



SURESH'

360°

January 2023

போட்டித்தேர்விற்கான மாத இதழ்

Issue : 7

Focus

- Sukhrayan
- Decoding Joshimath
- Article 176
- Project Nilgiri Tahr
- Aspirational Block Programme



CONSTITUTION
OF
INDIA





TNPSC தேர்வுகளில் வெற்றி பெறுவதற்கான

முக்கிய ஆலோசனைகள்...

1. தேர்வுகளில் வெற்றி பெறுவதற்காக சாத்தியமாகக் கூடிய கால அட்டவணையை முதலில் தயாரித்து, அதை உறுதியாகப் பின்பற்ற வேண்டும்.
2. TNPSC தேர்வுக்கான பாடத்திட்டம் என்ன என்பதை முழுமையாக அறிந்துகொண்டு, அதில் எந்தப் பகுதியையும் விடாமல் படிக்க வேண்டும்.
3. முதன்மை ஆதாரங்கள் அல்லது நூல்களில் இருந்து **தரமான குறிப்புகளைத் தயாரித்து** வைத்துக்கொள்ள வேண்டும்.
4. TNPSC தேர்வு எழுதுவதற்கான அறிவுத் திறனை அடுத்த நிலைக்கு மேம்படுத்த எஸ்.சி.இ.ஆர்.டி (SCERT) எனப்படும் மாநிலக் கல்வியல் ஆராய்ச்சி மற்றும் பயிற்சி நிறுவனக்குழு தயாரிக்கும் பாட நூல்களில் இருந்து அவற்றின் அடிப்படைத் தத்துவத்தை புரிந்துகொள்ள வேண்டியது மிகவும் முக்கியமாகும்.
5. பாடங்களில் இருந்து எவ்வாறு வினாக்கள் எழுப்பப்படும் என்பதை அறிந்து கொள்வதற்காக அவற்றின் தத்துவங்கள், உண்மைகள் போன்றவற்றை தேர்வுக்கானக் கோணத்தில் இருந்து புரிந்துகொள்ள வேண்டும்.
6. முந்தைய ஆண்டின் வினாக்களை நன்றாகப் படித்து, அவற்றை ஆய்வு செய்ய வேண்டும்.
7. அத்தியாயங்கள் வாரியாகவும், பாடங்கள் வாரியாகவும் பயிற்சித் தேர்வுகளை எழுதிப் பார்க்க வேண்டும். அவ்வாறு செய்வதன் மூலம் உண்மையான தேர்வு எவ்வாறு இருக்கும் என்பது குறித்த அனுபவம் நமக்குக் கிடைப்பதுடன், **தவறுகளைத் திருத்திக் கொண்டு** மேம்படுத்திக் கொள்ளவும் முடியும்.
8. கடந்த ஆண்டுக்கான பொது அறிவு வினாத்தாள்களுக்கு விடை அளிக்க முயற்சி செய்ய வேண்டும். **உங்களின் பலவீனம் என்ன என்பதை தெரிந்து கொள்ள** அது உதவும். நீங்கள் எந்த அளவிற்குத் தேர்வுக்கு தயாராக இருக்கிறீர்கள்? உங்களின் அறிவுத் திறன், விடை அளிக்கும் வேகம், துல்லியம் ஆகியவற்றை அளவிடுவதற்கும் இது உதவும்.
9. பாடங்களை ஒருமுறையாவது திருப்புதல் **செய்து பார்ப்பது கட்டாயம் ஆகும்.**
10. அனைத்துப் பாடங்களையும் ஒருமுறை திருப்புதல் செய்து பார்ப்பதும், தயார் செய்து வைக்கப்பட்டுள்ள குறிப்புகளை மூன்றாவது முறையில் படித்துப் பார்ப்பதும் சிறப்பாகும்.
11. தேர்வுக்கு முந்தைய **ஒரு மாதத்தில் புதிய பாடங்களைப் படித்து ஆராய ஒருபோதும் முயற்சி செய்ய வேண்டாம்.** அந்த ஒரு மாதமும் ஏற்கனவே படித்த பாடங்களைத் திருப்புதல் செய்து பார்ப்பதற்கு மட்டுமே ஒதுக்கப்பட வேண்டும். அந்த ஒரு மாதம் முழுவதும் திருப்புதல், திருப்புதல், திருப்புதல் என்பதே மந்திரமாக இருக்க வேண்டும்.
12. **செய்திகளையும், நாட்டு நடப்புகளையும் தொடர்ச்சியாகப் படித்து வரவேண்டும்.** பாடங்களையும், தேசிய மற்றும் சர்வதேச நிகழ்வுகளையும் நன்கு அறிந்துகொள்ள வேண்டும்.
13. **அடுத்த நாள் தேர்வு நடக்க இருப்பதாகக் கருதிக் கொண்டு** அதற்கேற்ற வகையில் தேர்வுக்குத் தயாராகுவதற்கான உத்தி வகுக்கப்பட வேண்டும். அந்த அளவுக்கான தயாரிப்பு அவசியமாகும்.
14. ஒவ்வொரு நாளும் **உறங்கச் செல்வதற்கு முன் அந்த நாள் முழுவதும் படித்த பாடங்களை ஒருமுறை நினைவுபடுத்திக் கொள்ள வேண்டும்.** அது உங்களின் நினைவுத் திறனை வலுப்படுத்தும்.
15. முதல்நிலைத் தேர்வுக்கான பொது அறிவு முதல் தாளுக்கான தயாரிப்பு முதன்மைத் தேர்வையும் மனதில் கொண்டு தொடரப்பட வேண்டும்.



Competitive Exam Monthly Magazine

INDEX

I. Profile of State

Uttarakhand 08

II. National Symbol

National Aquatic Animal 13

III. Eminent Person's and Places, Sports, Book Authors

1. Eminent Person's 14

2. Sport's 15

3. Event's / Award's 20

4. Historic Person's 22

5. Book Author's 22

IV. History – Historical events

- Ahom Burial Mounds "Maidam" in Assam to vie for UNESCO
World Heritage Site (WHS) Tag 23

V. Polity – Political Parties and Political system in India

- Election Commission of India Begins Delimitation in Assam with 2001 Census 23

- Census Postponed by at least 4 years to 2024 - 25 : Office of the Registrar
General and Census Commissioner of India 24

- Bureau of Indian Standards (BIS) published Indian Standard for USB type KC
Receptacles, Plug and Cables 24

- Centre seeks search panel for postings in Judiciary 25

- Ministry of Rural Development launches Prajjawala Challenge 25

- PM Modi to address 108th Indian Science Congress on January 3, 2023..... 25

- MoD, MoE, MSDE and all three services sign MoUs with various Stakeholders to facilitate continued education of Agniveers	26
- PM Modi emphasises on need for States' efforts for water conservation; Water Resources Ministers from all states take part in All-India Annual Conference on Water.....	26
- Union Government approves National Green Hydrogen Mission	27
- Supreme Court Upholds Demonetisation	27
- Centre Clears Rs.19,744 Crore Green Hydrogen Mission	28
- One Nation One Standard	29
- Ethylene Glycol (Quality Control) Order, 2022	29
- Decadal Census - Delayed Again	30
- Article 176 of the Indian Constitution	31
- Basmati Rice	31
- Bureau of Energy Efficiency (BEE)	32
VI. Public Awareness and General Administration	
- Draft UGS (Setting up and Operation of campuses of Foreign Higher Educational Institutions (FHEIS) in India) Regulations, 2023 Released	33
VII. Welfare Oriented Schemes and their Utility, Problem in Public Delivery System (Central Government & State Government)	
1. Central Government	
- Case for reforming collegium : Suggestions by Law Minister	35
- NCERT Notifies India's First National Assessment Regulator	35
- PM launches Aspirational Block Programme	36
- Govt introduces new system to measure and grade performance of hospitals	36
2. State Government	
- Village Defence Committees (VDCs)	36
- National Centre for Good Governance (NCGG)	37
- Horizontal Reservation	37
- Tripura signs agreement with ADB for Power Project	37
- Government forms committee to protect Ladakh culture, Language & Employment	37

- 'SMART' program for Ayurveda Professionals to boost R & D in Ayurveda in the Country	37
- Foreign Universities will need UGC's nod to set up campuses in India	38
- Odisha : Talcher Fertilizer Plant to be functional by Oct 2024, says Mandaviya	38
- Kerala Becomes country's first fully digital banking state	39
- High-Powered Committee For Ladakh	40
- SC Dismisses PIL Challenging Committees up by Gujarat and Uttarakhand for Uniform Civil Code	40
- Governor - CM Rift in TN	41
- National Clean Air Programme	41
- Doctor Didis of Jharkhand	43

VIII. Geography – Geographical marks

- Spitiual Town Joshimath Battles a sinking feeling	43
- Heat waves in India	44
- Black Carbon Aerosols	44
- How Climate Change Fuels Tropical Cyclones	45
- Decoding Joshimath	45

IX. Environment

- Project Nilgiri Tahr	46
- No Action Plan by Ministry of Environment, Forest & Climate Change to Handle Plastic Waste	46
- India Recycles only 30% of 3.4 MT Plastic waste generated annually : Report	47
- NCST : New Forest (Conservation) Rules Vs Forest Rights Act	47
- Urban Forestry & Urban Greening in Drylands	48
- What is a cold Wave ?	49
- Deep - Water Circulations of the Indian Ocean	49
- Human Disturbance Altering Habitats, Routines of Animals	50
- Protests over ESZ classification	51
- Asian Waterbird Census (AWC) 2023	52

X. Economy – Economy, Socio-Economic issue**1. Economy**

- Reserve Bank of India Released Report on trend & progress of Banking in India 2021 - 22	53
- V-Shape Recovery	53
- G-20 Digital Innovation Alliance launched by Meity	54
- Microfinance Institutions (MFIs) to play leading role in India's Economic Growth	54
- Govt & Asian Development Bank sign several loan agreements to boost infrastructure sector in India	54
- Sovereign Green Bonds	55

