Key-highlights of the Report

- Singapore has retained its number one rank among all. Canada and Denmark were ranked joint second with the US and Switzerland occupying fourth and fifth place respectively.
- **India has moved up six spots** since the last report. From the 14th rank for the period between 2018-22, India now stands at 10th rank in terms of business environment for the period 2023-27.
- India, Vietnam, Thailand, Belgium, Sweden, and Costa Rica made the biggest improvements over the past year in their business environments, whereas China, Bahrain, Chile and Slovakia deteriorated the most.

The **EIU's Business Environment Ranking (BER)** measures the attractiveness of the business environment in 82 countries on a quarterly basis, using a standard analytical framework with 91 indicators.



What led to the improvement?

- Foreign trade: The improvement is mostly attributable to gains in its scores for foreign trade and exchange controls, infrastructure, and technological readiness
- Profitable market: India's highest-scoring category is market opportunities, helped by the large and growing domestic market that the country offers.
- Beneficial geopolitical trends: India has also benefited from global geopolitical trends, in particular the tension between the US and China.
- Stability and labour supply: In India, a strong, stable economy and access to a large labour supply form the basis of its appeal to investors.
- Easier policy reforms: In addition, policy reforms are making it easier to do business in India, and the researchers at the EIU are expecting major improvements in areas such as infrastructure, taxation and trade regulation which will boost investment.
- Demography: Another factor playing to India's advantage is its generally youthful demographic which promises good availability of labour.

India's Demography

EIU forecasts India's working-age population to expand by almost 100 million in the period to 2030, pushing it comfortably past 1 billion, while that of China will fall by 40 million to under 950 million. India's median age of 28.4 years compares favourably with that of 38.4 years in China. The rise in population creates an additional incentive for the government to develop the manufacturing sector to absorb additional workers.

Challenges

- Low labour participation rate: The low labour participation rate remains a weakness in India's labour market environment.
 - ➤ The overall labour participation rate in India consistently falls short of 50 per cent, below peer economies, mainly because female participation in the labour force remains extremely low.
 - As a result, India's labour force is smaller than that of China, even though it has a larger working-age population.
- Low levels of literacy and technical skills are a further constraint.

Why is China losing?

 China has been losing favour with international investors who are shying away from the middle kingdom due to regulatory changes stemming from the statist direction of economic policy as well as rising local costs weigh. • This has resulted in China being labelled as the "biggest loser" in the EIU survey, falling 11 spots in the global rankings compared to a year ago.

INDIA HAS ALMOST WIPED OUT EXTREME POVERTY: IMF

CONTEXT

An International Monetary Fund (IMF) working paper by Bhalla, Bhasin and Virmani (henceforth called BBV) has come out with a series of poverty projections based on different assumptions, the most optimistic of which shows extreme poverty virtually disappearing at just 0.86% of the population (12 million people).

Key-highlights

Purchasing power parity (PPP) is a metric that equalises the buying power of different currencies to make comparisons easy.

The IMF working paper said that the **proportion of people living in extreme poverty, at less than 1%,** remained steady even during the pandemic on the back of "in-kind" subsidies, especially food rations.

The **Gini coefficient** ranges from 0 to 1, with 0 representing perfect equality and 1 representing perfect inequality.

- In India, the number of people living in extreme poverty -- defined by the World Bank as living on US\$1.9 or less in purchasing power parity (PPP) terms -- was 0.8% of the population in the pre-pandemic year 2019.
- Real (inflation-adjusted) inequality, as measured by the Gini coefficient, which stands at 0.294, is now very close to its lowest level 0.284 observed in 1993-94, the paper stated.

What is Extreme Poverty?

• Extreme poverty is defined by the UN as living on less than \$1.90 a day.

India's poverty line

- In India, the official consumption-based poverty line is still the **Tendulkar Line**, which is close to the World Bank \$1.9 a day line.
- The Tendulkar Expert Group chaired by economist Suresh Tendulkar in 2009 was formed to review the methodology for poverty estimation.
- The committee finalised per person per day consumption figure of Rs 32 a day for urban areas and Rs 26 a day for rural areas.



 The national poverty line for 2011-'12 was estimated at Rs 816 per capita per month for rural areas and Rs 1,000 per capita per month for urban areas.

Rangarajan Committee

- In 2012, due to the widespread criticism of the Tendulkar Committee's approach, the Rangarajan Committee was formed. This panel's report, submitted in 2014, raised the daily per capita expenditure to Rs 47 per day for urban areas and Rs 32 for rural areas.
- They recommended a monthly per capita consumption expenditure of Rs 972 in rural areas and Rs 1,407 in urban areas as the all-India poverty line.
- However, the government did not adopt this report and has continued using the Tendulkar Line

NSO's poverty figure

- India will finally have its official poverty figure in the second half of this year.
- The National Statistical Office (NSO) is currently rolling out the consumption expenditure sample survey, which is used to measure poverty level.
- The survey will continue through July 2023 and preliminary results are expected by the end of the year.

Poverty Alleviation Scheme

- Schemes to increase monthly income: The four schemes, Pradhan Mantri Kisan Samman Nidhi (PM Kisan), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Ujjwala Yojana (PMUY) and saving from PMGKAY, together increased a person's monthly income by Rs. 2,111.
- Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY): It is a programme to distribute a fixed quantity of free foodgrain (5kg per head) to the poor beyond their usual entitlement of 25kg a month of subsidised grains.
- Public Distribution System (PDS) aims to manage food scarcity and distributing essential food commodities at affordable prices.
- National Rural Livelihood Mission (NRLM) was launched in 2011 by the Ministry of Rural Development and aided by the World Bank.
- Pradhan Mantri Awaas Yojana-Gramin (PMAY-G): Due to the gaps in the earlier scheme for rural housing, titled Indira Awaas Yojana (IAY) — it was restructured in 2016 to PMAY-G. Through this scheme, the government commits to realizing housing for all.

POONCH ATTACK

CONTEXT

There has been a terrorist attack on an army vehicle in Jammu and Kasmir's Poonch, in which the country has lost 5 of its brave soldiers in this terrorist attack.

Who is responsible for the attack?

 The attack was carried out by the People's Anti-Fascist Front (PAFF), a terror organisation supported by the Jaish.

What is the People's Anti-Fascist Front (PAFF)?

- The People's Anti-Fascist Front (PAFF) is a military group engaged in the current conflict in Jammu and Kashmir between Kashmiri separatists and Indian security forces.
- India asserts that it's a division of the Lashkra-e-taiba.
- PAFF organisation was discussed for the first time when Article 370 was removed in J&K in 2019.

Increasing terrorism in India

 India ranks 13th on The Global Terrorism Index (GTI). The GTI report is produced by the Institute for Economics & Peace (IEP), a think tank, using data from Terrorism Tracker and other sources.

Framework for Combating Terrorism in India:

- India recently hosted a special meeting of the UNSC's Counter Terrorism Committee (CTC), with theme of 'Countering the use of new and emerging technologies for terrorist purposes'.
- India also hosted the meeting of "No Money For Terror", which was initiative of the French government, to specifically focus on cooperation between countries to choke terror funding.
- In August 2019, the Unlawful Activities
 Prevention Act of 1967 was revised to include
 the ability to label individuals as terrorists.
- National Investigation Agency is the lead law enforcement investigative agency to combat terrorism.
 - ➤ The National Investigation Agency (NIA) Act of 2008 has been **amended** by the Indian Parliament to give NIA the ability to investigate terrorism cases overseas.

Why erasing terror is becoming a challenge?

 Increased freelancers: Radicalised individuals, also called 'lone wolves', 'DIY' or 'freelancer' terrorists are now committing random acts of terrorist violence.



- Dark net: Terrorist have expanded the use of The Onion Router (TOR)-enabled darknet for propaganda, and recruitment on encrypted chat forums and platforms beyond the gaze of the security agencies.
- **Evolving tech, evolving terror:** Advancing and emerging technologies like autonomous systems, 3D printing and deep fake potentially offer the terrorists prospects for weaponisation.

50 YEARS OF PROJECT TIGER

CONTEXT:

India marked 50 years of Project Tiger on April 1, 2023.

About Project Tiger:

- Project Tiger is a tiger conservation programme launched in April 1973 by the Government of India during Prime Minister Indira Gandhi's tenure.
- o Aim:
 - ➤ The project aims at ensuring a viable population of Bengal tigers in their natural habitats, protecting them from extinction, and preserving areas of biological importance as a natural heritage forever represented as close as possible the diversity of ecosystems across the distribution of tigers in the country.
- It is a Centrally Sponsored Scheme of the Ministry of Environment, Forest and climate change
- The project is administered by the National Tiger Conservation Authority (NTCA).
- While it initially covered nine Tiger Reserves (Manas, Palamau, Simlipal, Corbett, Ranthambhore, Kanha, Melghat, Bandipur and Sundarban) spread over 18,278 sq km, India now has 54 such reserves covering more than 75,000 sq km (approximately 2.4% of the country's geographical area).

National Tiger Conservation Authority (NTCA):

- NTCA was established in December 2005 following a recommendation of the **Tiger Task Force**.
- Administration of the tiger reserves will be in accordance with guidelines of NTCA.
- Tiger reserves in India are administered by field directors as mandated by NTCA.
- No alteration in the boundaries of a tiger reserve shall be made except on a recommendation of the NTCA and the approval of the National Board for Wild Life.
- No State Government shall de-notify a tiger reserve, except in public interest with the approval of the NTCA and the approval of the National Board for Wild Life.

Facts related to Tigers in India:

- There are 54 tiger reserves in India that are governed by Project Tiger.
- India is home to **80 percent of tigers** in the world.
 - ► In 2006, there were 1,411 tigers which increased to 1,706 in 2010, 2,226 in 2014 and **2967 in 2018**.
 - Largest Tiger Reserve in India

 Ranipur Wildlife
 Sanctuary (Uttar Pradesh), Nagarjunsagar Srisailam Tiger Reserve (Andhra Pradesh,
 Telangana)
 - Smallest Tiger Reserve in India— Bor Tiger Reserve (Maharashtra)
- Every 4 years the National Tiger Conservation Authority (NTCA) conducts a tiger census across India.
- The **Bengal tiger (Panthera tigris tigris**), also called the Indian tiger or the Royal Bengal tiger is native to the Indian subcontinent.
- They are currently found in India, Bangladesh, Nepal and Bhutan.
- o Protection status:
 - ➤ It is listed as **Endangered** in Nepal, India, and Bhutan, While Bangladesh and China list it as **Critically Endangered.**
- The species found are namely,
 - ➤ White Tiger, Bengal Tiger and Indochinese Tiger.

Other Tiger Conservation Measures:

- National Tiger Conservation Authority: It was established in 2005, following the recommendations of the Tiger Task. It was given statutory status by the 2006 amendment of the Wildlife (Protection) Act, 1972 for strengthening tiger conservation, as per powers and functions assigned to it.
- Tiger Relocation Projects: The tiger relocation project was initiated in 2018 wherein two big cats, a male (Mahavir) from Kanha Tiger Reserve and a female (Sundari) from Bandhavgarh from Madhya Pradesh were relocated to Satkosia Tiger Reserve in Odisha, to shore up the tiger population
- Tiger Special Protection Force: It will be effective in checking illegal human intrusion into the reserve through villages located on its fringes and serve as a second layer of protection for tigers
- Global Tiger Forum: It is an Inter-Governmental international body working exclusively for the conservation of Tigers. Established in 1994, the Global Tiger Forum (GTF) has its headquarters in New Delhi
- Global Tiger Initiative: Global Tiger Initiative (GTI) was launched in 2008 as a global alliance of governments, international organizations, civil

- society, conservation, and scientific communities, and the private sector, with the aim of working together to save wild tigers
- MSTrIPES: MSTrIPES program uses Global Positioning System (GPS), General Packet Radio Services (GPRS), and remote sensing, to collect information from the field, create a database using modern Information Technology (IT) based tools, analyses the information using GIS and statistical tools to provide inferences that allow tiger reserve managers to better manage their wildlife resources.

Other important conservation Projects for Wildlife in India

- Project Elephant: Project Elephant was launched in 1992 and is a centrally sponsored scheme. The project aims at assisting the management and protection of elephants in the States which have free-ranging populations of wild elephants.
- **Project Snow Leopard:** Project Snow Leopard launched in 2009, aims to promote inclusivity and participatory approach for the conservation of the species. The species of Snow Leopard inhabits the Himalayan landscape as well as states such as Jammu and Kashmir, Uttarakhand, Arunachal Pradesh, Sikkim, and Himachal Pradesh.
- Project Hangul: In the 1970s, the Jammu and Kashmir Government in association with the International Union for Conservation of Nature (IUCN) and World Wildlife Fund (WWF) designed a project for the protection and conservation of the Kashmir Red Stag and its habitat. This project came to be known as Project Hangul.
- **Project Crocodile:** Project Crocodile was introduced in 1975. The primary focus was on breeding and rearing in captivity.

OPEN-SOURCE SEEDS MOVEMENT

CONTEXT:

 As public sector breeding declined and the private sector began to dominate the seed sector, the need for alternatives became keenly felt to safeguard the plant varieties and indigenous seeds.

About:

- Farmers have innovated and shared seeds without any intellectual property rights (IPR) claims for centuries.
- Farmers also haven't sought exclusive rights over seeds and germplasm to prevent others from innovating on the seeds.

- In 1999, a Canadian plant-breeder named T.E.
 Michaels suggested an approach to seeds based on the principles of open source software.
- **Seed movement** is required to provide **proper rights** to the plant breeders.

How is IPR protected in agriculture?

- Presently there are two forms of IPR protection in agriculture: Plant-breeders' rights and patents.
- They restrict farmers' rights and the freedom to develop new varieties using germplasm from IPprotected varieties.
- They have thus further consolidated the seed sector and increased the number of plant varieties covered by IPRs.

What are 'open source seeds'?

- In 2002, Boru Douthwaite proposed an open-source model for seeds and plant varieties.
- The open seed Agrecol's model of Europe is based on a contracts approach in which the user agrees inter alia to not patent seeds bought under the opensource licence (OSSI).
- The OSSI simply asks for a pledge, that an individual won't "restrict others" use of these seeds or their derivatives by patents or other means, and to include this pledge with any transfer of these seeds or their derivatives.

What are plant-breeders' rights (PBRs)?

- In some countries, the PBR regulations allow rightsholders to restrict the unauthorised use of seeds to develop new varieties.
- In 1994, the establishment of the World Trade
 Organisation and then the Trade-Related IPR
 Agreement cast a global IPR regime over plant
 varieties.
- TRIPS required countries to provide at least one form of IP protection while consolidation in the seeds sector raised concerns about the freedom to innovate.
- The Green Revolution was spearheaded by **public-sector breeding institutions** and seeds were available as '**open pollinated varieties'**, or as reasonably priced hybrids with no restrictions on farmers to cultivate, reuse and share.
- But the genetic revolution in agriculture was led by the private sector, with seeds mostly made available as hybrids and/or protected by strong IPRs.

Are there such initiatives in India?

 In India, the Hyderabad-based Centre for Sustainable Agriculture (CSA), part of the Apna Beej Network,



developed a model incorporated into an agreement between CSA and the recipient of the seed/germplasm.

- CSA's Open Source Seeds Initiative is trying to use this approach through three farmer producer organisations (FPOs).
- This is similar to Agrecol's strategy, using an agreement to 'shrinkwrap' a licence with contractual obligations.
- Under the Plant Variety Protection and Farmers'
 Rights Act (PPVFRA) 2001, farmers can register
 varieties as 'farmer varieties' if they meet certain
 conditions, and have the right to reuse, replant, and
 exchange seeds.
- However, they can't breed and trade in varieties protected under the Act for commercial purposes.

EMERGING HAZARDS OF RADIOACTIVE CONTAMINATION

CONTEXT:

As per the latest data, radioactive materials or contaminated devices are entering into the booming scraps recycling chain, posing a grave health hazard.

About the data:

- Released by: The annual data on illicit trafficking of nuclear and other radioactive material released by the International Atomic Energy Agency (IAEA).
- For this database, participating members report three groups of incidents.
- According to IAEA,
 - ➤ **Group I** includes incidents that are, or are likely to be, connected with trafficking or malicious use;
 - ➤ **Group II** covers incidents of undetermined intent;
 - Group III accounts for incidents that are not, or are unlikely to be, connected with trafficking or malicious use.
- The most common source of such contamination is the feed material (in most cases, metal) from which the product had been manufactured.

Radioactive waste and Pollution:

- Water and air contamination caused by radioactive elements is known as radioactive pollution. It can produce dangerous pollution if radioactive waste is not disposed of properly.
- Radioactive elements are naturally found in the earth's crust.

- Uranium, thorium and actinium are three NORM (Naturally Occurring Radioactive Materials) series that contaminate water resources.
- A small amount of radiation is found in all types of water but the extended amount of radiation is harmful to human health.

Note: Radioactivity in drinking water can be determined by **a gross alpha test.**

 Radioactivity is measured in Becquerel (SI unit) or in Curie. The unit Sievert measures the quantity of radiation absorbed by human tissues.

Sources of Radioactive waste generation:

- Atmospheric Deposition of Cosmogenic Radionuclides: Atmospheric deposition (both dry and wet) of cosmogenic radionuclides adds radioactive nuclei in the surface water. Cosmogenic radionuclides are radioactive isotopes which are produced by natural processes and distributed within the Earth system.
- Nuclear Reactors and Warheads: Nuclear reactors and nuclear warhead experiments are the key sources of human-induced radionuclides discharge. Nuclear reactors produce radioisotopes (Cobalt-60, Iridium-192, etc.) that hand out as sources of gamma radiation in radiotherapy and numerous industrial appliances.
- Dumping of Radioactive Waste: The application of radioactive elements in nuclear weapons, X-rays, MRI and other medical equipment causes their exposure to human beings. Dumping of these radioactive wastes in surface water bodies causes water pollution.
- Mining: Mining activities of radioactive elements like uranium and thorium also pollute surface and groundwater.

Health Impacts and concerns:

- Radiation Syndrome: Human tissues absorb radiation through polluted water and foodstuff, which can cause serious health risks. High doses of radiation can cause acute radiation syndrome or dermal radiation injury.
- Disorders in Human Physiology: Exposure to radiation causes various disorders in human physiology, including cancer, leukaemia, genetic mutations, cataracts, etc.
- Mutation and Structural Alteration: Genetic effects ionizing radiation induces mutations in germ cells (male sperm cells and female egg cells), resulting in structural alteration in germ cell DNA that are passed on to offsprings. Hereditary disorders can lead to premature death and severe mental illness.