2. Socio Economic Issue

- National Commission for women issues Advisory to ensure safety of women in Educational Institutions	55
- RBI to issue Sovereign Green Bonds (SGrBs) in two tranches of Rs.8000 Crore each	56
- Gini Coefficient	56
- Reserve Bank of India (RBI) Released state finances : A study of Budgets of 2022 - 23 Report	56
- Annual Status of Education Report (ASER) 2022 Released by NGO Pratham	57
- Centre issues guidelines to social media influencers to regulate promotions	57
- Economy at risk from move to clean energy	58
- India's unemployment rate rises at 8.30% in Dec 2022	58
- Lumpi - Provacind Vaccine	58
- Kala - Azar Cases Decline	59
- Mission Parivartan	59
- Kollam	60
- What Plagues Rural Health Care ?	60
- Malnutrition Risking Children's Lives : WHO	61
- Guidelines to social Media Influencers	62
- A Gentler Workplace	63

XI. Science and Technology

- H9N2 Vaccine	63
- InCoVACC Nasal Vaccine	64

- Vande Metro Hydrogen Trains	64
- Ministry of Science and Technology Notified the National Geospatial Policy 2022	64
- Brahmos	64
- Dark Sky Reserve	64
- Cloud Forest	65
- Earth Radiation Budget Satellite (ERBS)	65
- Prithvi - II	65
- Small Magellanic Cloud (SMC)	65
- ISRO's Venus Mission Shukrayaan - I could be shifted from 2024 to 2031	65
- Artificial Intelligence (AI) can help fight wildfires : World Economic Forum (WEF)	66
- ISRO, Andhra University set up equipment to predict rip currents at sea	67
- Digantara launches second satellite to monitor space weather	67
- The Danger of Deep Fakes	67
- Smart Program For Ayurveda	68
- Gelbots	68
- Wassenaar Arrangement	68
- Vidisha : 1st District in India for the On-ground Deployment of Innovative 5G use	69
- Duchenne Muscular dystrophy	69
- Hemo - Halt Bandage	70
- Using Artificial Photosynthesis to make green Hydrogen at record efficiency	70
- START - UPs are powering India's Space Odyssey 2.0	71
- SHUKRAYAAN	72
- James Webb Telescope Discovers its First Earth - sized Exoplanet	72

XII. Miscellaneous

1. Index	73
2. Report.....	74
3. Committee	79
4. Minutes: (News in shorts)	80

I. Profile of State

Uttarakhand

Background

- Uttarakhand was formed on 9th Nov 2000 as the 27th state of India, when it was covered out of Northern Uttar Pradesh.
- Located at the foot hills of the Himalayan mountain ranges
- It is largely a hilly state, having international boundaries with China (Tibet) in the north and Nepal in the east
- On its north - west lies Himachal Pradesh, while on the south is Uttar Pradesh
- It is rich in natural resources especially water and forests with many glaciers, rivers, dense forests and snow - clad mountain peaks.
- Char - dham, the four most sacred and revered Hindu temples of Badrinath, Kedarnath, Gangotri and Yamunotri are nestled in the mighty mountains.

Largest city	Dehradun
Districts	13
Legislature	Unicameral
Literacy (2011)	87.60
Sex Ratio (2011)	963/1000
State animal	Alpine Musk deer
State bird	Himalayan Monal
State flower	Brahma Kamal
State tree	Burans

Important Point :

- Uttarakhand is divided into two regions that are Garhwal and Kumaon
- Uttarakhand is best known for its rivers as it is the origin of some of the most sacred rivers of India like Ganga and Yamuna.
- These rivers are the lifeline of India, fed up by hundreds of small and big tributaries emerging from the glaciers of Uttarakhand,



Characters

Formation	9 November 2000
Capital	Bhararisain (summer) Dehradun (winter)
Judicial seat	Nainital

- On November 4, 2008, prime minister of India declared holy Ganges as the National River of India
- Uttarakhand is home to two UNESCO world Heritage sites. i.e valley of flowers, Nanda Devi Biosphere Reserve
- The exotic and serene vistas of valley of flowers aka Bhtundar valley attracts thousands of tourists and botanists from worldwide every year
- An astonishing height of 7816 meters, Nanda Devi peak is the 2nd Highest Peak in India and the highest peak located entirely with India
- Tucked in the western Himalayas, Uttarakhand is bejeweled by culturally rich heritage.
- Uttarakhand's diverse ethnicities is a cluster of Rups, Bhotia, garhwali, Kumaoni, Jaunsari, shukla and other communities That all have their unique dialects, attire, tradition, culture and festivals.
- Established in 1936, Jim Corbett National park is the first and the oldest National park of India which is situated in Nainital district of Uttarakhand.
- The name of the who played a vital role in the establishment of park, earlier it was known as Hailey National park.
- According to the latest census, Uttarakhand becomes the second state in the country after Karnataka with the highest number of tigers.
- Since last census, the numbers of tigers in Uttarakhand has risen from 227 to 340
- Uttarakhand is the only state of India with Sanskrit as its official language.
- Population dense Uttarakhand has the highest number of soldiers in Indian Army than any other Indian state.
- As a small Himalayan in Indian Army is just mind blowing
- Referred as 'Devbhumi' Uttarakhand is a divine land holding religion. It features a unique cluster of Panch Badri, Panch Kedar, Panch Prayag (five holy confluences)
- Apart from this Uttarakhand also featured Chota Char Dham circuit of Yamunotri, Gangotri, Kedar Nath and Badrinath
- Located at an altitude of 3680 m, Dhangnath Temple is the highest Shiva temple in the world.
- Hemkunt Sahib is the highest Guruvara and place of worship in world.
- It is a gateway to several Himalayan mountain climbing adventures, hiking paths, and Pilgrimage sites like Badrinath and is situated at a height of 6150 feet (1875 m).
- One of the four cardinal paths founded by Adi Shankara is located there.
- The aftermath of the 2021 Uttarakhand flood and its effects have been felt strongly in the region since February 7.
- It has been determined that the town is sinking as a result of its location along a flowing ridge.
- People in the town had to be evacuated after the town's surrounding structures started to crack.

Joshimath Crisis

- In recent years, Joshimath has faced a number of crises, including floods and landslides caused by heavy monsoon rains.
- In 2013, a major flash flood hit the town, causing extensive damage to infrastructure and homes.
- In 2016, another flash flood hit the area, killing over 30 people and displacing thousands.
- The Indian government has been criticized for its slow response to the crisis, and for not providing enough aid and support to affected residents.
- Many residents of Joshimath

Joshimath Sinking Crisis Uttarakhand, History, Future, Facts

Joshimath Uttarakhand

- Joshimath often spelled Jyotirmath, is a municipality and a city in the Uttarakhand state of India's Chamoli District.

have been forced to leave their homes and seek shelter elsewhere.

- The crisis has also affected the local economy, as tourism has dropped sharply due to the damage caused by the floods.
- The Indian government has announced plans to improve the infrastructure of the town and to provide more aid to affected residents, but it remains to be seen whether these efforts will be successful in addressing the ongoing crisis.
- In 2021, another flash flood hit the area of Tapovan.
- In 2023, All of Joshimath City is Sinking.

Joshimath Sinking crisis Natural or Man Made in Uttarakhand?

- Joshimath may all sink, according to satellite photos of the town issued by the National Remote Sensing Centre (NRSC) of the Indian Space Research Organization (ISRO) and a preliminary assessment on land subsidence.
- The Cartosat-2S satellite provided the images.
- The NRSC, situated near Hyderabad, has made available satellite photos of sinking regions.
- Images show that the entire town, together with the Narasimha shrine and the Army's helipad, has been designated as a sensitive zone.

- The government of Uttarakhand is launching rescue operations in hazardous areas and relocating residents there to safer locations on a priority basis based on the preliminary report from ISRO.
- The report states that Joshimath sank by 8.9 cm between April and November 2022, during which time land subsidence was gradual.
- However, the intensity of ground subsidence rose between December 27, 2022, and January 8, 2023, and the town sank by 5.4 cm during these 12 days.

Joshimath Sinking crisis

- The Joshimath-Auli road is also set to collapse as a result of the subsidence of the soil, according to satellite photographs.
- The findings in the ISRO's initial report are alarming, despite the fact that scientists are still investigating the fissures that started to form in houses and roadways after the town's ground began to sink.

Joshimath- 1976 Mishra Committee Report

- Land subsidence is currently posing a serious threat to Joshimath.
- Joshimath is not located on the main rock but rather on a historic sand and stone landslide depos-

it, according to a 1976 investigation by the Mishra Committee.

- This indicates that it is a part of landslide debris.
- The report also emphasised how the Alaknanda and Dhau-liganga rivers' undercutting by currents contributed to the landslides.
- According to the research, the region is characterised by dispersed rocks covered with old landslide debris made up of boulders, gneissic rocks, and loose soil, all of which have a low bearing ability.
- Due to their extreme weathering and poor cohesive value, these gneissic rocks are prone to significant pore pressure when wet, especially during monsoon season.

Joshimath- Indiscriminate Construction & Negligence of Warning

- Increased construction activity, hydroelectric projects, and the extension of the National Highway in the last two decades have all worsened the situation in Joshimath.
- The slopes are now extremely unstable and prone to landslides as a result of these efforts. Other theories for the city's demise include the rushing streams from Vishnuprayag and sliding along natural streams.

- According to several experts, the best course of action at this time would be to completely halt all hydroelectric and development projects in the area.
- The population must first be moved to a safer area, and only then could the town's planning be revised to account for the new variables and shifting geographical conditions.

Joshimath- Religious Importance

- One of the four cardinal institutions founded by Adi Shankara, the others being those at Shringeri, Puri, Dwarka, and Kanchi, Jyotirmath is the uttarmnya matha, or northern monastery.
- The word "Shankaracharya" appears on their heads.
- This matha is in charge of the Atharvaveda, in accordance with the tradition started by Adi Shankara.
- Jyotirmath is adjacent to Badrinath, a popular destination for pilgrims.
- Travelers heading to the Valley of Flowers National Park or Guru Gobind Ghat may use this location as a base camp.
- Badrinarayan is worshipped at the Narasimha temple among a pantheon of gods.
- Adi Sankara is credited with the ruling god Lord Narasimha.

Narsingha Dev temple at Joshimath

Joshimath- Army Cantonment

- One of the significant Indian

Army installations in Uttarakhand is Joshimath Cantonment.

- It serves as "The Garhwal Scouts" permanent post, the scout battalion of the Garhwal Rifles.
- The army station is the nearest to the Indo-Tibetan Border.
- It served as a base camp for the 2013 Kedarnath Floods rescue operation.

What is land subsidence?

- According to the National Oceanic and Atmospheric Administration (NOAA), subsidence is the "sinking of the ground because of underground material movement".
- It can happen for a host of reasons, man-made or natural, such as the removal of water, oil, or natural resources, along with mining activities.
- Earthquakes, soil erosion, and soil compaction are also some of the well-known causes of subsidence.

What can be the reasons behind Joshimath's subsidence?

- The exact reason behind Joshimath land subsidence is still unknown but experts suggest that the incident might have occurred because of unplanned construction, over-population, obstruction of the natural flow of water and hydel power activities.

- Not only this, the area is a seismic zone, which makes it prone to frequent earthquakes.
- According to experts, Joshimath city has been built on an ancient landslide material meaning it rests on a deposit of sand and stone, not rock, which doesn't have high load-bearing capacity.
- This makes the area extremely vulnerable to ever-burgeoning infrastructure and population.
- Moreover, the lack of a proper drainage system might have also contributed to the sinking of the area.
- Experts say that unplanned and unauthorised construction has led to the blocking of the natural flow of water, which eventually results in frequent landslides.
- As per the reports, residents have also blamed NTPC's Tapovan Vishnugad Hydro Power Project for the incident.
- They allege that the tunnel had water seepage "from a punctured aquifer, leading to the drying of water sources in Joshimath."
- Experts suggest that it could be one of the reasons for the collapse of the area.
- However, NTPC denied the allegations and in a statement said, "The tunnel built by NTPC does not pass under Joshimath town."

- This tunnel is dug by a tunnel boring machine (TBM) and no blasting is being carried out presently”.

Zone of Fracture

- Apart from the aforementioned possible reasons, reports have pointed out that subsidence in Joshimath might have been triggered by the reactivation of a geographic fault - defined as a fracture or zone of fractures between two blocks of rock - where the Indian Plate has pushed under the Eurasian Plate along the Himalayas.

Haldwani Case

- The Supreme Court’s timely intervention has halted the forcible eviction of some 50,000 people from Haldwani in Uttarakhand, where the occupants are accused of squatting on railway property for decades.
- The Uttarakhand High Court had taken a tough stand against the residents, and passed a slew of directions that would have entailed their eviction within a week, backed by force, including the deployment of paramilitary forces.
- It is significant that the Bench underscored the human angle to the issue and spoke about the need for rehabilitation before eviction while staying the order.

- In an earlier round of litigation over the same land, which adjoins the Haldwani Railway Station, court orders had allowed proceedings against individual occupants under the Public Premises (Eviction of Unauthorised Occupants) Act, 1971, to be completed.
- This time, too, it was on a PIL that the High Court had passed its orders.
- The High Court’s detailed judgment shows that the residents’ claim is traceable to a 1907 Office Memorandum that says the area be managed under rules pertaining to ‘nazul land’.
- The court has ruled that it was not a government order but only a communication on how to manage the land, and it does not amount to declaring it as ‘nazul land’, that is, land that has fallen into the hands of the state.
- As one of the nazul rules is that there cannot be sale or lease, the court rejected all claims made by occupants based on purported documents for lease, sale, and, in some cases, purchase through auction.

Public Vs State

- Conflicts between occupants of public land and the state that wants to reclaim the land are a never-ending saga in the country.

- A shortage of housing, as well as inadequate recognition of the right to shelter, means that large masses of people encroach on vacant land, be it on the bed of water bodies or government property.
- This often leads to attempts to evict the occupants and spawns litigation.
- Invariably, there are claims to occupancy rights based on long years of stay at the same location.
- There are court judgments that stress rehabilitation measures and consultation with the oustees before eviction.
- Some courts have also recorded the view that mandatory rehabilitation may prove to be an incentive for encroachment.

Communal overtones of the land

- The Haldwani eviction effort has unfortunately taken communal overtones, and there appears to be a clamour for the early eviction of the Muslim residents.
- India does not have a good record on rehabilitation of those evicted from public spaces, and this case presents an opportunity to the Supreme Court to lay down the law on meaningful rehabilitation as well as effective prevention of encroachments.

II. National Symbol

National Aquatic Animal

About

- Ganges River Dolphin was recognised as the National Aquatic Animal in 2009 by the Government of India
- Ministry of Jal shakti released a guide for the Safe rescue and release of stranded Ganges River Dolphins.



Key Points

- **Scientific Name** : Platanista gangetica gangetica
- **Discovery** : Officially discovered in 1801
- **Habitat** : They live in the Ganges - Brahmaputra - Sangu river systems of Nepal, India and Bangladesh
- The Ganges river dolphin can only live in fresh water and is essentially blind
- **Population** : The global population of species is estimated at 4,000 and nearly 80% found in the Indian subcontinent

- **Significance** : It is a reliable indicator of the health of the entire river ecosystem

Related Constitutional Provisions:

Article 48 A:

- It directs the state to protect and improve the environment and safeguard wildlife and forests.
- This article was added to the constitution by the 42nd Amendment in 1976

Article 51 A:

- It imposes certain duties for the people of India to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures.

Threats :

- **By Catch** : These dolphins and people both favour areas of the river where fish are plentiful and the water current is slow.
- This has led to fewer fish for people and more dolphins dying as a result of accidentally being caught in nets.
- **Population** : Industrial, agricultural, human pollution is another serious cause of habitat degradation
- **Dams** : Construction of dams and other irrigation related

projects make them susceptible to inbreeding and more vulnerable to other threats because they cannot move to new areas

Conservation status:

- Indian wildlife (Protection) Act 1972 - Schedule I
- International Union for the Conservation of Nature Endangered
- Convention on International Trade in Endangered Species - Appendix I (most endangered)
- Convention on Migratory Species - Appendix II

Steps Taken

Project Dolphin :

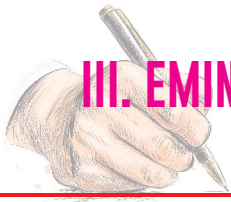
- The Prime Minister announced the government's plan to launch a Project Dolphin in his Independence Day speech 2020

Dolphin Sanctuary :

- Vikramshila Ganges Dolphin Sanctuary has been established in Bihar National Ganga River Dolphin Day 5 October observed

Conservation Plan :

- The Conservation Action Plan for the Ganges River Dolphin 2010-2020, which identified threats to Gangetic Dolphin are impact of river traffic, irrigation canals and depletion of prey-base on dolphin populations"



III. EMINENT PERSONS AND PLACES, SPORTS, BOOK AUTHORS



1. EMINENT PERSONS

Thiruvalluvar Day



Context:

- The Prime Minister, has paid homage to Thiruvalluvar on Thiruvalluvar Day and recalled his noble thoughts.
- He also urged the youth to read the Kural.

About Thiruvalluvar:

- Thiruvalluvar, commonly known as Valluvar, was a celebrated Tamil poet and philosopher.
- Thiruvalluvar is known by various other names including Poyyil Pulavar, Mudharpavalar, Deivappulavar, Nayanar, Devar, Nanmukanar, Mathanu-

bangi, Sennabodhakar, and Perunavalar.

- He is best known as the author of the Tirukkural, a collection of couplets on ethics, political and economical matters, and love.
- The text is considered an exceptional and widely cherished work of Tamil literature.
- Valluvar has influenced a wide range of scholars down the ages since his time across the ethical, social, political, economical, religious, philosophical, and spiritual spheres.
- He has long been venerated as a great sage, and his literary works a classic of Tamil culture.
- Tirukkural is the primary work credited to Valluvar.
- It contains 1330 couplets, which are divided into 133 sections of 10 couplets each.
- The first 38 sections are on moral and cosmic order (Tamil: aram), the next 70 are about political and economic matters (Tamil: porul), and the remain-

ing 25 are about pleasure (Tamil: inbam).

- The Tirukkural text has been translated into several Indian and international languages.
- The first European language translation was made in Latin by Constantius Joseph Beschi and was published in 1730.
- The English translation was made by G.U.Pope.
- The first available French version was by E. S. Ariel in 1848.
- The first German translation was made by Karl Graul.
- The ten medieval commentators include Manakkudavar, Dharumar, Dhamatthar, Nacchar, Paridhiyar, Thirumalaiyar, Mallar, Pari Perumal, Kaalingar, and Parimelalhagar,
- The first paper print of the Tirukkural is traceable to 1812, credited to the efforts of Nānāpirakacar who used wooden blocks embossed from palm-leaf scripts to produce copies of the Tirukkural along with those of Nalatiyar.

2. Sports

Hockey Madhya Pradesh Men's U-18 team won Khelo India Youth Games 2022

- Madhya Pradesh has clinched the Qualifiers title of Khelo India Youth Games 2022 Men's Under-18 after defeating Odisha by 6-5 in the final at Bhubaneswar, Odisha.
- Ali Ahmad, Mohammad Zaid Khan and Captain Ankit Pal netted one goal each for Madhya Pradesh.
- While, Haryana claimed third place in the competition with a win against Jharkhand.
- With this, Madhya Pradesh, Odisha, Haryana and Jharkhand have qualified for the 2023 Khelo India Youth Games to be held in MP.

Koustav Chatterjee becomes 78th Grandmaster of India

- Koustav Chatterjee (19) has become 78th Grandmaster of India at the MPL 59th National Senior Chess Championship in New Delhi.
- He is also the tenth Grandmaster of West Bengal.
- He won his maiden GM-norm in October 2021 at Sheikh Russel GM 2021 in Bangladesh.