The Atomic Energy Act, 1962:

- The Act articulates India's resolve to pursue the development, control and use of atomic energy for the welfare of the people of India and for other peaceful purposes and for matters connected therewith.
- This Act confers on the Government of India, the powers and responsibilities for framing of Rules and issuance of notifications for implementing the provisions of the Act.
- The powers and responsibilities include those for:
 - ➤ Production, development, use and disposal of atomic energy / radioactive substances;
 - Control over radioactive substances or radiation generating plants in order to prevent radiation hazards, secure public safety and safety of persons handling radioactive substances or radiation generating plant and ensure safe disposal of radioactive wastes.

In accordance with these mandates, the **Central Government has promulgated** the;

- Atomic Energy (Radiation Protection) Rules, 2004,
- the Atomic Energy (Working of the Mines Minerals and Handling of the Prescribed Substances) Rules, 1984,
- the Atomic Energy (Safe Disposal of Radioactive Wastes) Rules, 1987,
- the Atomic Energy (Factories) Rules, 1996 and the Atomic Energy (Radiation Processing of Food and Allied Products) Rules, 2012.
- These laws formulate the policy and regulatory framework for control of activities and for ensuring safety in the activities relating to use of atomic energy.

G7 VOWS TO ZERO CARBON

CONTEXT

Energy and environment ministers of the Group of Seven wealthy nations vowed to work to hasten the shift toward cleaner, renewable energy, but set no timetable for phasing out coal-fired power plants.

Key excerpts

- The Group of Seven industrialised nations, which also includes Germany, Italy, Canada and the EU, all target net-zero emissions by 2050 or sooner after signing the Paris Agreement to cap warming at well under 2 degrees Celsius, and ideally 1.5C.
- Reducing carbon emission: The leaders reiterated the need to urgently reduce carbon emissions and

- achieve a "predominantly decarbonized power sector" by 2035.
- Phasing out fossil fuel: The group is committed to accelerate the phase-out of unabated fossil fuels so as to achieve net zero in energy systems by 2050 at the latest.
 - ► But they offered no new deadlines beyond last year's G7 pledge.
- Hydrogen and Ammonia: The group recognised lowcarbon and renewable hydrogen and its derivatives such as ammonia should be developed and used where they are impactful as effective emission reduction tools to advance decarbonisation.
- Critical mineral: The group is committed to maintain products containing critical minerals and raw materials in the economy as long as possible
- Plastic pollution: The group is committed to end plastic pollution, with the ambition to reduce additional plastic pollution to zero by 2040.

What Does Carbon Free Mean?

- In contrast to carbon-neutral, becoming carbon-free means directly reducing emissions to zero.
- For Critical mineral: example, if a country or company is carbon-free, all the energy and electricity comes from renewable sources, like wind or solar.

What is this move significant?

- The G-7 nations account for 40% of the world's economic activity and a quarter of global carbon emissions.
- Their actions are critical.

About G7



G7 in numbers
7 member countries
1975 first meeting of the group of six
40% of global GDP
1/10 of world's population

2014 Russia suspended over annexation of Crimea

Source: BBC research

- The Group of Seven (G7) is an inter-governmental political grouping consisting of Canada, France, Germany, Italy, Japan, the UK and the US.
- Russia joined in 1998, creating the G8, but was excluded in 2014 for its takeover of Crimea.
- The EU is not a member of the G7 but attends the annual summit.

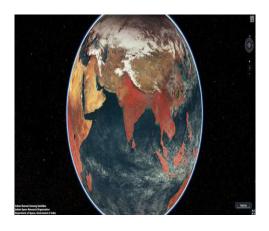


ISRO RELEASES IMAGES OF EARTH CAPTURED BY ITS EOS-06 SATELLITE

CONTEXT:

The Indian Space Research Organisation (ISRO) has released images of Earth captured by the EOS-06 satellite in 13 distinct wavelengths to provide information about global vegetation cover on Land and Ocean Biota for global oceans.

About:



- The images are a mosaic generated by the ISRO's National Remote Sensing Centre (NRSC).
- NRSC/ISRO has generated a global False Colour Composite (FCC) mosaic from the images captured by the Ocean Colour Monitor (OCM) payload on board EOS-06.

About EOS-06 satellite:

- EOS-06, also called OceanSat-3, is a nanosatellite which was launched by ISRO, as part of the PSLV-C54 mission in 2022.
- EOS-06 provides continued services of Oceansat-2 with enhanced payload capability and carries four payloads OCM-, Sea Surface Temperature Monitor, Ku-Band Scatterometer, and ARGOS.
- The EOS-06 is envisaged to observe ocean colour data, sea surface temperature and wind vector data to use in Oceanography, climatic and meteorological applications.
- The satellite also supports value added products such as potential fishing zone using chlorophyll, SST and wind speed and land based geophysical parameters.

What is an Earth Observation satellite?

 Earth Observation (EO) satellites are designed for earth observation from space, which includes military

- **use** like spying and civilian use like, meteorology and cartography.
- These satellites make essential information available on a vast number of areas, including; ocean salinity, ice thickness, crop health, and air quality.
- The data from these satellites are used for several applications like agriculture, urban planning, rural development, mineral prospecting, environment, forestry, ocean resources and disaster management.

INDIA LAUNCHES NATIONAL QUANTUM MISSION

CONTEXT

The Union Cabinet cleared Rs 6,003 crore
National Quantum Mission seeking to realise a
host of frontier technologies related to quantum
computing, quantum communication and
quantum sensing that only a handful of
countries possess.

Background

The new mission comes four years after the central government in December 2018 announced Rs 3,660 crore National Mission on Cyber-Physical Systems, which is being executed through 25 hubs.

What is the National Quantum Mission?

- Duration: Eight years
- Verticals: The mission involving research institutions and industry will have four verticals
 - three on quantum computing, communication and sensing
 - ➤ a fourth one on developing novel materials and devices that would aid in the three core programmes
- **Aim:** To accelerate quantum technology-led economic growth and nurture the ecosystem in the country.
- The new mission targets developing intermediate scale quantum computers with 50-1000 physical qubits in eight years in various platforms like superconducting and photonic technology
- Global race: India will be the seventh country to have a dedicated quantum mission after the US, Austria, Finland, France, Canada and China.
 - ➤ All these countries are also at the R&D stage.

What is Quantum technology?

 Quantum technology is a class of technology that works by using the principles of quantum mechanics



(the physics of sub-atomic particles), including quantum entanglement and quantum superposition.

➤ **Example-** Smartphone is a type of quantum technology – its semiconductors use quantum physics to work.

What is Qubit?

- A qubit (or quantum bit) is the quantum mechanical analogue of a classical bit.
- In classical computing the information is encoded in bits, where each bit can have the value zero or one
- In quantum computing the information is encoded in qubits.

How Quantum technology can be a good 'solution'?

- Effective functioning: In modern day computing, information is relayed and stored in binary digits or bits, that is, 0 or 1. In quantum computing, information sharing, and storage is done in qubits, which exist as 0 or 1 or a combination of both.
 - ➤ This allows for a quantum computer to perform a multitude of applications at the same time, at a much faster rate, surpassing the processing ability of a conventional computing system.
- Increased processing capabilities: Quantum computers will exponentially increase the processing capabilities of a modern-day computer and address impediments linked to combinatorics.
- Wide range of application: It has immense potential in a wide range of applications from ultrasecure military communication to extra-precise MRI machines.
- Multiple benefits: Near-term and long-term quantum applications will:
 - > augment AI solutions
 - improve financial forecasting
 - drastically reduce failures in the manufacturing sector
 - > accentuate drug development
 - push for better cybersecurity paradigms

How this mission will give India a quantum leap?

• Valuable deliverables: Satellite-based secure quantum communications between ground stations over a range of 2000 km within India, long distance secure quantum communications with other countries, inter-city quantum key distribution over 2000 km as well as multi-node quantum network with quantum memories are also some of the deliverables of the mission. Development of atomic systems: The mission will help develop magnetometers with high sensitivity in atomic systems and atomic clocks for precision timing, communications and navigation.

- Development of quantum materials: It will also support design and synthesis of quantum materials such as superconductors, novel semiconductor structures and topological materials for fabrication of quantum devices.
- Beneficial for different sectors: The mission would greatly benefit communication, health, financial and energy sectors as well as drug design, and space applications.
- Boost to national priorities: It will provide a huge boost to National priorities like Digital India, Make in India, Skill India and Stand-up India, Start-up India, Self-reliant India and Sustainable Development Goals (SDG).

GENOME SEQUENCING AND THE GENOME INDIA PROJECT

CONTEXT

The Department of Biotechnology (DBT) recently said that the exercise to sequence 10,000 Indian human genomes and create a database under the Centre-backed Genome India Project is about two-thirds complete.

What is the human genome?

- The human genome is the entire set of deoxyribonucleic acid (DNA) residing in the nucleus of every cell of each human body.
- It carries the complete genetic information responsible for the development and functioning of the organism.
- Base: The DNA consists of a double-stranded molecule built up by four bases –
 - adenine (A)
 - cytosine (C)
 - guanine (G)
 - ▶ thymine (T)
- Every base on one strand pairs with a complementary base on the other strand (A with T and C with G).
- In all, the genome is made up of approximately 3.05 billion such base pairs.

What is genome sequencing?

While the sequence or order of base pairs is identical in all humans, there are differences in the genome of every human being that makes them unique.



 The process of deciphering the order of base pairs, to decode the genetic fingerprint of a human is called genome sequencing.

Important Projects

- **Human Genome Project:** In 1990, a group of scientists began to work on determining the whole sequence of the human genome under the **Human Genome Project.**
 - ➤ The first results of the complete human genome sequence were given in 2003. However, some percentage of repetitive parts were yet to be sequenced.
 - ➤ The Human Genome Project released the latest version of the complete human genome in 2023, with a 0.3% error margin.
- Genome India project: Genome India Project is a research initiative to gather samples, compile data, conduct research, and create a 'Indian reference genome' grid
 - ➤ India's 1.3 billion-strong population consists of over 4,600 population groups,many of which are endogamous. Thus, the Indian population harbours distinct variations, with disease-causing mutations often amplified within some of these groups.
 - Creating a database of Indian genomes allows researchers to learn about genetic variants unique to India's population groups and use that to customise drugs and therapies.

Application of genome sequencing

- Genome sequencing has been used to evaluate rare disorders, preconditions for disorders, even cancer from the viewpoint of genetics, rather than as diseases of certain organs.
- Nearly 10,000 diseases including cystic fibrosis and thalassemia — are known to be the result of a single gene malfunctioning.

INDIAN SPACE POLICY – 2023

CONTEXT

The Indian Space Research Organisation (ISRO) formally published Indian Space Policy, 2023.

Key-highlights of the Policy

 The Indian Space Policy 2023 is a comprehensive set of guidelines that outlines the roles and responsibilities of different entities in the Indian space sector.



- Research & Development: The policy aims to keep India at the cutting edge of space research and development. ISRO, the Indian Space Research Organisation, has been tasked with focusing on applied research, technology development, and human spaceflight capabilities.
- Efficient collaboration between public and private sector: The policy outlines a strong emphasis on sharing technologies, products, processes, and best practices with New Generation Entities (NGEs) and Government companies.
- **Privatising:** The policy permits non-government entities to undertake end-to-end activities in the space sector through the establishment and operation of space objects, ground based assets and related services such as communication, remote sensing and navigation.
- Democratizing Data for All: Data with a Ground Sample Distance (GSD) of 5 meters and higher will be made freely accessible on a timely basis.
 - ➤ This initiative promises to empower researchers, industries, and the general public with valuable information for various applications. In contrast, data with a GSD of less than 5 meters will be available for free to Government entities and at fair pricing for NGEs.
- Focus on human spaceflight capabilities: ISRO will work on developing the necessary technologies, infrastructure, and ecosystem for sustained human presence in space. This ambitious goal promises to propel India into the ranks of spacefaring nations. Additionally, the policy emphasizes the development of a collaborative framework for scientific research in multidisciplinary domains related to human space activities.

- Celestial Prospecting and In-situ Resource Utilization: ISRO is set to undertake studies and missions focused on in-situ resource utilization, celestial prospecting, and other aspects of extraterrestrial habitability. This forward-looking approach will help India pave the way for future space exploration and utilization of resources beyond Earth.
- Applicability: This policy is applicable to any space activity to or from Indian territory or within the jurisdiction of India, including the area to the limit of its exclusive economic zone.

Roles and responsibilities of organisations

 NewSpace India Limited: The Public Sector Undertaking, NewSpace India Limited (NSIL), has been assigned responsibilities for commercializing space technologies and platforms, as well as servicing

- space-based needs of users, whether Government entities or NGEs.
- ➤ By manufacturing, leasing, or procuring space components and assets, NSIL will operate on sound commercial principles, furthering the growth of India's space industry.
- Indian National Space Promotion and Authorization Center (IN-SPACe): IN-SPACe will serve as the interface between ISRO and nongovernmental entities.
- Department of Space: The Department of Space (DOS) will oversee the implementation of the Indian Space Policy-2023, ensuring that stakeholders are suitably empowered to carry out their respective functions.
 - ➤ From international cooperation to sustainable space operations, DOS will play a pivotal role in the successful execution of the policy.

India's space sector (in-brief)

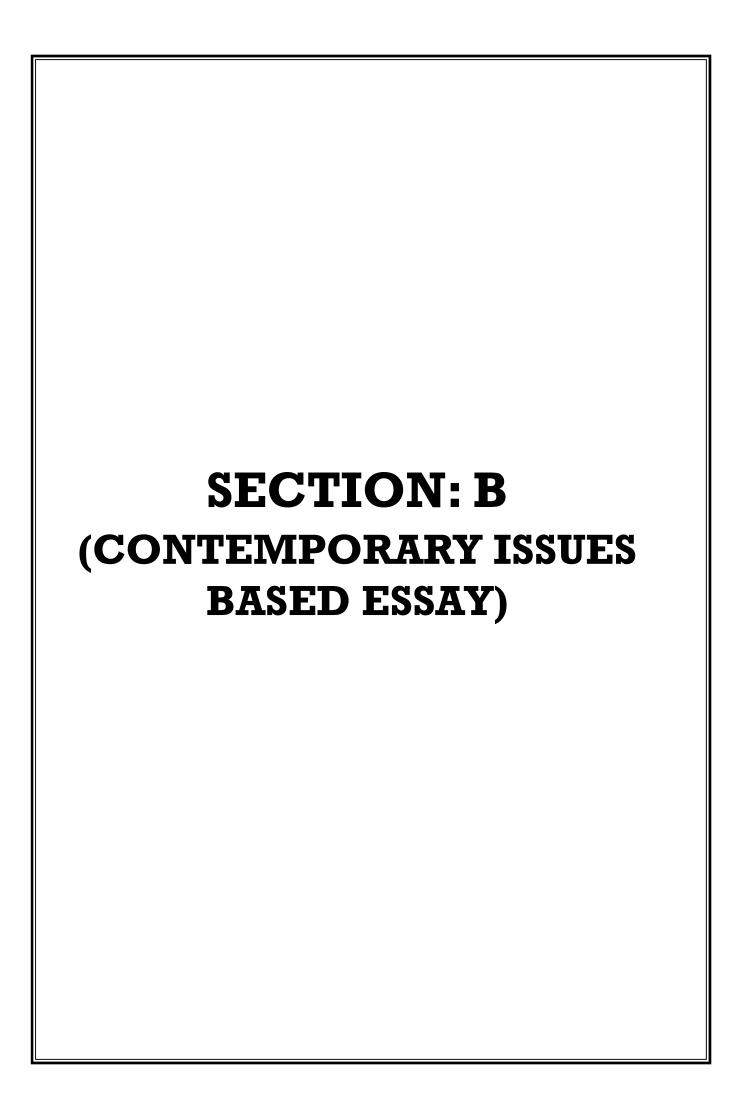
• India's space sector is globally recognized for cost-effective satellite building, and it advocates for peaceful and civilian use of outer space.

- ISRO has an exceptional success rate and is the 6th largest space agency globally.
- India has over **400 private space companies** and **ranks fifth globally** in terms of the number of space companies.
- Recent developments include
 - setting up the Defence Space Agency (DSA)
 - expanding satellite manufacturing capabilities, which are expected to reach USD 3.2 billion by 2025
 - ▶ ISRO launched **SAMVAD**, a student outreach program to encourage space research among young minds
- Challenges: However, the space sector faces major challenges as well including
 - ▶ lack of regulations on commercialisation which could lead to monopolisation
 - rising space debris from increasing expeditions
 - ▶ China's rapid growth in the space industry and potential weaponization
 - > increasing global trust deficit creating an environment of suspicion and potential conflict
- **Global space industry:** The global space industry is currently valued at more than \$400 billion and has the potential to become a \$1 trillion industry by 2040.

What are the expected benefits of the new policy?

- Enhancing Indian space economy: The Policy is expected to have a significant impact on the Indian space economy. It aims to increase India's share in the global space economy from less than 2% to 10%.
- Making India a global space leader: Through a combination of research and development, collaboration, and innovation, the nation is poised to reach for the stars and solidify its position as a global space leader.





LIFE SHOULD ALWAYS BE AT THE TOP OF OUR AGENDA, NOT JUST SUCCESS



Life is a journey that we all have to live. Some truly live it and few get lost in just living. Humans spend life mostly in desiring things that they usually do not possess and consume to such an extent that in case of being unsuccessful they get anxious or depressed. To run behind the success is not something undesirable but to get involved into it too much that we do not get time to enjoy the small things in life such as spending quality time with family, appreciate our mothers for her care, giving emotional support to family and friends, to take care of own health including mental as well physical, stops us from enjoying and understanding real meaning of life. Life is not about having a competitive spirit rather it also includes having a generous heart that may see through people's mind and eyes to understand them.

Economic and career success fulfils our essential needs but it cannot be a replacement for human touch and emotions. Not every happiness can be bought by money or fame. We have to work for these smaller moments of happiness. Success cannot be cherished always but memories do. The real meaning and purpose of life is not only to gain material success rather to progress as a human being. Life requires us to be more kind, compassionate, sympathetic and cheerful. It demands us to spread happiness in other lives by understanding their plight. Even small gestures such as giving an ear to listen, to give a helping hand to someone in need, to lighten up someone by cracking bad jokes are also equally important to give life its meaning. Sometimes, this demands us to forgive others who did anything

wrong to us anytime. It urges us to be more patient in accepting others point of view instead of always putting counter arguments. Winning is always not important, sometimes life demands the courage of character to accept failure.