- He scored his second GM-norm at Asian Continental Championship in November 2022.
- He has also crossed 2500 in the August FIDE rating list.
- 77th grandmaster of India: Aditya Mittal
- 76th GM of India: Pranav Anand

World Boxing Council to create transgender category

- The World Boxing Council, one of the four governing bodies for the sport, will introduce a transgender category from this year, its president Mauricio Sulaiman has said.
- The WBC is going to create a league and a tournament but title belts may not be on the line.
- According to The Telegraph, WBC wants to eliminate a scenario where a 'man fights a woman'.
- A 'at birth rule' will be used, which means a transgender boxer who is registered as male at birth will be allowed to fight others who have also been registered as male at birth and those registered as female at birth will be allowed to fight others who have been registered as female at birth.
- "The World Boxing Council, through its medical committee and technical committee,

reached a determination after studies and an important talk during the WBC annual convention, an absolute and total confirmation was reached to not allow fights between people born men against people born women regardless of their current gender," Sulaiman told ESPN.

- "That is the main determination to not allow fights between men and women for the protection that we have always had of women's boxing."
- The WBC president said the process of identifying those who can compete in the transgender category will begin soon.
- FINA, world swimming's governing body, is set to create an 'open category' and has set up a working group for it.
- FIFA, football's governing body, and world athletics said they would review their transgender policy after it came to light that FINA was looking creating the 'open category'

Tamil Nadu's Pranesh M becomes 79th Grandmaster of India

- M Pranesh (16) from Tamil Nadu has secured the title in the 2022/2023 Rilton Cup, the

first tournament of the FIDE Circuit, to become the 79th chess Grandmaster of India.

- He has crossed the live rating of 2,500 Elo points.
- He won his first norm at the 18th Delhi GM Open, second norm at the Sunway Sitges International Chess Festival in Spain and third norm at the Asian Continental Chess Championship in Stockholm, Sweden.
- He was trained by renowned coach RB Ramesh

Sania Mirza announces her retirement from professional Tennis

- Sania Mirza has confirmed her retirement from professional Tennis.
- The former doubles World No. 1 champion has announced that she will retire at the WTA 1000 event in Dubai in February.
- Mirza spoke about her retirement in an interview with the Women's Tennis Association (WTA)
- The 36-year-old will be playing in women's doubles at the Australian Open in January alongside Kazakhstan's Anna Danilina.
- This is her final appearance at a Grand Slam event after she missed the US Open last year due to an elbow injury.
- Mirza, who has been dealing with a lingering calf injury, had planned to retire at the end of the 2022 season but an elbow injury in August ruled her out of the US Open.
- "I really don't have the capacity in my mind to emotionally push that much anymore.
- I turned pro in 2003...Priorities change, and now my priority is not to push my body to the limit every single day," she said to WTA.
- After retirement, Mirza will focus on her academics in Dubai, the city of her residence for more than a decade, where she has resided for more than a decade with her husband, former Pakistan cricketer Shoaib Malik.
- Mirza, regarded as her country's greatest women's tennis player, has won six Grand Slam doubles titles and will compete in her final major this month at the Australian Open, where she bagged the women's doubles crown in 2016.
- Mirza became the first Indian to win a WTA singles title, when she won her hometown Hyderabad event in 2005.
- She broke into the top 30 by 2007 and reached her career-high ranking of world number 27.
- The maiden triumph came in 2009, as she partnered with Mahesh Bhupathi to clinch the Australian Open mixed doubles title.
- She earned a second victory alongside Bhupathi in the 2012 French Open.
- Her third mixed doubles title victory was at the 2014 US Open, partnering with Brazilian player Bruno Soares.
- In 2015 Sania Mirza partnered up with Swiss legend Martina Hingis and won three back-to-back Grand Slam doubles titles.

Anahat Singh wins Girls U-15 squash title at 2023 British Junior Open

- Indian squash prodigy, Anahat Singh (14) has clinched the girl's Under-15 squash title at the 2023 British Junior Open tournament, held in Birmingham (United Kingdom) from January 4-8, 2023.
- She has defeated Sohaila Hazem of Egypt by 3-1 in the final.
- The British Junior Open is held in January every year in the UK.
- She has also won the 2022 Scottish Junior Open held in Edinburgh, Scotland in the Girls under-17 categories.
- She hails from New Delhi.

Surya Kumar Yadav becomes fastest player to reach 1,500 runs in T20

- Indian batter, Suryakumar Yadav has become the fastest player to reach 1,500 runs in T20 International cricket in terms of balls faced.
- He took only 843 balls to reach this landmark.
- In 45 matches and 43 innings, Suryakumar has scored 1,578 runs at an average of 46.41.

- He has three centuries and 13 half-centuries in the format, with the best individual score of 117.
- However, he is the third-fastest batter to reach the 1,500-run mark in terms of innings.

Khelo India National Women Kho Kho leagues set to take place in Punjab



- The Khelo India Senior Women National Kho Kho league will be held at Chandigarh University, Punjab from January 10 to January 13, 2023.
- The league is being organized by the Kho Kho Federation of India.
- The Kho Kho women's league for junior and sub-junior age groups is scheduled from January 16 to 19 at the Alberta Ekka Kho Kho stadium in Hotwar, Ranchi.
- The Khelo India Senior Women National Kho Kho league is set to take place at Chandigarh University, Punjab from January 10 to January 13.
- The league is being organized by the Kho Kho Federation of India and will be held over

three phases with full financial support from the Ministry of Youth Affairs and Sports.

- A total of 12 teams and close to 200 players are slated to participate.
- The Kho Kho women's league for junior and sub-junior age groups is scheduled from January 16 to 19 at the Alberta Ekka Kho Kho stadium in Hotwar, Ranchi.
- The Khelo India women's leagues, which are being held across multiple sports since 2021, is an initiative taken by the Ministry of Youth Affairs and Sports to develop the overall sports ecosystem of the country.

Novak Djokovic wins men's single Adelaide International number 1 title 2023

- Serbian Tennis Player, Novak Djokovic has defeated America's Sebastian Korda to win the 2023 Adelaide International number 1 men's singles title.



- While, Aryna Sabalenka (Belarus) has won women's singles title, after defeating Czech Republic's Linda Nosková.

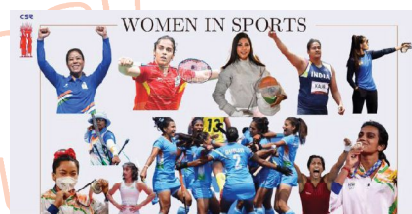
Other winner:

- Men's doubles: Lloyd Glasspool(United Kingdom) / Harri Heliövaara(Finland)
- Women's doubles: Asia Muhammad (United States)/ Taylor Townsend (United States)

Wrestling the way out

Context:

- Women are made to face the barrels of buoyant sexism on a daily basis, be it at work or even at home.



- Recently, Indian women wrestlers, Vinesh Phogat and Sakshi Malik accused BJP MP and Wrestling Federation of India (WFI) president Brij Bhushan Sharan Singh of sexual harassment.

Issues faced by women in sports:

- The word 'pressure' is central to a sportsperson's life:
- The need to perform better or at least at par with a previous time; the juggling of time between sport and study; the stress of endorsements.
- However, women have added layers of pressure:
- **Gender Pay disparity:** The first challenge that female athletes

have to face is being paid half or less of what is given to their male counterparts.

- **Being objectified:** From coaches to commentators, to the audience, women are looked at as commodities showcasing themselves for men's pleasure, not as entities of potential and talent.
 - Eg: India's popular badminton player Jwala Gutta faced issues related to objectification and body shaming.
- **Lack of access to facilities:** A lack of access to adequate playing facilities near their homes, makes it more difficult for girls to engage in sports.
- **Safety and transportation issues:** Sports require a place to participate – and for many girls, especially in dense urban environments, that means travelling to facilities through unsafe neighbourhoods or lacking any means to get to a good facility miles away.
 - Eg: Manipur is a sporting powerhouse, but 48 % of female athletes travel over 10km to reach the practice facility
- **Social stigma:** Girls in sports may experience bullying, social isolation, and negative performance evaluations.
- **Mental Health:** Mental safety is essential. Institutes and coaches must provide access to sports psychologists.
- According to the IOC Mental Health in Elite Athletes Toolkit(2021), anxiety and depression are more common in women athletes.
- **The disparity in Access to Quality Training & Infrastructure:** The availability of quality, trained coaches may be lacking in their community or these coaches may be more focused on the boys' programs that have more money for training.
- Equipment and even uniforms aren't funded for many girls' programs at the same levels as boys.
- Thus, their ability to improve and enjoy the sport is diminished.
- **Inadequate Budget Allocated for Women in Sports:** Budgets are being slashed in all sports, especially for women leading to poor infrastructure.
- **Lack of positive role models:** Today's girls are bombarded with images of external beauty, not those of confident, strong female athletic role models.
- To some girls, fitting within the mould that they are constantly told to stay in is more important than standing out.
 - For instance, it is estimated that the prevalence of eating disorders among women athletes is 6% to 45%, while for men athletes it ranges

from 0 to 19% [IOC Mental Health in Elite Athletes Toolkit (2021)].

Why girls need to be encouraged in sports:

- They learn important life skills such as teamwork, leadership, and confidence.
- It enhances their self-image
- Girls' involvement in sports is related to higher levels of family satisfaction.
- High school female athletes have more positive body images than non-athletes.
- Reduces chances of diseases in the long run.

The ethical aspect of sexual harassment in sports:

- Lack of trust in the association.
- Reduce participation
- Shows a lack of empathy and morals from the perpetrator's side.

Few positive examples:

- The athletics federation has an international-level sports-woman (Anju Bobby George) as Vice President, which is the highest.
- PT Usha leads IOA now.

Case of Dutee Chand:

- Dutee Chand was to be the first Indian woman in 36 years to run a 100m at the Rio Olympics.
- Acting on an anonymous tip, she was asked to get tested for

hyperandrogenism, where in a woman's body produces more testosterone than is acceptable under the International Association of Athletics Federations (IAAF) guidelines.

- Not only was she banned from competing against other women in the Commonwealth Games, but the world was also suddenly questioning her gender identity.
- Her personal life became a sham and her professional life was a mess.
- However, Dutee refused to cower down, and refusing therapy, has challenged the IAAF regulations at the Court of Arbitration for Sport in Switzerland

Insta Curious:

- International Charter of Physical Education, Physical Activity and Sport by UNESCO affirms that 'equal opportunity to participate and be involved at all supervision and decision-making levels in physical education, physical activity and sport, whether for the purpose of recreation, health promotion or high performance, is the right of every girl and every woman that must be actively enforced'.