All these characteristics are important to make life healthy, meaningful and happy. On the contrary, to have a success centric mindset sometimes may bring misery through lack of satisfaction. Success may bring pride and enmity between people and groups. Life demands satisfaction and contentment to be more fruitful.

Jag me bairi koi nahi, jo mann sheetal hoye; Yeh aapa to daal de, dya kare sab koye

...There is no enemy of in the world, if your mind is at peace

Once you drop off your ego, you will receive compassion Success means achieving what we want in our life. In today's world, we run mostly behind short term materialistic success for example earning money, business success, successful career, etc. From the very beginning of our life, we teach our children to perform well and score well, win trophies in sports and extracurricular activities etc. Being a part of the society we are always taught to be a successful individual. People who are successful are generally admired by the people, so we always give priority to this in our life. In the pursuit of success, we often involve and consume ourselves behind

the short term material learning and forget to take

the long term teachings and real learnings of life. For

example, the main purpose of education is not to make students mug up books and top the examination. Rather, the real purpose of education is to make children more rational so that they can question everything instead of trusting them directly.

Similarly, the competitive examination teaches students not to get the medals and trophies rather the real teaching and purpose is to teach students teamwork, to develop a competitive spirit, cooperation with the fellow students, to control emotions in difficult situations. But by developing an idea of success and being successful, we often left behind in inculcating the right meaning and purpose of the education and institutional life in our children. Though we should

When freedom fighters fight for the freedom of a country from the glitches of oppressive governments such as in the case of Bangladesh liberation or outside influences such as in the case of liberation of colonies from the glitches of colonialism. The only thing was not the transfer of power and defeat of the suppressors, rather it is about the liberation of people, hope for justice and freedom of thoughts and ideas which matters. It is not only about how economic, judicial and political institutions will come into the hands of the ruled ones; rather it is more about how the equity will be ensured to satisfy the aspirations of people.

While making industrial progress which is essential for the growth and development of countries, for the

prosperity and to balance power among nations, we often neglect the fundamental and natural rights of individuals and nature. We have constantly failed to consider environmental issues and put them on pedestal to give preference to industrial progress. Trees have fallen disproportionately, air is being polluted with hazardous pollutants, water has become unsuitable for drinking and radioactive decay is trespassing through generations. It has disrupted the food chains and life cycles of animals and humans together. The frequent drought has caused the failure of crops and food shortages, which have further thrown people in malnutrition and misery. In this process of materialistic progress humans are forgetting its role and trying to be the master of everything. We are neglecting life and its necessities and giving precedence to material progress.

Success is important but that is not the sole purpose of human life. It demands us to be more considerate towards ourselves and others. It requires us to understand the real meaning and purpose of life. Life is not about being selfish and neglecting others rather it is about being virtuous and more humane. The real purpose of life should be to achieve values, which may prove to make the attitude of humans more enduring and patient. Those who understand the real meaning of life remain positive and optimistic even in the most difficult situations. The positivity of mind drives the positive atmosphere for self and others.



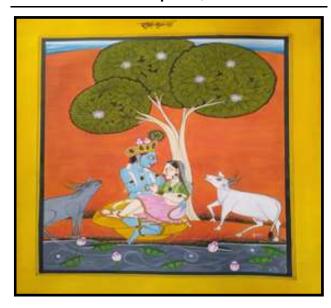
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J & K'S BASOHLI PAINTINGS GET GI TAG

CONTEXT:

Recently, the Basholi (Basoli) paintings received the Geographical Indication (GI) tag following approval of the National Bank for Agriculture and Rural Development, Jammu.



About:

- Basholi painting is a reputed school of miniature paintings.
- The Basohli painting of Kathua is the first independent
 GI-tagged product from Jammu region.
- Basohli painting, school of **Pahari miniature painting** that flourished in the **Indian hill states** during the late 17th and the 18th centuries, known for its bold vitality of colour and line.

Basholi is a town in **Kathua district** in the state of **Jammu and Kashmir**, India.

o Key features:

- ➤ These paintings known for its vivid, evocative colors, bold lines, and deep-set facial patterns.
- ➤ It was founded by **Raja Bhupat Pal** in the 16th century.
- Basholi paintings are considered as the first school of Pahari paintings, many of which have evolved into the much more detailed and widespread style of Kangra painting school.

Geographical Indication (GI) tag:

- The GI is a form of intellectual property right that identifies goods originating from a specific geographical location and having distinct nature, quality and characteristics.
- The Geographical Indication is recognised by the **World Trade Organization**.
- India became a signatory to this convention, when, as a member of WTO, it enacted the Geographical Indications (Registration and Protection) Act, of 1999, which came into effect on September 15, 2003.

Paintings in India:

- Principles of Indian Paintings:
- Hinduism, Buddhism, and Jainism were three new religions that emerged in India, and they all provided important sources of inspiration for artists.
- The development of Indian Paintings has been significantly influenced by various factors, including India's deep-rooted history and culture.
- In the famous paintings of India, spiritual themes, noble ideals, and common beliefs are depicted.
- In the third century AD, Vatsyayana wrote about the six main shadanga or principles of Indian painting in his work Kamasutra. These were:
 - ➤ Various Forms: Rupabheda
 - ► Emotional immersion: Lavanyayoganam
 - Combining colours to simulate modelling effects:
 Varnikabhanga
 - ➤ The proportion of the object or subject: Pramanam
 - ➤ The portrayal of the subject's likelihood: Sadrisyan
 - ➤ The use of colour to create lustre and gleam: Bhava

Miniature Indian Paintings:

- When India first came into contact with the Islamic civilization, miniature painting finally reached its full potential.
- Indian painting underwent a new stage of development during the Mughal Empire when the workshops were created at the Imperial court.
- From there, artworks like illustrated manuscripts, book miniatures, portraiture, celebratory or genre scenes, and many others spread throughout India.
- Key features of miniature paintings:
 - Miniature Indian paintings are characterized by small and detailed paintings.



Some famous miniature paintings include:

- Ragamala (1680 AD)
- Bhairavi Ragini Painting
- **Bani Thani** (Monalisa of India) by Nihâl Chand and Radha and Krishna of Kishangarh
- Gita Govind, Palm Leaf Painting
 - ► Human figures are mostly seen in side profiles, bulging eyes, slim waists, pointed noses, etc.
- ➤ Different colours were used for different characters, and various bases were used.
- ▶ Often painted on paper, clothes, palm leaves, etc.
- ➤ The characteristics of Miniature painting varied in different regions of the country.

INDIA HOSTS INTERNATIONAL BUDDHIST CONFERENCE

CONTEXT

The first Global Buddhist summit was held in Delhi.

About Buddhism

- Buddhism is a non-theistic religion (no belief in a creator god), also considered a philosophy and a moral discipline, originating in India in the 6th and 5th centuries BCE.
- It was founded by the sage Siddhartha Gautama (the Buddha 563 - 483 BCE) who had been a Hindu prince.
 - ➤ It remained a relatively minor school until the reign of Ashoka the Great (268-232 BCE) of the Mauryan Empire (322-185 BCE) who embraced and spread the belief, not only throughout India, but through Central and Southeast Asia.
- Buddhism offers four primary sites of pilgrimage:
 - ➤ Lumbini (birthplace of the Buddha),
 - ➤ **Bodh Gaya** (the site where the Buddha attained enlightenment)
 - **Sarnath** (the location of the Buddha's first sermon)
 - ➤ **Kushinagar** (the location where the Buddha attained parinirvana)

Main Branches of Buddhism

- Theravada School of Buddhism: It was popularized in Sri Lanka, Myanmar, China and other Asian countries.
 - According to the doctrine of Theravada Buddhism, an individual needs to abide by the basic principles of Buddhism strictly.

Four Noble Truths

Buddha presented the **Four Noble Truths** as guiding principles: there is suffering in life; the cause of suffering is desire; ending desire means ending suffering; and following a controlled and moderate lifestyle will end desire, and therefore end suffering.

Noble Eightfold Path

In order to achieve the above goals (happiness), the Buddha presented the **Noble Eightfold Path**:

- right belief
- · right resolve
- right speech
- right conduct
- right occupation
- right effort
- right mindfulness
- right samadhi—or meditation

According to Buddhist practice, following the Noble Eightfold Path will ultimately result in being liberated from **samsara**, the cycle of rebirth and suffering.

- Mahayana School of Buddhism: The main idea behind Mahayana Buddhism is that anyone can reach the stature of the Buddha by following Buddha Marga. Mahasanghika sect is believed to be the source of the Mahayana Buddhism.
 - ➤ This school of Buddhism had a huge impact on China, Korea and Japan.
- Vajrayana School of Buddhism: This is the tantric school of Buddhism. It is believed that by practicing Vajrayana, a Buddhist follower can achieve enlightenment easily.
 - It is more popularly used in Tibetan Buddhism. When considered on a larger aspect, it is a part of the Mahayana school of Buddhism.
 - ➤ It is also commonly referred to as 'Lamaism' because at the center of the school lies the Lama.

KERALA'S THIRUNELLY TEMPLE'S STRUCTURES NEED PROTECTION

CONTEXT

The Indian National Trust for Art and Cultural Heritage (INTACH) has urged the government to conserve the historically significant structures, including the 600-year-old 'Vilakkumadom', an exquisite granite structure, at the Sree Mahavishnu Temple at Thirunelly in Wayanad district during the on-going renovation of the temple.



About the temple

- Thirunelli Temple is an ancient temple dedicated to Lord Maha Vishnu on the side of Brahmagiri hill in Kerala.
 - ► **East:** The Tirunelli temple faces east where the sun rises over the Udayagiri range.
 - ➤ **North:** At the north is the formidable Brahmagiri Range which appears so close to the temple.
 - ➤ **West and South:** At the west and south are Karimala and Narinirangimala respectively.
- **Style:** The **15th century structure** is built in the typical Kerala style, with tiled roofs.
 - ➤ A local ruler began building a stone structure, but he was interrupted by a war, and a few pillars stand in solitude in memory of the attempt.
 - ➤ An impressive structure from that period is an aqueduct, bringing water from the hill streams to the temple.
- Thirunelli Temple is the only temple in the world where the devotees can perform all the rituals related to one's life, starting from birth to death and life after death. Panchatheertham is the temple holy pond.
- Kashi of the South: It is believed that here the prathishta of Lord Vishnu was performed by Lord Brahma. It is also known as "Sahyamala Kshetram" and "Kashi of the South".

Vilakkumadom

The Vilakkumadom at Thirunelly temple, an exquisite granite structure, is incomplete and its incompleteness is a part of history. It is said that the work was initiated by the King of Coorg without the knowledge of the temple's custodian, the Kottayam Raja. The Kottayam Raja later stopped the works and the structure remained untouched afterwards.

PUSHKARALU FESTIVAL RETURNS TO THE GANGA

CONTEXT

The 12-day **Pushkaralu festival** of Telugu-speaking people commenced recently in **Varanasi.**

About the festival

- The festival is being organised in Kashi this year after a gap of 12 years due to a special combination of planetary transits.
- Godavari Pushkaralu is celebrated once in every 12 years when Brihaspati enters Simha Raasi.

 In this festival, pilgrims worship their ancestors and the river Ganga.

It is the second event of the recent past to be organised in Varanasi, after the Kashi-Tamil Sangamam.

The story behind

- As per the legend, after severe penance, the devotee Pushkara was blessed by Lord Shiva with the ability to live in water, and purify holy rivers.
- On a request from Bṛhaspati (Jupiter), Pushkara decided to enter one of the 12 sacred rivers — Ganga, Yamuna, Godavari, Krishna, Kaveri, Bhima, Tapti, Narmada, Saraswati, Tungbhadra, Sindhu, and Pranhita.
- Each river has its zodiac sign.
- The river for each year's festival is decided in accordance with Brihaspati travel from one zodiac sign to another.

Pushakaram of these rivers is celebrated when Jupiter / Brihaspati transits from one Raasi (zodiac sign) to the other:

- The cycle of Pushkaraulu begins with River Ganga when Brihaspati enters Mesha Raasi (Aries). It is celebrated as Ganga Pushkaram.
- **Narmada Pushkaram** when Jupiter enters Vrishabha Raasi (Taurus).
- **Saraswati Pushkaram** when Brihaspati enters Mithuna Raasi (Gemini).
- Yamuna Pushkaram is celebrated when Jupiter enters Karkataka Raasi (Cancer).
- **Godavari Pushkaram** when Brihaspati enters Simha Raasi (Leo).
- **Krishna Pushkaram** when Jupiter enters Kanya Raasi (Virgo).
- **Kaveri Pushkaram** when Brihaspati enters Thula Raasi (Libra).
- **Bheema Pushkaram** when Jupiter enters Thula Raasi (Libra).
- Pushkara Vahini when Brihaspati enters Dhanur Raasi (Sagittarius).
- **Tungabhadra Pushkaram** when Jupiter enters Makara Raasi (Capricorn).
- **Sindhu Pushkaram** when Brihaspati enters Kumbha Raasi (Aquarius).
- And when Jupiter enters Meena Raasi (Pisces),
 Pranahita Pushkaram is celebrated.



THE ANCIENT ART FORM OF BHOOTA KOLA

CONTEXT

The ancient art form of Bhoota Kola, which gained mainstream popularity after the film Kantara, inspires anticipation and hope in Dakshina Kannada, Udupi and Kasaragod.

About the culture

- The trained **Bhoota Kola performer**, in a possessed state, provides the answers to the community and is revered as the manifestation of God himself.
- The ritual performance that starts in the night goes on into the early hours of the morning.



- Different forms: Performed in the open air, the Bhoota Kola comes in the forms of Panchuruli, Kallurutti, Koragajja and so on.
- Objective: The Tuluvas, the people who speak the Tulu language, believe in animism and the Bhoota Kola is performed to invoke these spirits of Nature.
- Tribe: The traditional right to perform the kola belong to the Nalike and Parava tribes of the region.
- A typical **Bhoota Kola** season starts in January and extends to May.

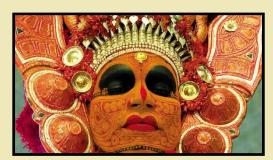
How is different from Theyyam?

- Originally from Dakshina Kannada and Udupi districts of Karnataka and the northern parts of Kasaragod district, the Bhoota Kola has striking similarities with Kerala's Theyyam, but have subtle differences too.
- **Costume:** The costumes of the Bhoota Kola are not as strikingly colourful as those of the Theyyam. The Bhoota Kola performer is bedecked in an attire entirely made of intricately woven palm leaves.
- Face painting: The elaborate face painting, however, is similar to Theyyam. The incantations the performer utters are in Tulu. The nema or kola (as the performance

is called) usually involves a fierce dance accompanied by drums, music and other rituals.

Theyyam

 Theyyam, also known as Kaliyattam, is a ritual dance popular in north Kerala. It encompasses dance, mime and music.



- It exalts the beliefs of the ancient tribals who gave a lot of importance to the worship of heroes and the spirits of their ancestors.
- The ceremonious dance is accompanied by the chorus of such musical instruments as Chenda, Elathalam, Kurumkuzal and Veekkuchenda.
- There are over 400 separate Theyyams, each with their own music, style and choreography.
- The most prominent among these are Raktha Chamundi, Kari Chamundi, Muchilottu Bhagavathi, Wayanadu Kulaven, Gulikan and Pottan.

125TH ANNIVERSARY OF SRI RAMAKRISHNA MATH

CONTEXT:

The Prime Minister has participated in the 125th Anniversary celebrations of Sri Ramakrishna Math at Vivekananda House in Chennai.

About the Ramakrishna Mission:

- Ramakrishna Paramahamsa (1836-1886), a 19thcentury saint, was the founder of the Ramakrishna Order of monks and is regarded as the 'spiritual founder' of the Ramakrishna Movement.
- Ramakrishna was a priest in the Dakshineswar Kali Temple and attracted several monastic and householder disciples.
- Narendra Nath Datta (1863-1902) later known as Swami Vivekananda was the most devoted pupil of Ramakrishna Paramahamsa who carried the message of his Guru Ramakrishna all over the world, especially in America and Europe.
- Later, Vivekananda became the first spiritual leader who thought beyond religious reforms.



- He felt that **Indian masses** required secular as well as spiritual knowledge to empower them to believe in themselves.
- Vivekananda established the Ramakrishna mission after the name of his guru Ramakrishna Paramahamsa.
- Through his speeches and writings, he brought out the essence of Hindu culture and religion.
- He believed in the spirit of Vedanta and the essential unity and equality of all religions.

In 1893, he participated in the **All World Religious Conference (Parliament of Religions**) at Chicago in the United States of America. He argued that Vedanta was the religion of all and not of the Hindus alone.

Ramakrishna Math:

- The Ramakrishna Math is headquartered at Belur math on the bank of river Ganga in West Bengal.
- After the death of Ramakrishna in 1886, the monastic disciples formed the first Math (monastery) at Baranagore.
- Ramakrishna Math is an Order of sannyasins having Sri Ramakrishna (1836-1886), regarded as the prophet of the modern age, as the ideal.
- Ramakrishna Math is a registered society engaged in the service of mankind in the spirit of 'service of God in man'.
- Ramakrishna Math was registered as a Trust in 1901 by Swami Vivekananda himself.

Teachings of Ramakrishna Paramahamsa:

- Ramakrishna Paramahamsa highlighted the essential unity of religions and the need to lead a spiritual life.
- He believed that the different religions of the world are only different ways to reach the same god.
- He believed that there were many roads to God and the service of man was the service of God, because the man was the embodiment of God.
- Hence, sectarianism had no place in his teachings.
- He realised the divinity in humanity and looked upon the service of mankind as a means to salvation.

ZOJILA TUNNEL AND CONNECTIVITY TO LADAKH

CONTEXT:

Recently, the Union Road Transport and Highways Minister had inspected the under-construction Zojila tunnel, which will establish all-weather connectivity between the Union Territories of Ladakh and Jammu and Kashmir.

➤ It claims to be **Asia's longest tunnel** and will prove significant for regions' development.

About:

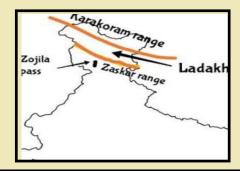
- Currently, the commute between Srinagar and Leh, takes over 10 hours on a good day and passes through extremely inhospitable terrain.
- The **Zojila Pass** is a high mountain pass through which one has to travel in order to make the journey.
- During harsh winters, this route is closed due to fears of avalanches, landslides and slippery roads, with areas beyond the pass cut off from the rest of the country for at least five months.
- With the Zojila pass shut, air connectivity is the only option, and airfares can skyrocket to over Rs.40, 000 during peak winter months.

Zojila Tunnel Construction:

- The Zojila tunnel will be India's longest road tunnel, and is expected to be Asia's longest bi-directional tunnel, boasting a length of 14.15 km.
- A connecting tunnel from **Z-Morh on NH1** to the Zojila tunnel will be built in the Zojila Ghats between **Sonmarg and Kargil**.
- This involves the development and expansion of the 18.475-km highway between Z-Morh to Zojila.
- A 3-km stretch will be expanded; the rest will be newly developed.

The Zojila Pass:

- Zojila Pass connects **Srinagar and Leh**.
- Located in the Kargil district of Ladakh, it connects the Union Territories of Ladakh and Kashmir
- Also known as the "Mountain Pass of Blizzards", it runs at an altitude of 3,528 meters.
- It lies in the **Zaskar range** of Greater Himalayas.
- The pass connects the Kashmir Valley to its west with the Dras and Suru valleys to its northeast and the Indus valley further east.



The highway will have two **twin-tube tunnels**, five bridges, and two snow galleries.

- The work on the entire 33-km span is spread between two union territories Jammu and Kashmir; and Ladakh.
- The tunnel is being built at a cost of more than Rs.4, 600 crore. It is expected to be completed by December 2023.

NISAR SATELLITE TO MAP HIMALAYAS' SEISMIC ZONES

CONTEXT:

NISAR satellite is going to map the most earthquake-prone regions in the Himalayas with unprecedented regularity and aims to build an advance warning system of land subsidence and earthquakes.

NISAR satellite was jointly developed by the Indian Space Research Organisation (ISRO) and the National Aeronautics and Space Administration (NASA) of the U.S.

NISAR is expected to be launched in **January 2024** from **Satish Dhawan Space Centre** into a near-polar orbit

About the map:

• **Need of the initiative:** A large section of the Himalayan region falls in **Zone V**, implying the highest risk of strong earthquakes.

Strain

Strain refers to the deformation that occurs in rocks when it is under pressure from other rocks, usually due to movements of continental plates that are sliding, colliding, or subducting against each other. The Indian Plate, for instance, collided into the Eurasian plate forming the Himalayas and continues to incrementally push it upwards.

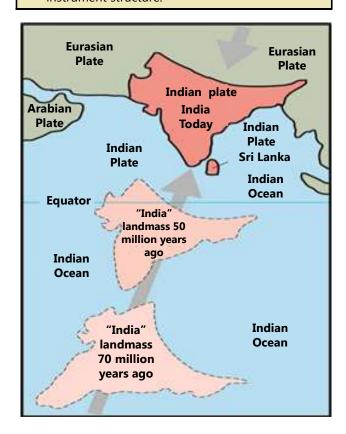
- The NISAR satellite will use two frequency bands: the L-band and S-band to image the Himalayan region.
- The geoscience community can use this to determine how **strain** is building up in various parts of the Himalayas.
- These two frequency bands will together provide high-resolution, all-weather data from the satellite that is expected to follow a sun-synchronous orbit and will be launched in January 2024.

About NISAR:

- NISAR stands for NASA-ISRO Synthetic Aperture Radar.
- It is an Earth observation satellite.

 The 2,800 kilograms satellite consists of both L-band and S-band synthetic aperture radar (SAR) instruments, which makes it a dualfrequency imaging radar satellite.

- NASA has provided the L-band radar, GPS, a highcapacity solid-state recorder to store data, and a payload data subsystem.
- And the ISRO has provided the S-band radar, the GSLV launch system and spacecraft.
- Another important component of the satellite is its large 39-foot stationary antenna reflector
- It is made of a gold-plated wire mesh, the reflector will be used to focus the radar signals emitted and received by the upward-facing feed on the instrument structure.



Emergence of Himalayas:

- About 225 million years ago, India was a large island still situated off the **Australian coast**, and a vast ocean (called **Tethys Sea**) separated India from the Asian continent.
- When Pangaea broke apart about 200 million years ago, India began to forge northward.
- By studying the history -- and ultimately the closing-of the Tethys, scientists have reconstructed India's northward journey.
- About 80 million years ago, India was located roughly 6,400 km south of the Asian continent, moving northward at a rate of about 9 m a century.



- When India rammed into Asia about 40 to 50 million years ago, its northward advance slowed by about half
- The collision and associated decrease in the rate of plate movement are interpreted to mark the beginning of the rapid uplift of the Himalayas.

Himalayas and vulnerability:

- The Himalaya is a fragile mountain range that is still rising as the Indian plate continues to push into the Asian plate.
- The mountains are mainly the shale upwelling of the sea, which makes them quite unstable.
- In fact, they are largely held together by the forests that they support.

Concerns:

- Extreme weather events With the consequent loss of forest cover and extreme weather events (the 2013 Kedarnath flood), catastrophes have occurred at a steady beat in all of Uttarakhand.
- Soil and water degradation The local soil and water have been degraded.
- Decline in natural springs The number of natural mineral water springs is declining.
- Increasing landslides The number of landslides is also shooting up.

INDIA ELECTED TO UN STATISTICAL COMMISSION

CONTEXT:

India was elected by the UN Economic and Social Council (ECOSOC) as a member of the UN Statistical Commission, returning to the world organisation's highest statistical body after a gap of two decades.

Significance of India's membership:

- India was a member of the Statistical Commission last in 2004 and the country is returning to the UN agency after a gap of two decades.
- The experience of India in the field of official statistics especially with regard to its diversity and demography is immense and will be a valuable addition to the functioning of the UN Statistical Commission.

Austria, Armenia, Finland, Hungary, Italy, Malta, the Netherlands, Poland, Portugal, Spain, the United Kingdom and the United States were elected for the term of 4 years in office by secret ballot.

UN Statistical Commission:

- The UN Statistical Commission, established in 1947, is the highest body of the global statistical system bringing together the Chief Statisticians from member states from around the world.
- It is the highest decision-making body for international statistical activities, responsible for setting statistical standards and the development of concepts and methods, including their implementation at the national and international levels.
- The Commission consists of 24 member countries of the United Nations elected by the United Nations Economic and Social Council on the basis of equitable geographical distribution.

Regional representation:

- ➤ Five members are from African States
- four from Eastern European States
- ▶ four from Latin American and Caribbean States
- Seven members from Western European and other States.
- The current members from the Asia-Pacific States are Japan (2024), Samoa (2024) as well as Kuwait and South Korea, whose terms are ending this year.

G7 CALLS FOR EXTENSION OF BLACK SEA GRAIN DEAL

CONTEXT

The Group of Seven (G7) economic powers have called for the "extension, full implementation and expansion" of a critical deal to export Ukrainian grain through the **Black Sea.**

Need of the deal

- Ukraine is a major global exporter of sunflower, maize, wheat and barley.
- When Russia invaded in February 2022, its naval vessels blockaded Ukraine's ports, trapping some 20 million tonnes of grain.

What is in the deal?

- Brokered by the United Nations and Turkey, the deal was signed in Istanbul last July, allowing Ukraine to export more than 27 million tonnes of grain from several of its Black Sea ports.
- The deal allowed exports from Ukraine of grain, other foodstuffs, and fertilizer, including ammonia, to resume through a safe maritime humanitarian corridor from three key **Ukrainian ports** to the rest of the world:



- ➤ Chornomorsk
- Odesa
- ➤ Yuzhny/Pivdennyi



LOKPAL DISPOSES OFF 68% CORRUPTION COMPLAINTS: REPORT

CONTEXT:

Around 68% corruption complaints against public functionaries that landed with the *Lokpal of India* were "disposed off" without any action in the past four years, according to information provided by the parliamentary panel report.

About:

- On January 5 2023, the Lokpal of India has issued an order that complaints received by the office of the Lokpal of India that were not in the prescribed form would not be entertained at any level.
- The Lokpal of India, the country's first anti-corruption body instituted four years ago to investigate complaints against public functionaries, including the Prime Minister, submitted to a parliamentary panel that it has not prosecuted even a single person accused of graft till date.

Findings of the report:

- Nearly 90% complaints were not in the prescribed format.
- The parliamentary panel report was based on information of the Department of Personnel and Training (DoPT), since 2019-20.

- The anti-corruption body received 8,703 complaints, out of which 5,981 complaints were disposed of.
- As many as **6,775 complaints** were rejected for not being in the correct format.
- The office informed that only three complaints were fully investigated, and 36 complaints were at a preliminary stage.
- In 2022-23, as many as 2,760 complaints were received, out of which only 242 were in the prescribed format.
- The Committee infers from the data provided by Lokpal that a large number of complaints are being disposed of on the ground that the complaint is not in the prescribed format.

Office of Lokpal:

Background:

- The term "Lokpal" was coined by Dr. L.M.Singhvi in 1963.
- ➤ The concept of a **constitutional ombudsman** was first proposed in parliament by Law Minister Ashoke Kumar Sen in the early 1960s.
- ➤ The first Administrative Reforms Commission (ARC) recommended the enacting of the Office of a Lokpal.
- ➤ Forty five years after its first introduction and after ten failed attempts, the Lokpal Bill was finally enacted in India on 18 December 2013.
- The Act was passed in 2013.
- The country's first Lokpal, Justice Pinaki Chandra Ghosh, was appointed on March 19, 2019 along with eight other members.

Justice Ghosh moved out of office in **May 2022** after attaining 70 years of age and since then, **Pradip Kumar Mohanty** has been acting as the Chairperson of Lokpal.

PM SVANIDHI SCHEME

CONTEXT:

A total of 42.7 lakh loans had been disbursed to street vendors under the PM SVANidhi scheme, as per the government's latest data.

Key-highlights of the development

- The 42.7 lakh loans amounted to ₹5,152.37 crore. Out of this 3.98 lakh or 9.3% were to hawkers from the minority communities.
- State-wise disbursal of loans seemed to be aligned with its population, with Uttar Pradesh disbursing the



- maximum number of loans at 11,22,397, while Sikkim gave out just one loan.
- Concerning area: There was a decline in the share of loans to street vendors of minority communities with 10.23% in 2020-21, 9.25% in 2021-22 and an alltime low of 7.76% in 2022-23.
 - ► In 2020-21, 2,10,457 loans were disbursed to minorities while it was 98,973 loans in 2021-22 and 88,609 in 2022-23.

Minority Community

Minorities constitute about 19%-20% population of the country. As of now, six communities - Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis) and Jains - come under the minority section in India.

About PM SVANIDHI:

- PM SVANiDHI is a special micro-credit facility plan to provide affordable loan of up to Rs. 10,000 to more than 50 lakh street vendors.
- The scheme is a Central Sector Scheme i.e. fully funded by Ministry of Housing and Urban Affairs.
- **Eligibility**: The Scheme is available to all street vendors engaged in vending in urban areas as on or before March 24, 2020.
- It was announced aims to enable street vendors to resume their livelihoods, which have been hit hard due to the national lockdown.
- Implementing agency: Small Industries Development Bank of India is the technical partner for implementation of this scheme. It manages the credit guarantee to the lending institutions through Credit Guarantee Fund Trust for Micro and Small Enterprises.
- Salient features:
 - Vendors can avail working capital loan of up to Rs 10,000, which is repayable in monthly instalments within one year.
 - ➤ On timely/early repayment of the loan, an interest subsidy of 7% per annum will be credited to the bank accounts of beneficiaries
 - ▶ Monthly cash back incentive on digital transactions
 - There will be no penalty on early repayment of loan.

Other related schemes

• **SVANidhi se Samriddhi**: The Ministry has initiated 'SVANidhi se Samriddhi' in 125 Urban Local Bodies, selected for saturation in the first phase. In Phase 1, approximately 35 Lakh Street vendors and their families were covered.

- The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014: It was enacted to regulate street vendors in public areas and protect their rights.
- National Association of Street Vendors of India (NASVI): NASVI is an organization working for the protection of the livelihood rights of thousands of street vendors across the country.

CENTRE 'APPROPRIATE' PARTY TO RESPOND TO PLEA ON DISQUALIFIED LAWMAKERS: EC

CONTEXT:

The Election Commission of India (ECI) said it would be "appropriate" to have the Union government deal with the disqualification issue.

About the news

- The Election Commission in the Supreme Court has chosen to maintain a distance on the question whether a disqualified lawmaker should be banned from contesting elections for five years.
- The commission said it would be "appropriate" to have the Union government deal with the issue.
- Election commission stated that the issue involved in this matter pertains to the interpretation of **Article** 191(1)(e) of the Constitution.

Article 191(1)(e)

- Article 191(1)(e) gives the various grounds of disqualification "for being chosen as, and for being a member of the Legislative Assembly or Legislative Council of a State".
- They include
 - holding an office of profit
 - > being of unsound mind or undischarged solvent
 - being a non-citizen or voluntarily acquiring the citizenship of a foreign state
 - being under any acknowledgment of allegiance or adherence to a foreign state
- It relates to matters that do not have a nexus with the conduct of elections in terms of the remit of the Commission under **Article 324**.
- Therefore Union government is the appropriate party for the adjudication of the prayers made in the petition

About Election Commission

 The Election Commission is a body established under Article 324 of the Constitution.



 It is vested with the authority of superintendence, direction, and control of elections for the conduct of elections to Parliament, State Legislatures and the offices of the President and the Vice-President.

Powers of EC for disqualification

- Under the Constitution, the Commission has advisory jurisdiction in the matter of post-election disqualification of sitting members of Parliament and State Legislatures.
- The opinion of the Commission in all such matters is binding on the President or, as the case may be, the Governor to whom such opinion is tendered.
- Further, the cases of persons found guilty of corrupt practices at elections which come before the SC and High Courts are also referred to the Commission for its opinion on the question as to whether such person shall be disqualified and, if so, for what period.
- The Commission has the power to disqualify a candidate who has failed to lodge an account of his election expenses within the time and in the manner prescribed by law.
 - In Mohinder Singh Gill & Anr vs The Chief Election Commissioner and Others (December 2, 1977), the Supreme Court ruled that "Article 324, on the face of it, vests vast functions in the Commission, which may be powers or duties, essentially administrative, and marginally, even judicative or legislative".
 - This means the ECI mainly has administrative functions in the preparation of electoral rolls and conduct of elections.

EXEMPTION FOR RARE DISEASES DRUGS

CONTEXT:

The Central Government has given full exemption from basic customs duty on all Rare Diseases drugs.

Key-highlights of the development:

- The Central Government has given full exemption from basic customs duty on all drugs and food for special medical purposes imported for personal use for treatment of all Rare Diseases listed under the National Policy for Rare Diseases 2021.
- Drugs/Medicines generally attract basic customs duty
 of 10%, while some categories of lifesaving drugs/
 vaccines attract concessional rate of 5% or Nil.

About National Policy of Rare Diseases (NPRD):

 The National Policy of Rare Diseases (NPRD) was notified in March 2021.

Aim:

- ➤ To increase focus on indigenous research and local production of medicines.
- ➤ To lower the cost of treatment of rare diseases.
- ➤ To screen and detect rare diseases early at early stages, which will in turn help in their prevention.
- Categorization: The policy has categorized rare diseases into three groups:
 - ➤ **Group 1**: Disorders amenable to one-time curative treatment.
 - ➤ **Group 2**: Those requiring long-term or lifelong treatment.
 - ➤ **Group 3**: Diseases for which definitive treatment is available but challenges are to make an optimal patient selection for benefit, very high cost, and lifelong therapy.

Financial Support:

- ➤ Provision for financial support of up to Rs.50 lakhs to the patients suffering from any category of Rare Diseases and for treatment in any of the Centre of Excellence (CoE) mentioned in NPRD-2021, outside the Umbrella Scheme of Rashtriya Arogaya Nidhi.
- Rashtriya Arogya Nidhi: The Scheme provides financial assistance to patients, living below the poverty line (BPL) and who are suffering from major life-threatening diseases, to receive medical treatment at any of the super speciality Government hospitals/institutes.

What are 'rare diseases?

- Rare diseases are diseases which affect a small number of people compared to the general population.
- These are serious, often chronic and progressive, diseases.

WHO defines a rare disease as "an often debilitating lifelong disease or disorder with a prevalence of **1** or less, per **1000** population".

- While nearly all genetic diseases are rare diseases, not all rare diseases are genetic diseases.
- There may be as many as 7,000 rare diseases, individual diseases may be rare, and the total number of people with a rare disease is large.
 - ➤ Examples: Lysosomal Storage Disorders (LSD), Gaucher disease, Pompe disease, cystic fibrosis, muscular dystrophy, spina bifida, haemophilia, MPS 1 and 2, and Fabry disease etc.



Drug Regulatory System in India:

 The Drug Regulatory Authority (DRA) is the institution in charge of developing and enforcing the majority of pharmaceutical legislation and regulations.

- Its main responsibility is to assure drug quality, safety, and efficacy, as well as product information accuracy.
- This is accomplished through enacting regulations that ensure the manufacture, procurement, import, export, distribution, supply, and sale of medications, as well as product promotion and advertising and clinical studies, are carried out following established the Central drugs standard control organisation (CDSCO), quidelines.

About CDSCO:

- The National Regulatory Authority (NRA) of India is the Central Drugs Standard Control Organisation (CDSCO), which is part of the Directorate General of Health Services, Ministry of Health & Family Welfare.
- CDSCO is responsible for approving drugs, conducting clinical trials, establishing drug standards, monitoring the quality of drugs imported into the country, and coordinating the activities of State Drug Control Organisations by providing expert advice to achieve uniformity in the enforcement of the Drugs and Cosmetics Act.

CRITICAL VIEWS ON GOVERNMENT POLICIES NOT ANTI-ESTABLISHMENT: SC

CONTEXT:

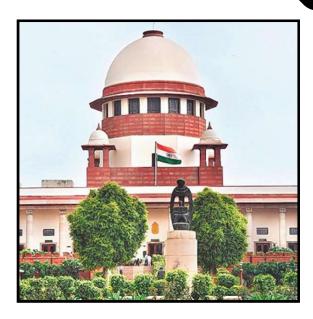
The Supreme Court of India has observed that the Central government's frequent reliance on sealed covers to validate its actions in courts has reduced constitutional rights and procedural guarantees of a fair hearing.

About the case:

- The Apex Court was deciding on Malayalam news channel **MediaOne's plea** against the telecast ban imposed on it by the Central government.
- The Supreme Court showed anger to the government for silencing voices in the media who "speak truth to power" by branding them as "anti-establishment".