Hockey

Context:

- As the FIH Hockey World Cup kicked off in Odisha (in Bhu-

baneswar and Rourkela), here is little information about the game.

About Hockey:

- Field hockey is a team sport played between two teams of 11 players each on a rectangular field with white lines on the blue AstroTurf.
- To score a goal, the scorer has to enter the opposition D – the D-shaped box 16 yards in front of the goal.



- A shot from outside the D is not counted.
- **Types of hockey hit:** Scoop, Flick, Tomahawk (reverse back-hand), Jink
- **Fouls:** The ball touching your feet, tackling from behind, third-party interference (two players are not allowed to tackle an attacking player at the same time), obstruction (when a player or a stick comes in between the ball and the other player) and dangerous play.
- **Fouls are penalized in different ways:** Free hits, Penalty Corners, Penalty strokes

Is Hockey the National Game of India?

- Hockey was believed to be the national game of India for decades, but the Government of India has clarified that hockey isn't and never was the official national game of India.
- In fact, India does not have a national game.

India's Performance in Men's Hockey

- India was the first non-European team to be a part of the International Hockey Federation.
- India's hockey team is the most successful team ever in the Olympics, having won a total of eight gold medals
- India also has the best overall performance in Olympic history with 83 victories out of the 134 matches played.
- They have also scored more goals in the Olympics than any other team.
- They are also the only team ever to win the Olympics without conceding a single goal, having done so in 1928 and 1956.
- **Major player:** Major Dhyan Chand was an Indian field hockey player, widely regarded as one of the greatest field hockey players in history.

3. Events/Awards

Dr. Tapan Saikia to receive Assam highest civilian award 'Assam Baibhav'

- Assam CM, Himanta Biswa Sarma has selected 21 personalities for the Assam State Civilian Awards 2022.
- The State's highest civilian award, 'Assam Baibhav' to Dr. Tapan Saikia for his contributions in the field of cancer care.
- Assam Saurav (Assam second highest civilian award) will be conferred to Krishna Roy; Gilbertson Sangma; Nayanmoni Saikia; Dr. Binoi Kumar Saikia and Dr. Shashidhar Phukan.
- Asom Gaurav (third highest civilian award) will be conferred to 15 people.

Director Aparna Sen received lifetime achievement award at Jaipur Film Fest

- Veteran actor-director, Aparna Sen was honoured with the lifetime achievement award at the opening ceremony of the 15th edition of the Jaipur International Film Festival (JIFF).
- She made her film debut in Teen Kanya (directed by Satyajit Ray) in 1961.

- She has directed acclaimed movies like 36 Chowringhee Lane (1981), Paroma (1985), Paromitar Ek Din (2000), and Mr and Mrs Iyer (2002).
- 282 films from 63 countries are being screened from 6th -10th January 2023.

Odisha wins World Habitat Award 2023 for its JAGA Mission

- Odisha has won the UN-Habitat's World Habitat Awards 2023 for Jaga Mission (5T initiative of the state).
- **5T:** Team work, Technology, Transparency, Transformation and Time limit.
- It is the world's largest land titling and slum upgrading program that aims to empower the lives of slum dwellers.
- Under this mission, 100% households in 2,724 slums have been provided with pipe water connections, and 8 cities become slum-free.

Maharashtra Jalna and Nagpur Police win 'Best Police Unit' award

- Jalna district police and Nagpur city police in Maharashtra have bagged the 'Best Police Unit' awards for 2021 in the state.

- The award has been given under different classes for maintaining law and order, and evolving community policing.
- The Jalna police got the award in 'Class A' and the Nagpur police in 'Class B'.
- Police units with less than 6,100 Indian Penal Code cases are grouped in 'Class A', while those with more than 6,100 IPC cases are grouped in 'Class B'.

Silent Valley bird species goes up to 175

About

- The bird survey held on December 27, 28 and 29 marked the 30th anniversary of the first bird survey in Silent Valley.
- A bird survey conducted at the Silent Valley National Park in the last week of December identified 141 species, of which 17 were new.
- So far, 175 species of birds have been spotted in Silent Valley.
- The survey held on December 27, 28 and 29 marked the 30th anniversary of the first bird survey in Silent Valley.
- Although the first survey was held in the last week of December 1990, the anniversary could

not be celebrated in 2020 December because of COVID-19 restrictions.

- Veteran birders such as P.K. Uthaman and C. Sushant were the only members in the 7th survey team who had attended the first survey held in 1990.
- As many as 30 birders and forest staff took part in the bird survey by staying in seven camps inside the core area of the Silent Valley.
- Wildlife Warden S. Vinod said that another bird survey would soon be held in the buffer zone of the national park.
- The survey was held in association with the Kerala Natural History Society.
- Brown wood owl, Banded bay cuckoo, Malabar woodshrike, White-throated kingfisher, Indian nightjar, Jungle nightjar, and Large cuckoo shrike were among the 17 species newly identified in the Silent Valley.
- As many as 139 birds had been identified in a survey held in 2006, and the number species went up to 142 in the last survey held in 2014.
- Birds such as Crimson-backed sunbird, Yellow-browed bulbul, Black bulbul, Indian white-eye and Indian swiftlet were found in abundance in Silent Valley.
- Silent Valley officials said that several species endemic to high elevation areas were also identified during the survey.

- Among the birds they sighted were Nilgiri laughingthrush, Nilgiri flowerpecker, Brown-cheeked fulvetta, Black-and-orange flycatcher, Grey-headed canary-flycatcher, Greenish warbler, Common chiffchaff, Tytler's leaf warbler, Shaheen falcon, Nilgiri wood pigeon, and Malabar whistling thrush.

CJI Chandrachud to be conferred with 'Award for Global Leadership'

- Chief Justice of India (CJI), D.Y. Chandrachud has been selected for the "Award for Global Leadership" by the Harvard Law School Center.

Reason:

- In recognition of his lifetime service to the legal profession in the country and around the world.
- The award will be presented to him at an online event on January 11, 2023.
- He took over as the 50th CJI on November 9, 2022.
- He obtained an L.L.M. degree and a Doctorate in Juridical Sciences (SJD) from the Harvard Law School.

Digital India Awards

Context:

- President Droupadi Murmu, recently conferred the Digital India Award 2022 – Gold to

CBSE in the Data Sharing and Use for Socio-Economic Development category.

- CBSE's pioneering IT initiative "Digital Academic Repository – Parinam Manjusha" was selected for the gold category.



Other winners:

- **Platinum:** E-NAM: for creating a unified national market for agriculture
- **Platinum Award: E-Vivechna App (MP):** To help in Crime investigation in the State Crime Records Bureau of Madhya Pradesh
- Mine Mitra (UP) for online approval of mining plan
- Duare Sarkar (West Bengal) for doorstep delivery of services.

About DIA:

- DIA aims to encourage and honour innovative digital solutions and initiatives by various government entities and start-ups (included in 2022 awards)
- **Nodal Agency:** Ministry for Electronics and Information Technology
- **Implementation Agency:** National Portal of India

4. Historic persons

Satyendra Nath Bose

Context:

- The 129th birth anniversary of Satyendra Nath Bose - a Mathematician and physicist from India best known for his work with Albert Einstein to develop what we now know as the Bose-Einstein statistics, was celebrated on January 1.

His legacy and stellar achievements:

- Satyendra Nath Bose (1 January 1894 – 4 February 1974) was a Bengali mathematician and physicist specialising in theoretical physics.
- He is best known for his work on quantum mechanics in the early 1920s, in developing the

foundation for Bose-Einstein statistics and the theory of the Bose condensate.

- A Fellow of the Royal Society, he was awarded India's second-highest civilian award, the Padma Vibhushan (in 1954) by the Government of India.
- The class of particles that obey Bose statistics, bosons, was named after Bose by Paul Dirac.

5. Books

Shashi Tharoor's latest book Ambedkar: A Life launched

A book titled Ambedkar:

- 'A Life', authored by Shashi Tharoor has been launched at the Kitaab Kolkata event.
- The event was organized by Prabha Khaitan Foundation (PKF) at the ITC Sonar presented by Shree Cement.
- The event was attended by bibliophiles young and old, members of Ehsaas Women and FICCI FLO.

Other notable books of Shashi Tharoor:

- Riot (2001), Why I Am A Hindu (2018), The Paradoxical Prime Minister (2018), India: From

Midnight to the Millennium (1997)

Former CJI Ranjan Gogoi released book 'Chief Minister's Diary No.1'

- Former Chief Justice of India and member of the Rajya Sabha, Ranjan Gogoi has released a book titled 'Chief Minister's Diary No.1'.
- This book containing the account of events of the first year in office of Assam CM, Dr Himanta Biswa Sarma.
- The book featured accounts of daily activities he undertook as a Chief Minister.
- His diary essentially featured the growth initiatives that the state has witnessed over the last 11 months.

Dhoni releases autobiography of Prof. K.K. Abdul Gaffar

- An autobiography of Techno-educationalist, Professor K.K. Abdul Gaffar 'Njaan Sakshi' (me as the witness) was released by Mahendra Singh Dhoni.
- It will provide an insight into the journey of Prof. Gaffar and how education and students have changed over the time.
- The first copy of this book was received by Marwan Al Mulla, the CEO of Dubai Health Authority (DHA).
- He also presented copies of the book to dignitaries including actor Tovino Thomas at the occasion.

IV. History - Historical Events

Ahom Burial Mounds "Maidam" in Assam to vie for UNESCO world heritage site (WHS) Tag

Presently, there are 40 UNESCO WHS in India:

- 32 cultural (none in the north-east), 7 natural, and 1 mixed type.
- Maidams are the burial mounds of Ahom kings, queens and nobles.
- Though Maidams are found in all districts of Upper Assam,
- Charaideo, first capital of Ahoms was necropolis of almost all Ahom Royals.

Maidam consists of three major features:

- A vault or chamber (to keep mortal remains).
- A hemispherical earthen mound covering the chamber with a brick structure (Chow-châli) for annual offering over it.
- An octagonal boundary wall having an arched gateway on its west.
- Their sizes vary from a modest mound to a hillock, depending upon the power, status and resources of the person buried.
- Special officer, known as Changrung Phukan, were appointed for construction of all the civil

works including royal Maidam.