Anti-establishment:

It means used for individual or Organisation who Opposed or hostile to the social, economic, and political principles of a ruling class (as of a nation).



- Government targets media which are against their ideologies.
- Supreme Court has also said on state's "unguided and ad hoc" use of sealed covers in courts to outsmart citizens' rights to personal liberty, life and profession.

Supreme courts' stand:

- The press has a duty to speak truth and present citizens with hard facts, enabling them to make choices that prepare democracy in the right direction.
- The restriction on the freedom of the press compels citizens to think along the same tangent.
- A homogenized view on issues that range from socioeconomic polity to political ideologies would pose danger to democracy.

Press Freedom in India:

Grounds of restriction against press:

A law could impose only those restrictions on the exercise of this right; it faces certain restrictions under article 19(2), which is as follows:

- Sovereignty and integrity of India,
- Security of the State,
- Friendly relations with foreign States,
- Public order, decency or morality or in
- Contempt of court,
- Defamation
- Incitement to an offence.
- Romesh Thappar v. State of Madras, 1950: The Supreme Court in Romesh Thappar v. the State of Madras observed that freedom of the press lay at the foundation of all democratic organisations.



- Fundamental Right under Article 19: The Indian Constitution guarantees freedom of speech and expression under Article 19, which deals with 'Protection of certain rights regarding freedom of speech, etc.
- Implicit Right: Freedom of the press is not expressly protected by the Indian legal system but it is impliedly protected under Article 19(1) (a) of the constitution.
- However, Freedom of the press is also not absolute.

GOVERNMENT INTRODUCES AQUACULTURE BILL

CONTEXT:

The Coastal Aquaculture Authority (Amendment)
Bill 2023 was introduced in the Lok Sabha, which
seeks to amend the Coastal Aquaculture Authority
Act 2005.

Highlights of the Bill:

- Introduced by: Minister of Fisheries, Animal Husbandry and Dairying Parshotaam Rupala.
- The Bill seeks to decriminalise the offences under the Act for promoting ease of doing business and to fine-tune the operational procedures of the Coastal Aquaculture Authority.
- It also aimed at promoting newer forms of environment-friendly coastal aquaculture including cage culture, seaweed culture, marine ornamental fish culture and pearl oyster culture which has the potential for creating additional employment opportunities.
- The Bill also has a provision to prevent the use of antibiotics and pharmacologically active substances which are harmful to human health in coastal aquaculture.

Coastal Aquaculture Authority:

- CAA was established under the provisions of the Coastal Aquaculture Authority Act, 2005
- **Objective:** To regulate the activities connected with coastal aquaculture in coastal areas.

Other Government Interventions:

- Pradhan Mantri Matsya Sampada Yojana (PMMSY): The Government has launched the PMMSY for the development of marine & inland fisheries.
- National Fisheries Development Board (NFDB): NFDB works for development of Fisheries in the country from Intensive Aquaculture in Ponds & tanks to Coastal Aquaculture.

26 STATES AND UTS ADOPTS BHU-AADHAR: DOLR

CONTEXT

The Department of Land Records (DoLR) has informed that at least 26 States and UTs have adopted the Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhar and seven more States are conducting a pilot test of the project.

What is Bhu-Aadhaar?

- The Bhu-Aadhaar or ULPIN is a "14-digit alphanumeric number generated based on the latitude longitude of the vertices of each land parcel".
- It is designated to be the "single, authoritative source of truth of information on any parcel of land or property to provide integrated land services to the citizens as well as all stakeholders".
- The Indian government is aiming to digitize 100 percent of land records by 2024.

Other important initiatives for land records

Bhu-Naksha initiative

- The Bhu-Naksha project introduced in 2022 is another project under the Digital India Land Record Modernisation Programme implemented in 2016.
- The Bhu-Naksha initiative provisions for <u>mapping</u> <u>boundaries and conducting spatial measurement</u> of land to computerize land records and produce digitized maps of a region with parcels of demarcated land.
 - ➤ These maps are editable based on the results of property divisions in G2G (govt to govt) and G2C (govt to citizen) domains.
 - These parcels of land are then identified by a Bhu-Aadhaar number.

National Generic Document Registration System (NGDRS)

- As many as 28 States and Union Territories (UTs) in the country have adopted the National Generic Document Registration System (NGDRS).
- NGDRS is a digital portal for maintaining land records.
- The NGDRS is an application developed for <u>allowing people to buy land online</u>via electronic registration of property and documents. The project was initiated by the Department of Land Resources under the aegis of the Ministry of Rural Development.



GOVERNORS SHOULD CLEAR BILLS AS SOON AS POSSIBLE: SC

CONTEXT

The Supreme Court observed that bills sent to the governor for assent must be returned "as soon as possible" and not sit over them, making state Legislative Assemblies wait indefinitely.

Key-highlights

- Citing proviso 1 of Article 200 of the Constitution, the bench said the expression 'as soon as possible' has significant constitutional intent and must be borne in mind by constitutional authorities.
- According to Article 200, "Assent to Bills when a Bill has been passed by the Legislative Assembly of a State or, in the case of a State having a Legislative Council, has been passed by both Houses of the Legislature of the State, it shall be presented to the Governor and the Governor shall declare either that he assents to the Bill or that he withholds assent therefrom or that he reserves the Bill for the consideration of the President."
- The governor is an important constitutional figure in India, serving as the representative of the President of India in each state and union territory.

Article 200 of the Constitution of India

- Article 200 of the Constitution provides that after a Bill has been passed by the Legislative Assembly of a state, the same shall be presented to the governor for his assent.
- The governor may either declare that he assents to the Bill or may withhold his assent or reserve it for consideration by the President.

FILL VACANCY IN NCSC EXPEDITIOUSLY: SC

CONTEXT

The Supreme Court has directed the Centre to ensure that vacancy in the National Commission for Scheduled Castes is filled on an expeditious basis.

About

- The National Commission for Scheduled Castes is an Indian constitutional body.
- Articles 338 of the Constitution of India lays down the provision for the establishment of the National Commission for the Scheduled Castes.

- Objective: It is established to provide safeguards against the exploitation of Scheduled Castes and Anglo Indian communities to promote and protect their social, educational, economic and cultural interests.
- Appointment: The President by warrant under his hand and seal appoints, and determines the tenure, service conditions of the Chairperson, Vice-Chairman, and the members of the Commission.
- **Composition:** NCSC consists of a chairperson, a vice chairperson and three other members. Its headquarter is situated in New Delhi and has 12 state branches.

National Commission for Scheduled Tribes (NCST)

 The National Commission for Scheduled Tribes (NCST) was established by amending Article 338 and inserting a new Article 338A in the Constitution through the Constitution (89th Amendment) Act, 2003.

Who are Scheduled Castes?

The 2011 Census places the number of scheduled castes in India at 16.6 percent of the total population, or approximately 166,635,700 people.

- Scheduled castes are sub-communities within the framework of the Hindu caste system who have historically faced deprivation, oppression, and extreme social isolation in India on account of their perceived 'low status'.
- Only marginalised Hindu communities can be deemed Scheduled Castes in India, according to The Constitution (Scheduled Castes) Order, 1950.

MISSION TO MAP RURAL INDIA'S CULTURAL ASSETS

CONTEXT:

In a bid to harness the unique cultural heritage of rural India, the government has identified and documented distinctive features of more than one lakh villages across the country under the 'Mera Gaon meri Dharovar' programme.

About the development:

- In this initiative of cultural asset mapping, villages have been broadly divided into seven-eight categories based on;
 - Whether they are important ecologically, developmentally and scholastically,



- ▶ If they produce a famous textile or product, and
- ➤ If they are connected to **some historical or mythological events** such as the Independence struggle or epics like the Mahabharata.

For example:

- The ecological category includes the Bishnoi village near Jodhpur in Rajasthan, which is a case study for living in harmony with nature, and Uttarakhand's Raini village, which is famous for the Chipko movement.
- There are also villages which have developmental importance like **Modhera in Gujarat**, which is the first solar-powered village in India.
- The NMCM aims to develop a comprehensive database of art forms, artists and other resources across the country.
- Though launched by the Culture Ministry in 2017, the programme got off to a slow start and was handed over to the Indira Gandhi National Centre for Arts (IGNCA) in 2021.
- The villages under the historical category include Kandel in Madhya Pradesh, the site of the famous 'Jal Satyagraha', and the villages of Hanol in Uttarakhand and Vidurashwathar of Karnataka, which are linked to the Mahabharata.
- The entire exercise has been carried out the National Mission for Cultural Mapping (NMCM).

Mera Gaon meri Dharovar programme:

- Launched by: Our PM launched on July 25, 2015, in Patna.
- o Implemented by:
 - ➤ The Ministry of Culture has partnered with the Common Services Centres (CSC), under the Ministry of Electronics & IT (MEITY).
- Aim: The survey seeks to document the cultural identity at the village level by involving citizens to share what makes their village, block, or district unique.

o Data collection:

- Under the survey, a CSC Village Level Entrepreneur called VLEs will conduct meetings with citizens at the villages and then upload interesting facts about their village, its places of interest, customs and traditions, famous personalities, festivals and beliefs, art and culture, etc., on to the application.
- ➤ Village level Cultural asset mapping shall be undertaken through Field Surveys involving Respondents.

➤ CSC Village level Entrepreneurs (VLE) shall be deployed for the same across all villages in the country.

Other related government schemes:

Kala Sanskriti Vikas Yojana,

- Scheme for Safeguarding the Intangible Cultural Heritage, and
- Ek Bharat Shreshtha Bharat.

INDIA RISES ON WORLD BANK'S LOGISTIC PERFORMANCE INDEX 2023

CONTEXT

India has improved its ranking in the World Bank's Logistic Performance Index 2023 by six places, owing to significant investments in both soft and hard infrastructure as well as technology, which has led to an improvement in the country's port performance.

Key-highlights of the Report

- Singapore and Finland are the most efficient and highest ranked LPI countries.
- India's ranking: According to the report, India's rank in the index of 139 countries has risen to 38 from 44 in 2018.
 - ➤ International shipments: In 2023, India's ranking for international shipments improved significantly, moving up from 44 in 2018 to 22.
 - ➤ Logistics competence and equality: The country also climbed four places to rank 48 in logistics competence and equality.
 - ➤ Timeline: In terms of timelines, India saw a significant improvement, moving up 17 places in the rankings.
 - ➤ Tracking and tracing: Additionally, India improved three places in tracking and tracing, now ranking at 38.

What is Logistic Performance Index 2023?

- The LPI is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance.
- The LPI 2023 allows for comparisons across 139 countries.
- The 2023 LPI for the first time measures the speed of trade with indicators derived from big datasets tracking shipments.



Overview of Logistics Industry in India

Government Scheme to improve India's logistics sector

- National Logistics Policy: It is a comprehensive effort to address issues of high cost and inefficiency by laying down an overarching interdisciplinary, cross-sectoral and multi-jurisdictional framework for the development of the entire logistics ecosystem.
- PM GatiShakti National Master Plan for mutimodal connectivity: It aims to give further boost and complementarity with the launch of the National Logistics Policy.
- Other Related Initiatives to Logistics:
 - Multi-Modal Logistics Parks
 - Logistics Ease Across Different States (LEADS) Report
 - Dedicated Freight Corridor
 - Sagarmala Projects
 - Bharatmala Project
 - ➤ Multimodal Transportation of Goods Act, 1993
- Meaning: Broadly, logistics is the time, resources, and money invested in storing and transporting a commodity from its origin to destination.
- The logistics industry in India is growing rapidly, with the country's economy expanding at a rapid pace.
- India's logistics sector is estimated to account for about 14.4% of GDP. The unorganised sector amounts to over 90% of the logistics sector.
 - ➤ The average logistics cost per GDP among BRICS countries was 11%. However, in the case of India, the cost share per GDP was 14%.
- The sector is expected to grow at a compound annual growth rate (CAGR) of 15.5% between FY2019 and FY2024.
- The sector employs around 22 million people and is expected to create another 1.2 million jobs by 2025.

CORE INFLATION CALCULATION

CONTEXT:

RBI former secretary has highlighted that country's Core Inflation calculation excludes food price (as they are volatile), which needs a particular observation due to increasing significance in recent times.

S&P Global Ratings recently said core inflation in India has been declining sequentially, and an elevated 6.25 percent policy rate limits the need for further rate hikes.

What is Core Inflation?

- Core inflation is the change in the costs of goods and services but does not include those from the food and energy sectors.
- Food and energy prices are exempt from this calculation because their prices can be too volatile or fluctuate wildly.

Why is it important?

- Core inflation is used to determine the impact of rising prices on consumer income.
- If the increase in the price index is due to temporary shocks that could soon reverse themselves, it may not require any monetary policy action.
- To deal with such situations, many central banks use measures of core inflation that are designed to filter the transitory price movements.
- Core inflation by eliminating the volatile components from the headline helps in identifying the underlying trend in headline inflation and is believed to predict future inflation better.
- Core inflation is a convenient guide to help the central bank achieve its objective of controlling total inflation.

What is Headline Inflation?

- It is the raw inflation figure reported through the Consumer Price Index (CPI).
- The CPI determines inflation by calculating the prices of a fixed basket of goods.
- Core inflation removes the CPI components that can exhibit large amounts of volatility from month to month.

NEW QUALITY CONTROL ORDERS FOR FIBRES

CONTEXT:

Recently, the new Quality control orders (QCO) have been issued for fibres and have been made mandatory for a few.

About the Orders:

- Quality Control Orders (QCO) have been issued for fibres — cotton, polyester and viscose.
 - These fibres constitute the basic raw materials for majority of the Indian textile and clothing industry.
- While the standards were available earlier too, these are now revised and made mandatory for a few, and yet to be finalised for others.



 International manufacturers of these fibres, who supply to India, are also mandated to get *a certificate* from the **Bureau of Indian Standards (BIS**), which is the certifying authority for the QCOs.

India's textile sector

- India's textile sector is one of the critical sectors of the Indian economy, accounting for more than two per cent of the total GDP and more than 12 per cent of the manufacturing sector gross domestic product (GDP).
- The sector is also the second largest provider of employment in India, after agriculture.
- It provides employment to an estimated 45 million people directly and to another 60 million indirectly through allied activities.

Why are fibres covered under QCOs?

- The Indian textile and clothing industry consumes both **indigenous and imported** fibres and filaments.
- The imports are for different reasons cost competitiveness, non-availability in the domestic market, or to meet a specified demand of the overseas buyer.
- The main aim of the QCO is to control import of sub-quality and cheaper items and to ensure that customers get quality products.
- The entire supply chain, from the textile manufacturers to exporters, has so far focused on quality standards prescribed by the buyers.

Bureau of Indian Standards (BIS):

- BIS, the national standard body of India, was established under the BIS Act, 2016.
- It is responsible for the harmonious development of activities of standardisation, marking and quality certification of goods.
- The following schemes of certification are covered under BIS:
 - ➤ **Product Certification Scheme** Applicable for tangible products; with some products classified under compulsory certification.
 - System Certification Scheme
 Applicable for systems/ process
 - Foreign Manufacturers Certification Scheme
 Applicable for foreign manufacturers who are engaged in the sale of their products in India.
 - ► Hallmarking Applicable for articles made from precious metals like gold and silver
 - ► **ECO Mark Scheme** Applicable for products affecting or related to the environment

ISRO LAUNCHES SINGAPORE'S TELEOS-2 SATELLITE

CONTEXT

The Indian Space Research Organisation (ISRO) launched a customer satellite in an orbit around the planet. The TeLEOS-2 mission was launched on-board ISRO's workhorse Polar Satellite Launch Vehicle (PSLV) on its 55th mission to date.

What is TeLEOS-2 satellite?

- The Singaporean probe is an **Earth Observation Satellite**, which has been designed to capture roundthe-clock, all-weather satellite imagery.
- The 750-kilogram satellite, developed by ST Engineering, will provide imagery that could be used for hotspot monitoring and haze management, air crash search and rescue operations, and much more.
- The XL variant of PSLV, which will be used during the C-55 mission, has 6 solid rocket strap-on motors to augment the thrust.
- The rocket is capable of launching 1,750 kg of payload to Sun-Synchronous Polar Orbits at 600 km altitude and 1,425 kg into Geosynchronous and Geostationary orbits.

WHAT IS PSLV?

- The PSLV is a third-generation launch vehicle developed solely in India and was the first launched from India to be equipped with liquid stages.
- The rocket is capable of placing multiple payloads into orbit and has been used to launch various satellites into Geosynchronous and Geostationary orbits.

Previous Launches

- The Indian space agency launched three Singaporean satellites with the **PSLVC-53** mission in June 2022.
- The spacecraft carried the **DS-EO satellite**, **NeuSAR**, a 155 kg satellite, and **Scoob-1 of Nanyang Technological University (NTU)**, Singapore.

LOCKBIT RANSOMWARE

CONTEXT

Cybercriminals have developed new ransomware encryptors designed to target macOS devices, making this the first major ransomware operation to specifically target Apple computers.



What is LockBit ransomware?

First reported in September 2019 and dubbed the "abcd" virus, due to the file extension used when encrypting victim's files, the LockBit ransomware is designed to infiltrate victims' systems and encrypt important files.

- The virus is categorised as a "crypto virus" due to its requests for payment in cryptocurrency to decrypt the files on the victim's device.
- The ransomware is therefore typically deployed against victims who feel hindered enough by the disruption to pay heavy sums in exchange for access and can afford to do so.

LockBit ransomware gang

- The group behind this is known as the LockBit gang. It is considered the most prolific ransomware group ever.
- It operates on the ransomware-as-a-service (Raas) model and comes from a line of extortion cyberattacks.
- Target: Historically, ransomware has targeted Windows, Linux, and VMware ESXi servers. However, the LockBit is now working to create encryptors targeting Macs for the first time.
- It works as a self-spreading malware, not requiring additional instructions once it has successfully infiltrated a single device with access to an organisational intranet.
- Protection: While there are no fool-proof ways of protecting against ransomware attacks, organisations and individuals can take certain steps to increase resilience against such cyber threats.

DRDO, INDIAN NAVY CONDUCTS SUCCESSFUL TRIAL OF INTERCEPTOR MISSILE

CONTEXT

Defence Research and Development Organisation (DRDO) and Indian Navy successfully conducted a maiden flight trial of a **sea-based endo-atmospheric** interceptor missile off the coast of Odisha in the Bay of Bengal.

Key-highlights

 The purpose of the trial was to engage and neutralize a hostile ballistic missile threat thereby elevating India into the elite club of Nations having Naval Ballistic missile defence (BMD) capability.

- Endo-atmospheric interception means the missile fired by Indian testing agencies had destroyed the incoming enemy ballistic missile within the Earth's atmosphere.
- Exo-atmospheric interception, on the other hand, is for destroying incoming enemy ballistic missiles outside of the Earth's atmosphere at a higher altitude.
 - AWACS (airborne warning and control systems) and other hostile aircraft, as well as approaching long-range nuclear missiles, can be intercepted by RMDs
- Prior to this, DRDO successfully demonstrated landbased BMD system with the capability to neutralize ballistic missile threats, emerging from adversaries.

Endo-atmospheric missiles

- Endo-atmospheric interception means the missile fired by Indian testing agencies had destroyed the incoming enemy ballistic missile within the Earth's atmosphere.
 - ➤ The endo-atmospheric missiles are those that function within the earth's atmosphere and have a range of less than 100 kilometres.
- Exo-atmospheric interception, on the other hand, is for destroying incoming enemy ballistic missiles outside of the Earth's atmosphere at a higher altitude.
 - ➤ The exo-atmospheric missiles are capable of completing missions in the uppermost part of the earth's atmosphere.
- India's phase-II ballistic missile defence interceptor AD-1, which can engage a wide variety of targets, successfully completed its first flight test in November.
- Long-range ballistic missiles and planes can be intercepted by the AD-1 long-range interceptor missile in both "low exo-atmospheric" and "endoatmospheric" settings.

NASA LAUNCHES DEVICE TO MONITOR AIR POLLUTION FROM SPACE

CONTEXT:

A SpaceX Falcon 9 rocket successfully launched from Florida carrying a new NASA device that can track air pollution over North America.

About the technology:

 The Tropospheric Emissions Monitoring of Pollution (TEMPO) instrument will allow scientists



to monitor air pollutants and their emission sources from space more comprehensively than ever before, down to the neighbourhood level.

- NASA's TEMPO project manager, the instrument will measure pollution and air quality across greater
 North America on an hourly basis during the daytime.
- A unique feature of TEMPO, which is about the size
 of a washing machine and has been described
 as a chemistry laboratory in space, is that it will be
 hosted on an Intelsat communications satellite in
 geostationary orbit.

How it is different?

- TEMPO will be able to measure atmospheric pollution down to a spatial resolution of 4 square miles (10 square kilometers), or neighborhood level.
- Existing pollution-monitoring satellites are in low Earth orbit, which means they can only provide observations once a day at a fixed time.

Significance:

 By monitoring the effects of everything from rushhour traffic to pollution from forest fires and volcanoes, NASA data will help improve air quality across North America and protect our planet.

NEW DETAILED MAP OF DARK MATTER

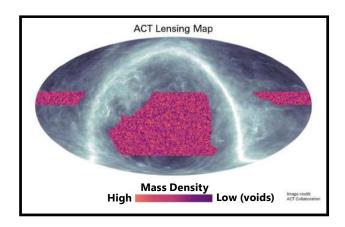
CONTEXT:

Researchers have created a detailed map of the 'hidden' dark matter that makes up 85 per cent of the universe and mentioned that it agrees with Einstein's theory of gravity.

What is dark matter?

- It is a hypothetical form of matter thought to account for approximately 85% of the matter in the universe.
- It forms the skeleton on which galaxies form, evolve, and merge.
- Dark matter is made up of particles that do not have a charge.
- So, these particles are "dark", namely because they do not emit light, which is an electromagnetic phenomenon, and "matter" because they possess mass like normal matter and interact through gravity.

Evidence for dark matter: It comes from calculations showing that many galaxies would fly apart, that they would not have formed, or that they would not move as they do if they did not contain a large amount of unseen matter.



Key findings:

- It proved that the Gravitational field generated by these massive objects bends and distorts light that passes through them.
- Unlike normal matter that constitutes all stars and galaxies; dark matter does not absorb, reflect or emit light.
- Dark matter only seems to interact with gravity, making it challenging to detect.
- Being invisible, researchers observe how dark matter interacts with the gravity of massive objects such as galaxy clusters and lumps of dark matter.
- The clumps of dark matter magnify the appearance of objects that lie behind.
- The researchers look for this characteristic magnification in the CMB image to map the dark matter.
- The new findings agree with the **standard model of cosmology** based on Einstein's theory of gravity.

Einstein's theory of gravity:

- According to the theory, he proved that a mass can prod space plenty. It can warp it, bend it, push it, or pull it.
- Gravity was just a natural outcome of a mass's existence in space.
- According to relativity, anything that can happen inside of a box picking up speed i.e., accelerating also happens in the presence of gravity.
- For example, a horizontal laser inside an elevator that's accelerating upward. As the light travels sideways, the elevator rises, causing the beam to strike a spot on the wall slightly lower than where it started.
- If the elevator accelerates quickly enough, the beam visibly bends toward the floor.
- Einstein showed the same thing happens to a beam inside a stationary elevator within a powerful gravitational field; the gravity bends the light.



 Similarly, he expected a beam of starlight should bend when passing through the sun's gravity.

Theory of Einstein vs. Newton:

- Isaac Newton described gravity as a force, an invisible rubber band that pulls together objects with mass. Newton's math did a good job at predicting how everything from projectiles to planets moved — but it kept gravity separate from acceleration.
- This link was established by Einstein in his theory.
- Einstein argued that gravity isn't a force at all.
- He described it as a curvature of time and space caused by mass and energy.

ISRO TESTED REUSABLE LAUNCH VEHICLE

CONTEXT:

ISRO successfully carried out the landing experiment of the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme at the Aeronautical Test Range in Chitradurga, Karnataka.

About Reusable Launch Vehicle-Technology Demonstration (RLV-TD):

- The configuration of RLV-TD is similar to that of an aircraft and combines the complexity of both launch vehicles and aircraft.
- The winged RLV-TD has been configured to act as a flying test bed to evaluate various technologies, namely, hypersonic flight, autonomous landing and powered cruise flight.
- o Components:
 - RLV-TD consists of a fuselage (body), a nose cap, double delta wings and twin vertical tails.
 - It also features symmetrically placed active control surfaces called Elevons and Rudder.
- This technology demonstrator was boosted to Mach no: 5 by a conventional solid booster (HS9) designed for low burn rate.

Objectives of RLV-TD:

- Hypersonic aero thermodynamic characterisation of wing body
- Evaluation of autonomous Navigation, Guidance and Control (NGC) schemes
- Integrated flight management
- Thermal Protection System Evaluation

Aeronautical Test Range (ATR) Facility:

- Aeronautical Test Range (ATR) is out-door testing and evaluation facility set up by DRDO exclusively for unmanned and manned aircraft.
- The ATR is under the command of the Aeronautical Development Establishment (ADE).
- ATR is located at Varavoo Kaval in Challakere Taluk of Chitradurga district
- ATR, Chitradurga has a Range Control Centre (RCC) with air traffic display system. It is equipped with a mission video distribution and display system. It has a Radar Centre which houses primary and secondary surveillance radars.

ERAVIKULAM NATIONAL PARK GETS A FERNARIUM

CONTEXT:

Recently, the Eravikulam National Park (ENP) has got a new attraction i.e. a Fernarium set up inside the park.

A **fernery or Fernarium** is a specialized garden for the **cultivation and display of ferns.**

About the move:

- About 52 varieties of ferns have already been planted in the new Fernarium.
- As per data, ENP has 104 varieties of ferns.
 - Government has planned to increase the number of ferns inside the park to cover all 104 varieties soon.
- This is the first time such a fern collection has been established in the hill station.

What are ferns?

- Ferns are part of the Epiphytic family.
- They grow naturally in a **soilless condition**.

About Eravikulam National Park (ENP):

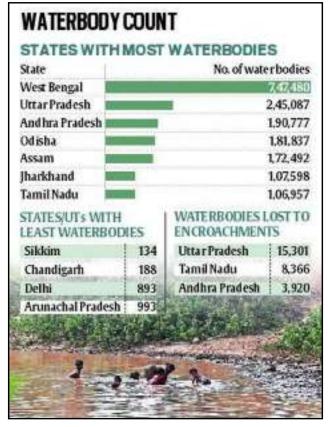
- This is also the **land of "Neelakurinji"**, the flower that blooms once in twelve years.
- The highest peak south of the Himalayas The Anamudi (2695 meters) is situated in this park.
- Topography: The major part of the park is covered with rolling grasslands, but several patches of shola forests are also found in the upper part of the valley.
- The plants obtain water and nutrients through leaching from trees. A large number of ferns are on the trees inside the park



- They reproduce via spores and have neither seeds nor flowers.
- Ferns are the **ecological indicator** of healthy forests.

FIRST-EVER WATERBODY CENSUS

CONTEXT



• The Ministry of Jal Shakti has released the report of the first census of waterbodies.

Key-highlights of the Census

- India has 24.24 lakh waterbodies like ponds, tanks and lakes, with West Bengal accounting for the most (7.47 lakh) and Sikkim the least (134).
- The report states, "24,24,540 waterbodies have been enumerated in the country, out of which 97.1% (23,55,055) are in rural areas and only 2.9% (69,485) in urban areas."
- As per the report,
 - ➤ 59.5 per cent (14,42,993) of waterbodies are ponds
 - ➤ tanks (15.7 per cent i.e. 3,81,805)
 - reservoirs (12.1 per cent i.e. 2,92,280)
 - water conservation schemes/percolation tanks/ check dams (9.3% i.e. 2,26,217)
 - lakes (0.9% i.e. 22,361)
 - ▶ others (2.5% i.e. 58,884)

What is water body?

- The census defines a waterbody as "all natural or man-made units bounded on all sides with some or no masonry work used for storing water for irrigation or other purposes (example industrial, pisciculture, domestic/drinking, recreation, religious, ground water recharge etc)".
- Waterbodies are usually of various types known by different names like tank, reservoirs, ponds and bundhies etc.
- A structure where water from ice-melt, streams, springs, rain or drainage of water from residential or other areas is accumulated or water is stored by diversion from a stream, nala or river will also be treated as waterbody.

1 CRORE OLIVE RIDLEY TURTLES HATCH ON ODISHA COAST

CONTEXT

At least 1 crore baby Olive Ridley turtles hatched on Odisha coast in last few days. It is expected that around 2 crore more baby turtles will hatch on Odisha coast before the culmination of this year's breeding season.

About Olive Ridley Turtles:

- They are the **smallest** and most abundant of all sea turtles found in the world.
- Major nesting sites in India: Rushikulya rookery coast (Odisha), Gahirmatha beach (Bhitarkanika National park) and mouth of the Debi River.
- Scientific name: Lepidochelys olivacea; also known as the Pacific ridley sea turtle.
- **Presence:** Found in **warm waters** of the Pacific, Atlantic and Indian oceans.

Conservation Status:

- ➤ IUCN Red List: Vulnerable
- ➤ **Schedule I** of Indian Wildlife (Protection) Act, 1972
- ➤ CITES Appendix I

o Features:

- ➤ Known for their unique mass nesting called Arribada, where thousands of females come together on the same beach to lay eggs.
- ➤ These are carnivores and feed mainly on jellyfish, shrimp
- ► The eggs hatch in 45 to 60 days, depending on the temperature of the sand and atmosphere during the incubation period.



PROTESTS IN HASDEO ARANYA

CONTEXT

For more than a year now, locals, largely from the Gond tribe, in Hariharpur, Ghatbarra, and Fattepur villages, have been holding a sit-in at the entrance to Hariharpur against mining.

About the Hasdeo Aranya forests region

- The Hasdeo Aranya forests are called the lungs of Chhattisgarh.
- The Hasdeo Aranya (Aranya means forest) lies in the catchment area of the Hasdeo river and is spread across 1,878 sq km in North-Central Chhattisgarh.
- The Hasdeo river is a tributary of the Mahanadi river which originates in Chhattisgarh and flows through Odisha into the Bay of Bengal.
- Home to vulnerable population: Hasdeo Arand region is home to a large and vulnerable population, most of them being Adivasis and other traditional forest dwellers. Over 90% of the residents are dependent on agriculture cultivation and forest produce for their livelihoods.

Coalfield

- Underneath the Hasdeo Aranya is a coalfield that comprises of 22 coal blocks. In 2010, the Centre categorised Hasdeo Aranya to be a "no-go" zone for mining. It ruled out mining in any of these blocks.
- However, only a year later, the Ministry of Environment, Forest and Climate Change (MoEF) granted clearance for the mining for one coal block.
- At present, of the 22 blocks, seven blocks have been allotted to different companies, says the resolution.
 - ➤ The implementation of **Forest Rights Act** has remained extremely poor till date leaving the population extremely vulnerable to abuse and exploitation.

IN A FIRST, FLY ASH PARTICLES FOUND IN ANTARCTIC ICE

CONTEXT

Spheroidal carbonaceous particles (SCP), a component of fly ash, have been identified for the first time in an Antarctic ice core, according to a new study.

What is fly ash?

 Fly ash is a residue generated in combustion and comprises the fine particles that rise with the flue gases.

- Fly ash is a heterogeneous material. The main chemical components present in fly ash are:
 - ➤ Silicon dioxide
 - Aluminum oxide
 - Ferric oxide

- ➤ Calcium oxide (occasionally)
- Source: Coal-fired power plants are the biggest sources of fly ash, which contains toxic chemicals such as arsenic, barium, cadmium, nickel and lead, among others.
- **Impact:** Without proper management, fly ash can pollute the waterways, ground water, drinking water, and air, posing a risk to humans, wildlife, and the environment.

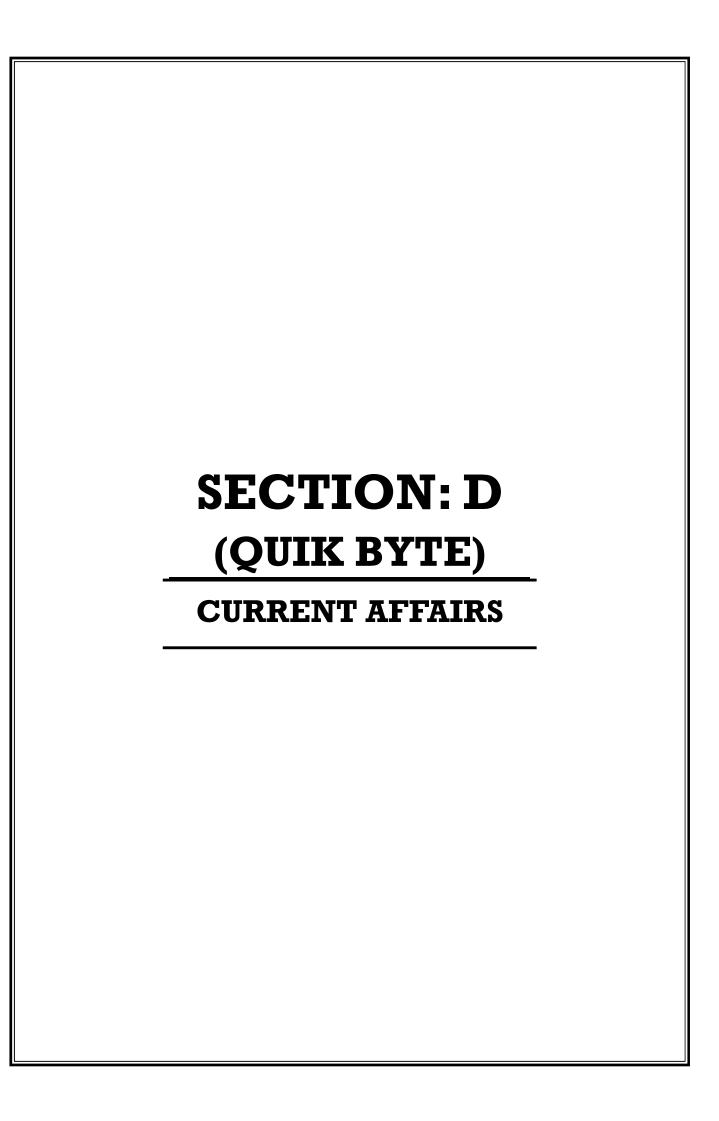
PITTAS FIND NEW HAVEN IN ODISHA DISTRICTS

CONTEXT

In a first-ever census of mangrove pitta birds carried out in two coastal districts of Odisha, 179 such birds were sighted.

About

- Scientific name: Pitta megharencha
- It is a species of passerine bird in the family Pittidae.
- Super-species: It is part of a superspecies where it is placed with the Indian pitta, the fairy pitta and the blue-winged pitta but has no recognized subspecies.
- **Distribution:** It is native to the eastern Indian Subcontinent and western Southeast Asia.
 - Its range extends from India to Malaysia and Indonesia.
 - It can be found in few pockets of eastern India, including Odisha's Bhitarkanika and West Bengal's Sundarbans.
- IUCN Status: These pitta species have fragmented distribution and considered 'Near Threatened' by IUCN.
- **Features:** A colourful bird, it has a black head with brown crown, white throat, greenish upper parts, buff underparts and reddish vent area.
- **Findings of first census:** The mangrove pitta is found in coastal mangrove forests of India, foraging on the ground and resting on the trees.
 - A total of 179 individual mangrove pitta birds were counted.
 - ➤ The highest concentration of the birds has been found in the mangroves near the **Mahipura river** mouth inside the **Bhitarkanika National Park**.



Avalanche hits Sikkim's Nathu La



World's highest Frozen Lake marathon



Pattanam ancient site



A major avalanche hit northeastern state Sikkim's Nathu La border region.

Nathu La pass:

- Nathu La, one of the most important Himalayan passes in the country which is situated on the border with China.
- It is a major tourist destination because of its scenic beauty.
- It is over 55 kilometres from Gangtok.
- Nathu La, situated on the international border 14,450 feet above sea level, is one of the open trading border posts between India and China.

In Ladakh, country's first ever Frozen Lake Marathon on Pangong Tso has been officially registered in the Guinness Book of World Records as the world's highest Frozen Lake marathon.

The Pangong Tso Lake:

- Pangong Lake, situated at a height of almost 4,350m, is the world's highest saltwater lake.
- Pangong Lake, one of the most famous lakes in Leh Ladakh, derives its name from the Tibetan word, "Pangong Tso", which means "high grassland lake".
- One-third of the nearly 160 kilometres-long lake lie in India, other two-thirds in China.