- Ahom kings used to be buried along with their treasures and articles of their day-to-day use.

About Ahom Kingdom

- Traditionally and culturally Ahoms are members of Great Tai (Tai-Yai) group of people.
- They entered upper Assam region of Brahmaputra Valley through Patkai hills under leadership of Chaulung Sinkapha, first king of the Ahom dynasty.
- He established capital at Charaideo.
- Lachit Borphukan was one of the greatest war generals who fought against Mughals

5. Polity

Election Commission of India Begins Delimitation in Assam with 2001 Census

- ECI has initiated the delimitation process for assembly and Parliamentary constituencies in Assam, as per Section 8A of Representation of people Act 1950.
- Last delimitation of Constituencies in Assam was done on basis of 1971 Census figures.
- As per Section 8 A of RPA 1950, President can order a delimitation exercise to be carried out in four North East States : Arunachal Pradesh, Assam, Manipur, Nagaland.
- Delimitation exercise has not been carried out for last 51 years in these states.
- Last delimitation exercise kept out these NES due to apprehensions over use of 2001 Census.
- **Issues involved** : Violates fundamental Rights guaranteed to citizens of India under Article 14 of Constitution, increasing law and order problems etc.
- Delimitation is the process of fixing limits or boundaries of territorial constituencies in a country or a state with a legislative body.
- It provides equal representation for equal population segments,

and fair division of geographical areas, so that no political party has an advantage.

- Delimitation commission orders cannot be questioned before any court.
- Members of DC : A retired judge Supreme Court, Chief Election Commissioner of India, State Election Commissioner (of respective State).

Census postponed by at least 4 years to 2024 - 25 : Office of the Registrar General and Census Commissioner of India

- Citing the on-going COVID pandemic, the office of RGI has extended the deadline of freezing of administrative boundaries to June 30, 2023 (extended multiple times since COVID).
 - As per Rule 8(iv) of Census Rules, 1990, the boundaries of the administrative units shall be frozen from the date intimated by the Census Commissioner, which shall not be earlier than one year from the Census reference date.
 - As general elections are scheduled for early 2024, it would not be possible to conduct Census operations before polls.
- The responsibility of conducting the decadal census rests with the Office of the Registrar General and Census Commissioner of India, Ministry of Home Affairs.
 - National Population Register (NPR) is a register of all usual residents of the country regardless of whether they are citizens/non-citizens of India.
 - First compiled in 2010 and updated in 2015.
 - Prepared under provisions of Citizenship Act 1955 and Rules, 2003.

Bureau of Indian Standards (BIS) published Indian standard for USB type KC Receptacles, plug and cables

- BIS under Ministry of Consumer Affairs has introduced standard for USB Type-C port, plug and

cables used in electronic devices like mobile phone, laptop etc.

- It aims to provide common charging solutions for various electronic devices sold in country by March 2025.
- USB i.e., Universal Serial Bus (an industry standard) is used for connecting a wide variety of devices to a processor.

USB Types:

- USB-A is a flat and rectangular shape; USB-B has multiple designs, but common shape is a square; and USB-C is a smaller rectangular with rounded corners.
- In EU by 2024, all mobile phones, tablets and cameras will be sold with a USB Type-C charging port.

Need for Common Charger

- To reduce number of chargers per consumer, thus reducing e-waste in India (as of 2021, 5 million tonnes of e-waste generated in India).
- Step towards LIFE (Lifestyle for Environment) that nurtures a global network of individuals, i.e., 'Pro-Planet People' (P3).
- Ease out technological 'lock-in' effect, where by a consumer becomes dependent on a single manufacture.
- BIS also published standards for digital television receivers with built-in satellite tuners and video surveillance security systems.

The Census Process:

- Before every Census, the states are required to provide information to the RGI on changes in the number of administrative units like towns, districts, etc.

Centre seeks search panel for postings in Judiciary

- Ministry Law and Justice has written to Chief Justice of India (CJI) expressing the need for Search-cum-Evaluation Committee (SEC) to bring transparency in judicial appointments through collegium system.
- SECs will be entrusted to prepare a panel of eligible candidates from which respective collegiums will make recommendations.
 - A representative of Union government should be a member of SEC for appointment of judges in Supreme Court and chief justices of high courts.
 - SECs for appointment of judges in high court should have a nominee of state government.
- At present, appointment mechanism as outlined in Memorandum of Procedure (MoP) does not include a SEC.
 - MoP is a crucial document that governs collegium system of appointing judges.
- CJI and Judges of SC are appointed by President under Article 124 (2) with the help of collegium system.
- Collegium system is the way by which judges of SC and HC are appointed and transferred.
 - SC collegium is a five-member body, which is headed

by incumbent CJI and comprises four other senior-most judges of court at that time.

- HC collegium is led by incumbent Chief Justice and two other senior-most judges of that court.

Collegium system has evolved with three judges case

- First Judges Case, 1981 or S P Gupta Case:
 - SC ruled that recommendation made by CJI to President can be refused for "cogent reasons", thereby giving greater say to executive.
- Second Judges Case, 1993 (Supreme Court Advocates on Record Association (SCARA) vs Union of India):
 - CJI only need to consult two senior-most judges over judicial appointments and transfers.
- Third Judges Case, 1998 :
 - CJIs should consult with four senior - most SC judges to form his opinion on judicial appointments and transfers.

Ministry of Rural Development launches Prajajawala Challenge

- The Ministry of Rural Development under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission has launched the Prajajawala Challenge

Aim:

- To invite ideas, solutions and actions that can transform rural economy
- The broad contours fall into following categories: Focus on Women and Marginalized section of community; Localised Models; Sustainability; Cost Effective solutions; Multi sectoral ideas and solutions
- Top 5 ideas will be rewarded with Rs. 2 Lakh each

PM Modi to address 108th Indian Science Congress on January 3, 2023

- Prime Minister Narendra Modi will inaugurate the 108th Indian Science Congress through video conferencing on 3rd January, 2023.

Theme 2023:

- Science and Technology for Sustainable Development with Women Empowerment
- The inaugural ceremony will be hosted by Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) at its Amravati Road Campus.
- The technical sessions of the 108th Indian Science Congress have been divided into 14 sections.
- Prime Minister Narendra Modi will inaugurate the 108th Indian Science Congress through video conferencing on Tuesday.

- The theme of the event this year is "Science and Technology for Sustainable Development with Women Empowerment".
- Talks and exhibitions are open to the general public.
- A special attraction of the event is the mega expo "Pride of India". The prominent developments, major achievements and the significant contributions largely of Indian Science and Technology to the society will be showcased in the exhibition, which brings together and displays hundreds of new ideas, innovations, and products covering the entire canvas of the scientific world.
- Pride of India displays the strengths and achievements of Government, Corporate, PSUs, Academic and R&D Institutes, Innovators & Entrepreneurs from all across the country.
- Under these MoUs, with the National Institute of Open School and Indira Gandhi National Open University, suitable 12th Class certificates and Bachelor's degrees will be awarded to the Agniveers.
- Addressing the MoU Exchange Ceremony's Outreach Programme through video conferencing, Defence Minister Rajnath Singh, said, this will enable Agniveers to complete education in a timely manner and develop additional qualities and skills.
- Mr. Singh elaborated on the paradigm-shift, the Agnipath scheme is going to make in transforming the Armed Forces into a tech-savvy, well-equipped, and combat-ready unit to face future challenges.

MoD, MoE, MSDE and all three Services sign MoUs with various stakeholders to facilitate continued education of Agniveers

- The Ministry of Defence, the Ministry of Education, the Ministry of Skill Development and Entrepreneurship, and all three Services have signed MoUs with various stakeholders to facilitate the continued education of Agniveers while serving in the Armed Forces.

PM Modi emphasises on need for States' efforts for water conservation; Water Resources Ministers from all states take part in All-India Annual Conference on Water

JAL JEEVAN MISSION

- Prime Minister Narendra Modi has said Jal Jeevan Mission is a major development parameter of a state to provide water to every household.
- In our constitutional system, the subject of water comes under the control of the states and the states efforts for water

conservation will go a long way in achieving the collective goals of the country.

- The Prime Minister informed that the country is constructing 75 Amrit Sarovar in every district where in 25 thousand Amrit Sarovars have already been built so far.
- Prime Minister drew attention to the role of public and social organisations and civil societies and asked for their maximum participation in the campaigns related to water conservation.
- He said when the public is associated with a campaign, they also get to know the seriousness of the work.
- Due to this, a sense of ownership also comes in the public towards any scheme or campaign he added.
- The Prime Minister gave the example of Swachh Bharat Abhiyan and said, when people joined the Swachh Bharat Abhiyan, a consciousness was awakened in the public as well.
- He proposed that Gram Panchayats should lead the Jal Jeevan Mission, and after the work is completed, they should also certify that sufficient and clean water has been made available.
- He also highlighted the 'Per Drop More Crop' campaign that began under the Prime Minister Agricultural Irrigation Scheme and informed that more than

70 lakh hectares of land in the country have been brought under micro-irrigation so far.

- Throwing light on the need to increase forest cover in the state for water conservation, the Prime Minister called for coordinated efforts by the Ministry of Environment and the Ministry of Water.
- In his concluding remark, Prime Minister said by making the Namami Gange Mission a template, other states can also start similar campaigns for the conservation of rivers.
- Ministers of Water Resources from all states attended the 1st All India Annual State Ministers' Conference on Water organised by Jal Shakti Ministry. The theme of this conference is Water Vision @ 2047.

Union Government approves National Green Hydrogen Mission

- The government has approved the National Green Hydrogen Mission with an initial outlay of 19,744 crore rupees.

Aim:

- To make India a Global Hub for production, utilisation and export of Green Hydrogen.
- Of the Rs 19,744 crore outlay, 17,490 crore for Strategic Interventions for Green Hydrogen Transition Programme (SIGHT) programme.

- The ministry of new and renewable energy (MNRE) will also formulate the scheme guidelines for implementation of the respective components.

Supreme Court Upholds Demonetisation

Context:

- The Supreme Court upheld the government's decision to demonetise currency notes of Rs 500 & Rs 1,000 by a 4:1 majority.