Pattanam, the iron-age and post-iron-age archaeological site was recently mentioned in news for emerging as an example of a space and time with no caste or institutionalised creed, but with a close connect to nature

About:

- Pattanam is the only multi-cultural archaeological site on the south-western coast of the Indian-subcontinent.
- The site is often referred to as the 'first emporium' of the Indian Ocean.
- It is an example of the Greco-Roman classical age coming into direct contact with an ancient South Indian civilisation.
- The site belongs to iron-age and post-iron-age which was also contains sophisticated weaponry.
- The Pattanam excavations have unearthed over 45 lakh sherds (ceramic fragments); these include approximately 1.4 lakh belonging to the littoral regions of the Mediterranean, the River Nile, the Red Sea, the western and eastern Indian Oceans, and the South China Sea.
 - Pattanam is an ancient town in Kerala located 30 kms north of Cochin in Ernakulam district.
 - It was an early historic urban settlement and an important maritime trading hub.



Ramanujacharya Jayanti



Prime Minister Narendra Modi remembered **Ramanujacharya** (1017-1037) on his birth anniversary.

- Born in 1017, Ramanujacharya also known as Ilaiya Perumal was born to Kanthimathi and Asuri Kesava Somayaji in Sriperumbadur, Chennai.
- He is known for his influential thinking towards devotional Hinduism.
- The great poet-saint Ramanuja was an eminent teacher and the founder of Vishishtadwaita.
- He is an expert in Vedic scriptures.

- A community of Vaishnavites has been following his path called Vedanta.
- Sri Ramanujacharya was also known for his social reforms.
- He had a vision towards Lord Vishnu and his consort Shri and instituted a daily worship ritual for them. He later moved to Kanchipuram.
- Shri Ramanujacharya wrote nine scriptures called Navaratnas and composed numerous commentaries on Vedic scriptures.

Adi Shankaracharya Jayanti



Adi Shankaracharya Jayanti has been recently observed on April 25.

- Also known as Adi Shankara, he is one of the most important figures in Hindu philosophy who played a major role in the revival of Hinduism.
- He attained the knowledge of all the Vedas at the age
 of 8
- Later on, he travelled across the country and established four peeths in four directions;
 - > Jagannath Puri temple in the East
 - ➤ **Shringeri Peeth** in Rameshwaram in the South
 - > Sharda Math in the West
 - > Jyotirmath or the Badrinath Dham in the North
- A perfect example of his teachings is "Brahma Satyam Jagan Mithya Jivo Brahmaiva Na Aparah" This translates to Brahman (the Absolute) is alone real; this world is unreal; and the Jiva or the individual soul is non-different from Brahman."
- He preached his Advaita philosophy. He preached that the supreme Brahman is Nirguna (without any Guna), Nirakara (formless), Nirvisesha (without any attribute), and Akarta (without any agent).
- **Upadesa Sahasri:** A Thousand Teachings, written by Adi Shankaracharya is a book of his teachings



Idu Mishmis



Announcement to declare **Dibang Wildlife Sanctuary** in Arunachal Pradesh as a tiger reserve has caused disquiet among the area's **Idu Mishmi people**, who feel that a **tiger reserve** would "hinder their access" to the forest.

Who are Idu Mishmis?

- The Idu Mishmi is a sub-tribe of the **larger Mishmi group** (the other two Mishmi groups are Digaru and Miju) in Arunachal Pradesh and neighbouring Tibet.
- Known for their weaving and craftsmanship skills, the Idu Mishmis primarily live in Mishmi Hills, bordering Tibet.
- The tribe is estimated to comprise around 12,000 people (as per census 2011), and their language (also called Idu Mishmi) is considered endangered by UNESCO.

Significance of Forests for Mishmi tribe:

- Traditionally animists, the tribe has strong ties with the region's rich flora and fauna.
- Tigers are especially important to the Idu Mishmis

 according to Idu mythology, they were born to the same mother, and thus, tigers are their "elder brothers".

Yangli festival



Tiwa tribesmen celebrated **Yangli festival** in **Karbi Anglong** district of Assam in every **three years**.

The Festival:

- Yangli is one of the important festivals of the Tiwas as it is related with agriculture which is the mainstay of their economy.
- In this festival, the Tiwas worship for a bountiful harvest and to protect their crops from pest and other natural calamities
- Sowing of paddy starts immediately after celebrating this festival.

About Tiwa Tribe:

- Tiwa is one of the **major tribe of Assam** that centres itself on a traditional form of agriculture.
- Also known as Lalung, the indigenous community is recognized as a Scheduled Tribe (ST) within the state of Assam.

Thira Dance Form



Recently, 'Nagaraja Thira' was celebrated at the Sree Muchilottu temple at Kuthiravattom in Kozhikode, Kerala.

About:

- Thirra or Theyyam thira is a ritual dance performed in "Kaavu" (grove) & temples of the Malabar region in Kerala.
- This art form is performed by the artists of malaya (the artist who recognised for performing the art form called as a "perumalayan") community.
- This art is performed during Utsavam (annual temple festival).



Key features:

- Clan deities (Bhagavathi, Shiva) are worshipped in these forms.
- Theyyam thira is main sub division of **Theyyam**.

Theyyam are Hindu Shamanic ritualistic dance forms practiced in northern Kerala and some parts of Karnataka.

- Thira brings the gods to life.
- Performers dress up with ceremonial facial paint and loud clothing and dance in front of the deity, the bhagavathi.
- The objective clearly is to bring a sense of awe to the proceedings.
- Each performer represents a **particular deity** and is sponsored by devotees as a prayer offering.
- These dancers are viewed as being possessed by the gods when they are in their act, with devotees queuing up to meet them to share woes and wishes.
- The performers belong to the "Peruvannan" caste of, who are given prime importance in Thira.
- Therefore in Kerala, both **upper caste Brahmins**, and lower caste tribals have an important place in worship.

Kamakhya Temple corridor

Assam is planning to construct a corridor at the Kamakhya Temple in Guwahati on the lines of the **Kashi-Vishwanath Temple Corridor in Varanasi.**

- Located on Nilachal Hill in Guwahati, Kamakhya Temple is considered most sacred and oldest of the 51 Shakti Peethas on earth.
- It is the centrepiece of widely practiced, powerful Tantrik Shaktism cult in India.
- The presiding deity in the temple is Goddess Kamakhya and her other forms as the Tripura Sundari, Kamala and Matangi.
- The mighty Brahmaputra river flows through the northern banks of the temple.
- The Kamakhya temple dates back to the first millennium during the time of Kamarupa. The Allahabad rock inscriptions of Samudragupta mention the existence of the temple.
- Ambubachi Mela: The annual festival of Ambubachi Mela celebrates the menstruation of the Goddess. The three-day mela is when the temple is closed off, as a period of rest for the Goddess.



MP's Gond Painting gets GI Tag

Madhya Pradesh's Gond painting gets **GI tag**, protecting and recognizing tribal artists and requiring committee approval for non-tribal artists to use the art.

About

 Gond paintings are a form of painting from folk and tribal art that is practiced by one of the largest tribes in India with whom it shares its name.





Bohag Bihu



- Gond comes from the **Dravidian expression**, Kond which means 'the green mountain'.
- Gond painting is a traditional art of Madhya Pradesh and belongs to the Gond tribe.
- Patangarh village of Dindori district famous for gond paintings.
 - ➤ It is such a village where there is an artist in every house.
 - ➤ Their work is not only famous in the state but also abroad as these paintings have a unique style and unique art which certainly mesmerizes for its unique theme
- Gond art has been ruling for centuries, traditionally adorning the walls of each artist's home in **Patangarh.**

Bohag Bihu, a 7-day festival will be celebrated from **April 14**, **2023 to April 20**, **2023 in Assam**.

About the event:

- The seven days of Bohag Bihu are celebrated differently.
- The **first day or Garu Bihu** is dedicated to cattle and on this day people take their cattle to river, bathe them, adorn them with garlands, pain their horns and hoofs and pray for their well-being.
- The second day of the festival is called Manuh Bihu, wherein people wake up early in the morning, apply turmeric paste on their bodies and take bath.
- Delicious traditional dishes like **Til Laru**, **Pitha**, **Murir Laru**, **Ghila Pitha**, **Poka Mithoi** among others are made.
- People meet and greet each other and exchange gifts.
- The third day of the festival is called Guxai Bihu, dedicated to worshipping household deities.
- The fourth day is called **Taator Bihu** or Bihu for the handlooms.
- The fifth day is **called Nangolor Bihu**, dedicated to farm equipment, while the sixth day is called GharosiaJibar Bihu, which is celebrated for domestic animals.
- The final day of the festival is celebrated as **Chera Bihu** which is celebrated with much enthusiasm.

Bihu festival:

- It is one of the biggest festivals of Assam and marks the first day of Hindu unipolar calendar, and the beginning of Assamese New Year.
- Bihu is celebrated thrice in a year.
- Bohag Bihu marks the beginning of the seeding period and falls in the second week of April every year.
- The other two **Kati Bihu and Magh Bihu** are celebrated in October and January respectively.
- Rong means joy in Assamese and Rongali Bihu is the time for joy and happiness for Assamese community as they celebrate each day of the festival with great fervour and enthusiasm.



Uttaramerur inscription



Prime Minister Narendra Modi recently referred to the **Uttaramerur inscription** in Kanchipuram, Tamil Nadu, while discussing India's democratic history.

About

- The famous inscription from Parantaka I's reign is found on the walls of the Vaikunda Perumal Temple.
- The inscription gives details of the functioning of the local **sabha**, i.e. the village assembly.
- A sabha was an assembly exclusively of brahmans and had specialised committees tasked with different things.
- The Uttaramerur inscription details how members were selected, the required qualifications, their roles and responsibilities, and even the circumstances in which they could be removed.

Uttaramerur lies in present-day Kanchipuram district, approximately 90 km southeast of Chennai. It is known for its historic temples built during **Pallava and Chola** rule.

World Heritage Day 2023



April 18th marks the observance of **World Heritage Day**, also referred to as **International Day for Monuments and Sites**.

About

- The day was established by the International Council on Monuments and Sites (ICOMOS) and was approved by the UNESCO General Conference in 1983.
- The date, April 18th, was chosen to commemorate the day when the Convention Concerning the Protection of World Cultural and Natural Heritage was adopted by UNESCO in 1982.
- Theme 2023: "Heritage Changes"
- Heritage sites refer to locations or landmarks that possess significant cultural, historical, scientific, or artistic value to a particular community, society, or nation.
- As of today, there are 40 World Heritage Sites in India that have been declared by UNESCO.

Exercise Orion



Exercise Orion, a **bilateral military drill** between the **Indian Air Force and the French Air and Space Force (FASF)**started at the Mont-de-Marsan airbase in France.

About

- Orion is reportedly the largest ever multinational exercise being carried out by the French defence forces which have involved their **Army**, **Navy and Air Force** along with their allies the US and the UK.
- The IAF Contingent comprising four Rafale, two C-17, two II-78 aircraft, and 165 air warriors participated in the exercise.
- This would be the first overseas exercise for the IAF's Rafale aircraft.



Exercise INIOCHOS-23



Exercise INIOCHOS-23 is a multi-national air exercise hosted by the Hellenic Air Force (Greece).

About 2023 Exercise

- The exercise will be conducted at the Andravida Air Base in Greece from April 24, 2023, until May 4, 2023.
- The aim of the exercise is to enhance international cooperation, synergy and interoperability among the participating Air Forces.

India's participation

- The Indian Air Force will participate with four Su-30 MKI and two C-17 aircraft.
 - ➤ The Sukhoi Su-30MKI is a twinjet multirole air superiority fighter developed by Russia's Sukhoi and built under license by India's Hindustan Aeronautics.
 - ► C-17 Globemaster III is a strategic transport aircraft, able to airlift cargo close to a battle area.
- Other nations are also expected to take part. It will include
 - ➤ Cyprus with an AW139 Helicopter
 - France with Rafales
 - ➤ Italy with Tornados
 - ➤ Jordan with F-16s
 - Saudi Arabia with F-15s
 - Slovenia with PC-9s
 - ➤ Spain with EF-18s
 - ➤ The USA with F-16s and MQ-9s

'Cope India' Exercise



The Air Forces of India and the U.S. are set to conduct the Cope India exercise from at the Kalaikunda airbase in West Bengal, with Japan as an observer.

About Exercise Cope India:

- It is a bilateral joint exercise between Indian Air Force (IAF) and the United States Air Force (USAF).
- Cope India **began in 2004** as a fighter training exercise.
- The exercise has evolved to incorporate subject matter expert exchanges, air mobility training, airdrop training and large-force exercises, in addition to fighter-training exercises.

Turkey approves Finland NATO membership bid



Finland became the **31st member of NATO** after Turkey's parliament voted to approve its application.

Background:

- Turkey had delayed Finland's bid to join the West's defensive alliance for months - complaining the Nordic nation was supporting "terrorists".
- Any NATO expansion needs the support of all its members.

About:

 Finland will now be formally admitted into NATO at its next summit, taking place in July in Lithuania.

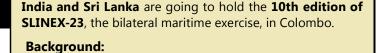


Significance:

maritime exercise.

 Finland, a country with a 1,340km (832 mile) border with Russia and one of the most powerful arsenals of artillery pieces in Western Europe, is ditching its neutrality and joining the alliance in response to Russia's full-scale invasion of Ukraine.

10th edition of SLINEX-23 in Colombo





• The exercise aims to enhance interoperability, improve mutual understanding and exchange best practices and procedures in multi-faceted Maritime operations between both Navies.

India-Sri Lanka maritime exercise SLINEX is an annual

 Interaction between the navies of the two countries has also grown significantly in recent years, in consonance with India's policy of 'Neighbourhood First' and the vision of 'Security and Growth for all in the Region' (SAGAR)'.

Caribbean Community and Common Market (CARICOM)

External Affairs Minister (EAM) S Jaishankar co-chaired the 4th India-CARICOM Ministerial Meeting with his Jamaican counterpart Kamina J Smith at the CARICOM Secretariat in Guyana.

- The Caribbean Community and Common Market (CARICOM) is a regional group of nations that encourage common policy and economic goals.
- The CARICOM was formed in 1973 and consists of 20 nations, including 15 full-time members and five associate members.
- The CARICOM was formed after the founders had enacted the **Treaty of Chaguaramas.**
- It was established to replace the Caribbean Free Trade Area, which had failed in its mission to develop policies in the region pertaining to labor and capital.
- The treaty was revised in 2002 to allow for the eventual establishment of a single market and a single economy.

The single market and economy is known as the Caribbean Single Market and Economy (CSME), which is meant to integrate all of the member states of CARICOM.

Malaria to become a notifiable disease



Malaria is all set to become a **notifiable disease** across India, with Bihar, Andaman and Nicobar Islands and Meghalaya too in the process of putting this vector-borne disease in the category.

- Currently malaria is a notifiable disease in 33 States and Union Territories in India.
- Malaria is a potentially life-threatening disease caused by parasites (plasmodium vivax, plasmodium falciparum, plasmodium malariae and plasmodium ovale) that are transmitted through the bite of infected female Anopheles mosquitoes.



 This is part of India's vision to be malaria-free by 2027 and to eliminate the disease by 2030.

"India was the only high-burden, high-impact country in the South- East Asia region to report a decline in malaria cases in 2020 as compared to 2019. India witnessed 85.1% decline in malaria cases and 83.36% decline in deaths during 2015-2022."

India's first 3D-printed post office



India's **first 3D-printed post office** is coming up in Bengaluru.

About:

- The project is being implemented by Larsen & Toubro, which has experience in constructing 3D-printed buildings.
- The construction cost of this post office is about 30 to 40
 per cent lower than constructing a conventional building
 and is expected to be completed in 30 days.
- The 3D-printed post office will be about 1100 sq. ft. and the cost of construction is Rs.23 lakh.

Significance:

• This will enhance the technology inclusion and a public welfare policy.

Election Commission grants national party status to AAP

The Arvind Kejriwal-led **Aam Aadmi Party** has got the status of **'National Party'** as announced by the Election Commission of India (ECI).

About:

- In the event, the removal of NCP, CPI, and TMC was also announced.
- There are now only six national parties in the country
 BJP, Congress, National People's Party, CPM, Bahujan
 Samaj Party and the latest addition AAP.

What is a National Party?

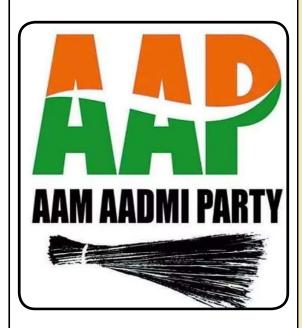
 A party that secures at least six per cent of the total votes in Lok Sabha elections or Assembly elections in four States and wins at least four seats in the Lok Sabha is recognised as a national party.

A Recognised party:

- A recognised political party enjoys privileges like;
 - ➤ a reserved party symbol, free broadcast time on staterun television and radio, consultation in the setting of election dates, and giving input in setting electoral rules and regulations.

Criteria for National party status:

 According to Election Commission rules, a party gets national status if it is recognized as a state party in four states. For recognition as a state party, it has to secure at least six percent of the valid votes polled and two seats each in Assembly or Lok Sabha polls.



India's First Water Metro



India's first water metro has been unveiled in Kochi, Kerala.

- It connects 10 islands around Kochi through batteryoperated electric hybrid boats for seamless connectivity with the city.
- The train will cover 11 districts namely Thiruvananthapuram, Kollam, Kottayam, Ernakulam, Thrissur, Palakkad, Pathanamthitta, Malappuram, Kozhikode, Kannur and Kasargod.

Hakki Pikki in Sudan Conflict



More than 181 members of the Hakki Pikki tribal community from Karnataka are stuck in violence-hit Sudan.

Who are the Hakki Pikki?

- The Hakki Pikki is a tribe that lives in several states in west and south India, especially near forest areas.
- Hakki Pikkis (Hakki in Kannada means 'bird' and Pikki means 'catchers') are a semi-nomadic tribe, traditionally of bird catchers and hunters.
- In different regions, they are known by different names, such as Mel-Shikari in northern Karnataka and Maharashtra.
- They are divided into four clans, called Gujaratia, Panwar, Kaliwala and Mewaras.

Sangathan Se Samriddhi campaign



The government launched the 'Sangathan Se Samriddhi' campaign.

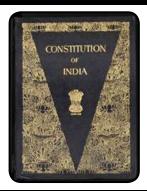
About

• The campaigns aim to empower marginalized rural households by bringing all eligible rural women into the fold of **Self Help Groups (SHGs)**.

What are SHGs?