Background:

- On November 8, 2016, the PM of India announced that the two notes would no more be legal tender, with immediate effect.
 - Introduced new notes of Rs 2,000 and Rs. 500 for public circulation.

- Two primary reasons: to curb fake currency notes and reduce black money stored as cash.

- Though supported by many, 58 petitions have been filed in the SC challenging various aspects.
- The petitioners accused that Section 26(2) of RBI Act, 1934, was not followed: On the recommendation of the [RBI] Central Board, the Central Government may, by notification in the Gazette of India, declare that any series of bank notes of any denomination shall cease to be legal tender.
- The court was to consider whether the recommendation for the policy came from the government or the RBI.

Arguments for and against demonetisation presented in the SC:

Against (by petitioners)	For (by RBI and Government)
<ul style="list-style-type: none"> • As per Section 26(2), the recommendation should have emanated from the RBI. • In this case, the government had advised the central bank, following which it made the recommendation. • Earlier governments had demonetised currency (in 1946 and 1978), by way of a law made by Parliament. 	<ul style="list-style-type: none"> • The said Section does not talk about the process of initiation. • The quorum as determined by RBI General Regulations, 1949, was met for the Central Board meeting. • Though consultations with the RBI began in Feb 2016, the process was kept confidential. • The RBI had not agreed to the previous demonetisation decisions, but the earlier governments made the law.

Centre clears ₹ 19, 744 Crore Green Hydrogen Mission

Context:

- Union Cabinet has approved the National Green Hydrogen Mission, which is aimed at making India the global hub for the production of green hydrogen

Expected Mission Outcomes:

- Development of Green Hydrogen Production Capacity of at least 5 MMT (Million Metric Tonne) per annum
- Renewable energy capacity addition of about 125 GW in the country by 2030
- Over 8 lakh crores in total investments
- Creation of over 6 lakh jobs by 2030
- Saving over 1 lakh crore in fossil fuel import
- Reduction in about 50 MMT of annual greenhouse gas emissions by 2030

Components of the Mission:

- SIGHT (Strategic Interventions for Green Hydrogen Transition Programme) under this, two financial incentive mechanisms have been created:
 - Targeting domestic manufacturing of electrolyzers
 - Production of green hydrogen

Strategic Hydrogen Innovation Partnership (SHIP):

- Under this Public-private partnership framework for R&D will be facilitated under the mission.

Green Hydrogen Hubs:

- Regions capable of supporting large-scale production and/or utilization of hydrogen will be identified and developed as Green Hydrogen Hubs

Policy Framework:

- An enabling policy framework will be developed to support the establishment of the green hydrogen ecosystem.
- Standards and regulations framework will be also developed
- A coordinated skill development programme will also be undertaken
- Support pilot projects in emerging end-use sectors and production pathways

India's status for Green Hydrogen:

- India has just begun to generate green hydrogen with the objective of raising non-fossil energy capacity to 500 gigawatts by 2030.
- Oil India Limited (OIL) recently commissioned India's first 99.99% pure green hydrogen plant in eastern Assam's Jorhat
- NTPC (in Kawas, Surat) has

started India's 1st Green Hydrogen Blending operation in Piped Natural gas (PNG) Network.

- Petroleum and Natural Gas Regulatory Board (PNGRB) has given approval for a 5% blending of green hydrogen with PNG (later to be scaled to 20%)
- Pune Municipal Corporation (PMC) has collaborated with business management consultant The Green Billions (TGBL) to manage its waste and generate it into useable green hydrogen (under the waste-to-hydrogen project)
- Strategic Clean Energy Partnership (SCEP) to mobilise finance and speed up green energy development

Benefits of the Mission:

- Creation of export opportunities for Green Hydrogen and its derivatives
- Decarbonization of Industrial, mobility and energy sectors
- Reduction in dependence on imported fossil fuels and feedstock
- Development of indigenous manufacturing capabilities
- Creation of employment opportunities
- Development of cutting-edge technologies

About the Mission:

- National Hydrogen Mission was launched on August 15,

2021, with a view to cutting down carbon emissions and increasing the use of renewable sources of energy.

Nodal Agency:

- The Ministry of New and Renewable Energy (MNRE) will formulate the scheme guidelines for implementation.
- All concerned ministries, departments, agencies and institutions of the Central and State Governments will undertake focused and coordinated steps

ONE NATION-ONE STANDARD

Context:

- The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, is working on a new industrial policy.
- This will be the third industrial policy (after 1956 and 1991), which is likely to replace the 1991 policy, which was prepared against the backdrop of the balance of payment crisis.

Objectives of the New Industrial Policy:

- In order to address issues and challenges of the industry, the policy has identified the following objectives -
 - Focus on competitiveness and capability;
 - Economic integration and moving up the global value chain;

- Promoting India as an attractive investment destination;
- Nurturing innovation and entrepreneurship; and
- Achieving global scale and standards.

The proposals of the New Industrial Policy:

- It seeks to achieve -
 - One Nation-One Standard,
 - Promote startups in every district,
 - Create startup innovation zones at the level of urban local bodies,
 - Formulation of a national capacity development program, and
 - Incentivise Indian speciality products by creating premium international brands.
- To increase financing sources, promote the Made in India brand, enhance local value addition and the country's credibility as a source of quality products.
- It has suggested various ways for wider access to finance for the industry such as setting up -
 - A development finance institution to provide finance at competitive rates and
 - Considering using some part of forex reserves for such funding.
- An integrated investment promotion strategy involving district, state, national and international market synergies.

- Creating a national digital grid, developing a robust data protection regime, setting up a technology fund, and creating a task force to continuously identify skill gaps.
- Strengthening of the export finance systems for enhancing export competitiveness.

Other suggestions in the proposed policy:

- Providing performance-based loans and incentives for innovation and green growth;
- Leveraging fintech;
- Encouraging MSMEs to choose the corporate bond market;
- Accepting intellectual property rights as collaterals for loans;
- Enabling supply chain financing;
- Encouraging microfinance institutions to form cooperative groups and finance micro-enterprises at affordable rates.
- Rolling out social security schemes for women workers
- Inclusion of labour-intensive industries under the production-linked incentive scheme.

Ethylene Glycol (Quality Control) Order, 2022

Context:

- The Department of Chemicals and Petrochemicals under the Ministry of Chemicals and Fertilizers issued a gazette notification titled Ethylene Glycol (Quality Control) Order, 2022

- Recently, Uzbekistan alleged 18 child deaths in Samarkand from the consumption of medicinal syrup manufactured by an Indian drugmaker (Marion Bio-tech's cough syrup DoK 1 Max).
- The syrup is manufactured containing ethylene glycol.
- Previously, In October, four sub-standard India-made products typically used to treat cough symptoms had caused the deaths of 66 children in Gambia (Africa)

Under 'Conformity to standards and compulsory use of the standard mark', the order stated:

- Certification and enforcement authority: In respect of specific goods or articles, the Bureau of Indian Standards shall be the certifying and enforcing authority.
- Penalty for contravention: Any person who contravenes the provisions of this Order shall be punishable under the provisions of the said Act.

About Ethylene glycol:

- Ethylene glycol is a useful industrial compound found in many consumer products.
- Examples include antifreeze, hydraulic brake fluids, some stamp pad inks, ballpoint pens, solvents, paints, plastics, films, and cosmetics. It can also be a pharmaceutical vehicle.

Why is ethylene glycol toxic to humans?

- Ethylene glycol's toxicity mainly

results from the accumulation of its toxic metabolites.

- Ethylene glycol is a central nervous system (CNS) depressant that produces acute effects similar to those of ethanol. (More in the Infographic below).

How can Cough syrups kill children?

- If glycerine, a key ingredient in cough syrup, is replaced with toxic industrial solvents diethylene glycol (DEG) or Ethylene Glycol (EG), the cough syrups become toxic.

How can they end up in cough syrup?

- DEG and EG are cheap, so they are sometimes used illegally, as a substitute solvent.

- If consumed in high doses, they can cause kidney failure

Decadal Census - Delayed Again

Context:

- As per the Registrar General of India (RGI), the Census enumeration scheduled to take place in 2021 has been further pushed to 2024-25 until further orders due to the ongoing COVID pandemic.
 - RGI has also extended the deadline for freezing administrative boundaries to June 30, 2023.
 - As per the norms, the census can be conducted only 3 months after the freezing of

Decadal Census Process

The Census process involves the following steps: Preparatory Work, Enumeration, Data Processing, Evaluation of Results, Analysis of Results, and Dissemination of Results.

States provide information on changes in the number of administrative units like town, district, etc to RGI.

Phase 1: House Listing and Housing Census: This phase will also include enumeration of National Population Register (NPR).
Phase 2: Each person is enumerated and her/his individual particulars (Age, Religion etc.) are noted.

What is RGI?
 Registrar General and Census Commissioner of India, founded in 1961, comes under the Ministry of Home Affairs, for arranging, conducting and analysing the results of the demographic surveys of India including Census of India and Linguistic Survey of India.
 As per the RGI, total number of districts in India has gone up from 640 (2011) to 736 (2021)

CENSUS	Vs	NPR
Census Act, 1948	Legal Origin	Citizenship Rules, 2003
Assesment, Policy and Planning	Purpose	Creating NRIC
Literacy, Migration, Employment, Income	Information	Birth details of parents and documents
Anonymous and Confidential	Data Privacy	Not Confidential
No punishment for non-disclosure	Punishment	Punishment for non-disclosure

What is NPR?
 NPR is a register of all usual residents of the country regardless of whether they are citizens/non-citizens of India.
 It was 1st compiled in 2010 under the provision of Citizenship Act 1995 and Rules, 2003.

Visit Insights IAS Daily CA for detailed News

boundary limits of administrative units (e.g., districts, sub-districts, tehsils etc.)

- o The origin of the Census in India goes back to the colonial exercise of 1881

Article 176 of the Indian Constitution

Context:

- The governor-government tussle in Tamil Nadu erupted in the assembly after the CM objected to the Governor skipping portions of his customary speech to the state legislature and tabled a resolution against him, prompting the latter to leave the House.