- Self-help groups are **informal groups** of people who come together to address their common problems.
- India has around 12 million SHGs, 88 per cent of which have only women members, according to the **Economic Survey 2022-23.**

Ninth Schedule of the Indian Constitution



Chhattisgarh chief minister has written a letter to Prime Minister Narendra Modi, urging him to include the state's amended provisions to provide 76% reservation for SC, ST OBC and RWS in the ninth schedule of the Constitution for "based on the population" of the state.

About

- The Ninth Schedule includes a list of **Central and State laws** which **cannot be challenged in courts.**
 - While the Ninth Schedule provides the law with a "safe harbour" from judicial review, the protection is not blanket.

- The Schedule became a part of the **Constitution in 1951**, when the document was amended for the first time.
- It was created by the new **Article 31B**, which along with **31A** was brought in by the government to protect laws related to agrarian reform and for abolishing the Zamindari system.
 - ➤ A. 31A extends protection to 'classes' of laws
 - ► A. 31B shields specific laws or enactments.

Dabba trading

The **National Stock Exchange (NSE)** issued a string of notices naming entities involved in 'dabba trading'.

About:

- Dabba trading is an illegal form of trading in shares that operates outside the purview of recognized stock exchanges.
- It has been banned by the **Securities and Exchange Board of India (SEBI).**
- It involves a parallel stock market where traders can speculate on the direction of share prices and stock indices without a trading account, demat account, or providing KYC details.
- According to the Securities Contracts (Regulation) Act, 1956 (SCRA), trading in shares of companies between persons other than members of a recognized stock exchange is illegal.
- SEBI has prohibited activity under regulations 3 and 4 of SEBI Prohibition of Fraudulent and Unfair Trade Practices.
 Dabba trading is also punishable under the Indian Penal Code and the Information Technology Act of 2000.
- Despite the risk involved, dabba trading can be profitable since it is not governed by any rules and regulations.
- Transactions are settled in cash and orders are taken personally by the operators of the dabba system.
- Since it is illegal, profits earned through dabba trading are not subject to income tax.

Utsa Patnaik wins Malcolm Adiseshiah Award 2023 Utsa Patnaik, a renowned economist of national and international repute, has been selected for the **Malcolm Adiseshiah Award 2023.**



About

- The award is given every year by the Malcolm & Elizabeth Adiseshiah Trust.
- The prestigious national award honours outstanding social scientists selected by a national-level jury specially constituted for this purpose, from the nominations received.

Utsa Patnaik

- Utsa Patnaik is an Indian Marxian economist.
- She taught at the Centre for Economic Studies and Planning in the School of Social Sciences at Jawaharlal Nehru University in New Delhi, from 1973 until her retirement in 2010.



India set to grow by 5.9% this fiscal: IMF



The **International Monetary Fund (IMF**) has projected that India's economy will grow by 5.9% for the current fiscal year April 2023 - March 2024.

About the forecast:

- The IMF estimated a 6.3% economic growth rate for India for the next fiscal year, a downward revision of 0.5 percentage points from the last forecast.
- The IMF maintained an optimistic outlook on India, explaining the down revision as an adjustment for historical numbers that were better than expected.
- **Global output growth** is projected by the IMF to **slow to 2.8%** in 2023 (calendar year), picking up to 3% in 2024.

Reasons for slow recovery:

- The global economy's gradual recovery from both the pandemic and Russia's invasion of Ukraine remains on track".
- Adding with the China's reopened economy was strongly rebounding and supply chain disruptions were unwinding, and negative impacts of the war on food and energy prices were receding.

6 GHz spectrum

The **telcos** and **broadband providers** are attracting towards the new 6GHz Spectrum against fixed line **Internet Service Providers** (**ISPs**), as they are keen to lay claim on a band of spectrum that could enable the next generation of 5G, or WiFi.

Note: 1 Megahertz (MHz) is equal to one million hertz 10⁶ Hz)

About:

- The Spectrum ranges from 5,925 to 7,125 megahertz (MHz)
- Newer WiFi routers in India largely use spectrum on two bands, sometimes simultaneously: 2.4GHz and 5GHz.
- As frequency increases, **the range of the signal drops**, but the bandwidth goes up significantly.
- The **WiFi 6E standard**, launched in 2020, uses 6 GHz, enabling speeds upwards of 9.6 gigabits per second (Gbps).
- No home internet provider currently offers those speeds in India, but 6GHz spectrum supports multiple devices on a wireless network more harmoniously than in the 5GHz band, even on slower connections, enticing telecom providers and ISPs.
- Meta Platforms (which owns Facebook and WhatsApp), Microsoft Corporation, and Google in 2020 urged the Telecom Regulatory Authority of India (TRAI) that it is critical that regulators enable all parts of the broadband ecosystem to advance in capabilities, and even more critical in the case of license-exempt technologies given their important role in supporting broadband requirements.



World Chagas Disease Day



Every year **on April 14th, World Chagas Disease Day** is observed to raise awareness about a life-**threatening illness** that can cause severe heart and digestive problems.

About the Disease:

- The disease, also known as American trypanosomiasis, silent disease, or silenced disease, is caused by the Trypanosoma cruzi parasite, which is transmitted to humans by the triatomine bug, commonly known as the kissing bug.
- The disease primarily affects individuals living in rural areas with poor hygiene conditions, particularly those who are impoverished. It is more common in regions like Central America, Mexico, and South America.

World Chagas Disease Day 2023: Theme

 The theme for 2023 is Time to integrate Chagas disease into primary health care, so that universal care and surveillance start at the most decentralized level of the health system.

Joint Military Exercise 'Ex KAVACH'

Andaman and Nicobar Command (ANC) conducted a large-scale Joint Military Exercise 'Ex KAVACH' involving the assets of the Army, Navy, Air Force and Coast Guard.

About:

- The exercise was began on February 23, 2023, concluded on April 07, 2023.
- The exercise was aimed at fine-tuning joint warfare capabilities & Standard Operating Procedures (SOPs) and enhancing interoperability and operational synergy between the forces.
- Elements of the 'Shatrujeet Brigade' of the Army, Armed Forces Special Operations Division (AFSOD), Special Forces of the Navy and Amphibious troops of the ANC, participated in the multi-domain exercise involving amphibious landing, air-landed operations, heliborne operations and rapid insertion of the Special Forces from mainland on a remote Island of the Andaman and Nicobar Islands.

Key features of the event:

- Exercise KAVACH' demonstrated the capabilities and preparedness of the Armed Forces to safeguard India's maritime interests and ensure the security of the Andaman and Nicobar Islands.
- The exercise effectively showcased the professionalism and synergy amongst the different components of ANC while conducting successful joint operations in a complex and dynamic environment



Pralay ballistic missiles



India plans to acquire 250 more **Pralay ballistic missiles** to further bolster its own **'rocket force'**.

About

- Pralay Ballistic Missile is an indigenous short-range ballistic surface-to-surface (SRBM) missile.
- This conventional weapon has a range of 150 to 500 kilometres.
- It is propelled by a solid-propellant rocket motor and other novel technologies.
- The **Pralay missile** project was sanctioned in 2015 and is a derivative of the Prahaar missile programme, which was first tested in 2011.
- The missile guidance system has integrated avionics and cutting-edge navigation. The Indian Air Force would be the first to receive the missile, and then the Indian Army.

Marburg virus outbreak



Equatorial Guinea and Tanzania has reported outbreaks of **Marburg virus disease (MVD)**, the first-ever outbreak of the disease in these countries.

Background:

- The Marburg virus was first identified in 1967 during outbreaks in Germany and Serbia and is known to cause severe and fatal viral haemorrhagic fevers in humans.
- The virus is closely related to another deadly virus, Ebola and is rated as a high-risk pathogen by the WHO.

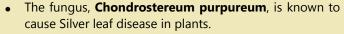
About the Virus:

- Marburg virus is transmitted to humans through contact with infected animals such as fruit bats, and further human-to-human transmission.
- It can occur through direct contact with the bodily fluids of an infected patient or contaminated surfaces resulting in outbreaks.

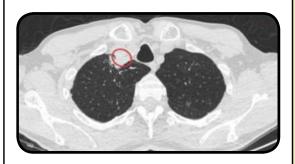
India registers first case of plant fungus

The first case of a plant fungus infecting human beings has been reported from Kolkata.





- However, a 61-year-old man is infected by the fungal species *Chondrostereum purpureu*.
- Of the hundreds of millions of fungal species, only a few cause infections in humans.
- Plant fungus is adapting to invade human cells by evading the process of 'phagocytosis'.
- 'Phagocytosis or 'cell eating', happens when a cell uses its plasma membrane to recognise and ingest particles larger than 0.5 μm to clean and defend itself.



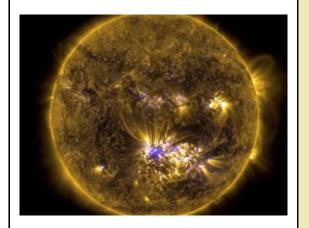
NASA's Artemis II mission to Moon



Amogha-III Missile System



NASA's new computer model 'DAGGER'



NASA announced the **four astronauts** who will make up the **crew of Artemis II**, which is scheduled to launch in late 2024.

About the mission:

- The Artemis II mission will send these four astronauts on a 10-day mission that culminates in a flyby of the Moon.
- The flyby will take the **Orion capsule** in one pass around the far side of the Moon.
- This mission will test the technology and equipment that's necessary for future lunar landings and is a significant step on NASA's planned journey back to the surface of the Moon.

Bharat Dynamics (BDL) has successfully conducted a field firing test of its latest 3rd generation man-portable Anti-Tank Guided Missile (ATGM), Amogha-III.

About:

- Developed by BDL's Research and Development Division, the missile features a dual-mode IIR Seeker with a range of 200 to 2500 meters.
- Amogha-III showcases a tandem warhead, consisting of two separate explosive charges that are detonated in sequence.
- The use of a tandem warhead significantly enhances the missile's ability to defeat heavily armoured targets.
- Moreover, the missile is capable of top and direct attack modes, adding to its versatile nature.
- The missile can be fired in lock-on-before launch (LOBL) mode and its anti-armour tandem warhead can penetrate in excess of 650 mm beyond Explosive Reactive Armour (ERA).

NASA's new **Deep Learning Geomagnetic Perturbation** (**DAGGER**) **model** aims to forecast **geomagnetic disturbances** and provide a warning for solar storms.

About:

- NASA said that a new computer model that combines artificial intelligence and agency satellite data could help prepare for dangerous space weather.
- The model, called DAGGER (Deep Learning Geomagnetic Perturbation), uses the technical tool to analyze spacecraft measurements of the solar wind and forecast where an impending solar storm will strike on Earth – with 30 minutes of advance warning.

What are Solar storms?

- Solar storms are a large explosion in the Sun's atmosphere caused by tangling, crossing or reorganizing of magnetic field lines.
- Coronal mass ejection (CME) is a massive burst of plasma from the Sun, sometimes associated with solar flares.



Government launches SUPREME



The government launched an initiative to provide financial support for the upgradation and maintenance of analytical instrumentation facilities (AIFs) created under the ministry's support.

About

- The Support for Up-gradation Preventive Repair and Maintenance of Equipment (SUPREME), a firstof-its-kind programme by the government, extends financial support for repair, upgradation, maintenance, retrofitting, or acquiring additional attachments to increase functional capabilities of existing analytical instrumentation facilities.
- Such facilities at institutions recognised by the University Grants Commission (UGC) are eligible to apply for grants under SUPREME.

UAE's Hope probe uncovers secrets of Deimos

The **UAE's Hope probe** has revealed striking details of **Mars's tiny moon Deimos**, helping to indicate that the celestial body may not actually be a captured asteroid as previously thought.

Key-highlights of the finding

- The spacecraft flew as close as 100km to the moon's surface, capturing data of its composition that challenges a long-standing theory that Mars' moons are captured asteroids — space rocks trapped in a planet's orbit.
- Findings point to a planetary origin, meaning that the rock may have come from Mars itself.

What is Hope?

- The Hope Mars Mission, also called the Emirates Mars Mission, is the first uncrewed, interplanetary satellite spearheaded by the United Arab Emirates (UAE).
- In fact, the Hope satellite is the first planetary science mission led by an Arab-Islamic country.
- The Hope spacecraft was launched to space in July 2020 and entered the orbit of Mars in February 2021.
- Since then, it has been sending back crucial data on the planet's upper atmospheric conditions and space weather.

Mark 54 anti-submarine torpedoes



India is going to sign a weapons deal with the United States soon to buy American weapons, including the **Mark 54 anti-submarine torpedoes.**

- The MK 54 lightweight torpedo is the primary antisubmarine warfare weapon used by the U.S. Navy surface ships, fixed-wing aircraft and helicopters.
- Designed to operate in shallow waters and in the presence of countermeasures, it can track, classify and attack underwater targets.



Scientists identifies Electromagnetic Ion Cyclotron (EMIC) waves



Scientists have identified **Electromagnetic Ion Cyclotron (EMIC) waves**, a form of **plasma** waves in the Indian Antarctic station, Maitri, and studied its characteristics.

About

- The electromagnetic ion cyclotron (EMIC) waves are generally detected in the Earth's magnetosphere and have a small wave normal angle and left-hand polarization in the source region.
- **Formation:** The waves are formed when low-energy ions in the magnetosphere interact with electromagnetic fields, causing the ions to spiral along the magnetic field lines
- EMIC waves accelerate electrons to very high energies and can cause the particles in the radiation belts to scatter, accelerate, and precipitate into the Earth's atmosphere, which can lead to changes in the distribution and intensity of the radiation belts.

More than 99% of the matter in the visible universe consists of plasma—the fourth state of matter.

Bengal has added four new biodiversity heritage sites (BHS)

in West Bengal, taking the total tally to eight.

West Bengal adds four new biodiversity heritage sites



The new sites

- Char Balidanga comprises two islands on the Hooghly with tropical riverine vegetation of tall grasses and swampy flat lands that are periodically inundated with tidal ebbs.
- State Horticulture Research and Development Station campus in Development, in Nadia
- Namthing Pokhari is a Himalayan natural wetland
- The Amkhoi Fossil Park has unique geological and paleo-botanical features. It is the first wood fossil park in West Bengal.
 - As per Section 37 of the Biological Diversity Act, the State Governments are empowered to notify areas of biodiversity importance as Biodiversity Heritage Sites.

SIDBI Launches 'Mission 50K-EV4ECO'



Small Industries Development Bank of India (SIDBI) has announced the launch of a pilot scheme called 'Mission 50K-EV4ECO' aimed at strengthening the electric vehicle (EV) ecosystem.

About

- 'Mission 50K-EV4ECO' aims to promote EV adoption and strengthen associated infrastructure in the country.
- The pilot scheme, which is a precursor to the EVOLVE scheme by SIDBI-World Bank.



Indian Policies on EVs

- In 2010, the Ministry of New and Renewable Energy (MNRE), announced a financial incentive for manufacturers for EVs sold in India.
- In 2013, India unveiled the National Electric Mobility Mission Plan (NEMMP) 2020.
- In the Union Budget 2015-16, the 'Faster Adoption and Manufacturing of EVs' (FAME) scheme was announced, with an initial outlay of Rs. 75 crore.
- In 2017, the Transport Ministryhighlighted its intent to move to 100 percent electric cars by 2030.
- In February 2019, the Union Cabinet cleared an 10,000-crore programmeunder the FAME-II scheme.

New species of bush cricket

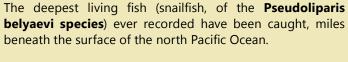


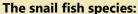
The three new species of Bush crickets, were found in two study locations namely in Shillong, Meghalaya, and in the forested area around of Sonipat, Haryana.

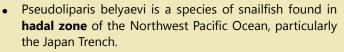
About the species:

- The two new species found in Haryana and were named Hexacentrus tiddae — borrowing heavily from the local dialect where bush crickets are referred to as tiddaes and Hexacentrus ashoka, respectively.
- The third species found in Meghalaya was named Hexacentrus khasiensis — after the Khasi hills where it was discovered.
- Hexacentrus is a genus of predatory katydids.
- In India, the genus Hexacentrus is represented by seven species of which six are morphologically characterized while one is only acoustically characterized.

Deepest-ever fish caught in Japan







- This species reaches a length of 10.8 cm.
- The species is a marine and bathymersal fish that lives at depths exceeding 6,000m deep.
- It is also harmless to humans.

Zones inside Ocean:

The ocean water column is made up of five zones: the sunlight zone (epipelagic), the twilight zone (mesopelagic), the midnight zone (bathypelagic), the abyssal zone (abyssopelagic) and the hadal zone (trenches).



Cumbum grapes gets GI Tag

Cumbum grapes from Tamil Nadu received the **Geographical Indication (GI) label.**

About

- Cumbum grapes is also known as the Cumbum Panneer Thratchai.
- The Cumbum valley, located in Tamil Nadu's Western Ghats, is regarded as the "Grapes City of South India" and grows the Panneer Thratchai.
- This variety, sometimes known as Muscat Hamburg, accounts for over 85% of the grape-growing areas in Tamil Nadu.
- Theni district is one of Panneer Thratchai's highest grape-producing locations.
- However, the 'Panneer' type is most closely linked with Cumbum Valley, where the agricultural area spans over 2,000 acres across ten villages.
- The **Cumbum region's agro-climate and soil conditions** are ideal for the cultivation of the Muscat varietal.
- This grape quality is suitable for making wine, spirits, jams, canned grape juice, and raisins.
- These grapes are high in vitamins, tartaric acid, and antioxidants, and they help to lower the risk of some chronic diseases. Apart from their purplish-brown color, they are also noted for their exceptional taste.

These grapes were introduced in **Tamil Nadu in 1832 by** a **French priest**.

'India's largest' aquarium, aviary to come up at Telangana's Eco-Park

Hyderabad is all set to have the country's largest aquarium, which will be housed at Echo Hill Park in Kothwalguda.

About

• The Kothwalguda Eco-Park includes, in addition to gazebos and pergolas, a six-acre aviary, a 2.5-kilometre boardwalk, an aquarium, a butterfly garden, a sensory park, an open-air theatre, flora, and landscaping.

Nagri Dubraj receives GI tag

Chhattisgarh's special variety aromatic rice **Nagri Dubraj** has received the **Geographical Indications (GI) tag.**



- Nagari Dubraj rice, popularly known as Basmati of Chhattisgarh, is the traditional, fragrant rice variety of the state, which has a lot of fame and demand outside Chhattisgarh as well.
- Shringi Rishi Ashram area of Sihawa is considered to be the place of origin of the Nagri Dubraj.
- GI tag is an intellectual property right in which the quality and importance of any product is determined by the geographical environment of that particular place.
- Thus, the place of origin of that product is recognized.