Article 176 (Special address by the Governor):

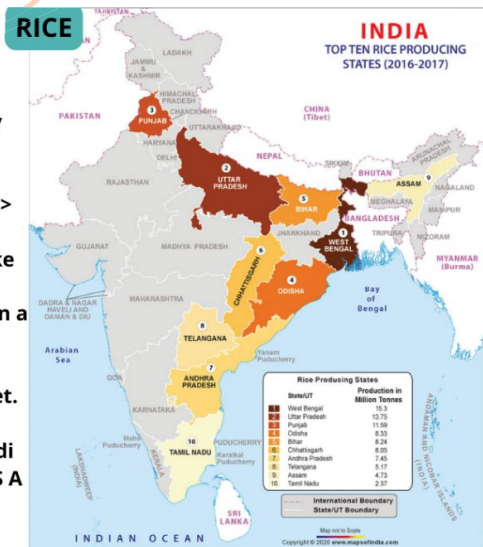
- The Governor shall address the Legislative Assembly or both Houses (in the case of a State having a Legislative Council), assembled together at the
 - o Commencement of the first session after each general election to the Legislative Assembly and
 - o Commencement of the first session of each year
- Provision shall be made by the rules regulating the procedure of the House or either House for the allotment of time for discussion of the matters referred to in such address.
- **Article 87:** Special address by the President

Basmati Rice

Context:

- For the first time in the country, the Food Safety and Standards Authority of India (FSSAI) has specified identity standards for basmati rice (including brown basmati, milled basmati, par-boiled brown basmati, and milled parboiled basmati)
- Food Safety and Standards (Food Products Standards and Food Additives) First Amendment Regulations, 2023 are aimed at establishing fair practices in the trade of basmati rice and protecting consumer interest, both domestically and globally.
- These standards will be enforced from August 1
- Previously, there was an issue with the export standards of Basmati Rice from India leading to many EU countries putting restrictions on Indian Basmati Exports
- **Temperature :** 22 - 32°C (high humidity)
- **Rainfall :** Around 150 - 300 cm.
- **Soil Type :** Deep clayey and loamy soil.
- **Top Rice Producing States :** West Bengal > Punjab > Uttar Pradesh > Andhra Pradesh > Bihar.
- **Aus, Aman and Boro :** In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year.
- India is the leading exporter of Basmati Rice to the global

- **Temperature:** 22-32°C (high humidity)
- **Rainfall:** Around 150-300 cm.
- **Soil Type:** Deep clayey and loamy soil.
- **Top Rice Producing States:** West Bengal > Punjab > Uttar Pradesh > Andhra Pradesh > Bihar.
- **Aus, Aman and Boro:** In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year.
- **India is the leading exporter of Basmati Rice to the global market.**
- **Major Export Destinations for Basmati Rice (2021-22):** Iran, Saudi Arab, Iraq, United Arab Emirates, U S A and Yemen Republic.



market and accounts for 2 / 3rd of supply.

- **Major Export Destinations for Basmati Rice (2021 - 22) :** Iran, Saudi Arab, Iraq, United Arab Emirates, USA & Yemen Republic.

Bureau of Energy Efficiency (BEE)

Context:

- Ceiling fans have come under the ambit of mandatory star labelling from January 1, as per the revised Bureau of Energy Efficiency (BEE) norms.
 - As high energy-efficient five-star rated fans will require new imported motors and electronic components, they would get costlier by 8% to 20%

What is Star-labelling?

- Star labelling denotes energy savings of a minimum of 30% for one-star rated fans to over 50% for five-star rated fans.

- Under the new mandate, manufacturers would have to display the star ratings on their fans.
- The star rating is dependent on service value (air delivery in cubic metres per minute divided by energy consumption in wattage in the case of fans).

Background:

- Star rating was introduced under the Standards and Labelling Program (in 2006) for the visual representation of an appliance's efficiency.
- Standards and Labelling Program comes under Energy Conservation Act, 2001.
- It is mandatory for many appliances to have star ratings such as Frost Free and Direct Cool Refrigerators, LED lamps, Rooms AC, Color TV, Refrigerators, TFL etc.

About BIS:

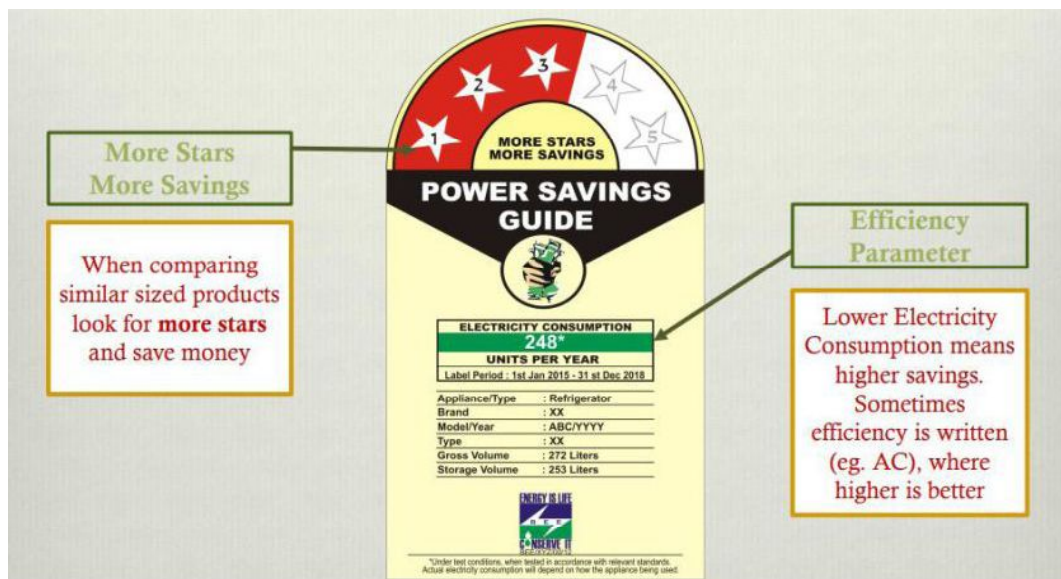
- The Bureau of Indian Standards is the National Standards Body

of India under the Department of Consumer Affairs, Ministry of Consumer Affairs, Food & Public Distribution, Government of India.

- It is established by the Bureau of Indian Standards Act, 2016 which came into effect on 12 October 2017.

Related News:

- The Bureau of Indian Standards (BIS) has announced terms for USB Type C receptacles, plugs & cables as the country moves to have a common charging port for smartphones and other electronic devices by March 2025
- The standards match international ones and provide requirements for USB Type-C ports, plugs and cables used in smartphones, laptops, notebooks and other devices.
- India mandated device manufacturers to ensure that their products have a USB Type-C charging port by March 2025.



VI. Public Awareness and General Administration

- Ministry of Electronics (meity) and it becomes Nodal Ministry for online Gaming.
- Appointment of meity as Central regulatory authority will provide clarity and certainty to investors, industry and consumers.
- The decision is in line with governments initiative to push for growth of animation, Visual effects, gaming and comics sector and making India a global hub for Online gaming.
- In addition, Ministry of youth Affairs and sports has been appointed to regulate E - Sports as part of multiple sports events.
- Centre identifies E - Sports as a competitive sport involving participants contesting in terms of both physical and mental, abilities, albeit in a digital environment.
- Election Commission of India Ready to Pilot Remote voting for Domestic Migrants.
- ECI has developed a prototype for a multi - constituency Remote Electronic Voting (RVM) machine which would enable remote voting by migrant voters.
- Voter turnout in General Election 2019 was 67.4% indicating over 30 Crore electors not exercising their franchise.
- Apart from urban and youth apathy, missing vote of domestic migrant is seen as a key factor behind stagnating voter turnout.
- RVM's are stand alone non - networked system that will be able to cater to multiple Constituencies.
- It will enable the migrants in August 2022 to vote in their home constituencies from a remote location.
- As per 2011 Census, there are nearly 45.36 Crore migrants in India amounting to approximately 37% of Country's Population.

Challenges in implementation

Administrative :

- Enumerating remote voters declaration, maintaining secrecy of voting location, provision of booth setup and personnel, implementation of moral code of conduct etc.

Legal :

- Several laws need relevant amendments (RPA 1950, 1951, conduct of election Rules 1961) process of defining migrant worker and Remote voting etc.

Technological

- Method of remote voting and its counting, familiarity of the voters.

Significance of Remote Voting

- Will improve voter turnout and ensure participative elections.
- Can lead to Social Transformation of migrants by enabling them to connect with their roots.

Draft UGC (Setting up and Operation of campuses of Foreign Higher Educational Institutions (FHEIS) in India) Regulations, 2023 Released

- University Grants Commission (UGC) has unveiled draft norms to allow FHEIs to set up campuses in India for internationalising India's higher education as envisaged in National Education Policy (NEP), 2020.

Key features

- **Approval:** UGC will grant in-principle approval to FHEIs to set up campuses in India.
- **Eligibility:** A foreign university with a rank among the top 500 global rankings or a foreign educational institution of repute in the home jurisdiction.
- **Mode of teaching:** Courses offered should be taught in a physical mode and online classes are not allowed.

- **Autonomy in FHEIs:** Determining fees, and the freedom to choose faculty from both India and abroad.
- **Protection to students:** FHEIs are mandated to take UGC's prior approval to discontinue any course/programme or close the campus and to establish a students' grievances redressal mechanism.
- **Securing India's national**

interest: FEHIs shall not offer any such programme or course which jeopardises the national interest of India or the standards of higher education in India.

- **Working of finances:** Cross border movement of funds under Foreign Exchange Management Act, 1999.
- Equivalence with degree awarded by foreign HEI in their country of origin

Significance

- Enable Indian students to obtain foreign qualifications at affordable cost.
- Reduction in foreign exchange outflow.
- Control in brain drain.
- Stimulation to R & D in India.
- Element of competition in higher education sector.
- Make India an attractive global study destination.

VII. Welfare Oriented Schemes and their Utility Problem in Public Delivery System (Central Government and State Government)

1. Central Government

- Sixth Common Review mission panel proposes Mahatma Gandhi National Rural Employment Guarantee Scheme Tweaks.

at site along - with geotagged photograph has not been implemented.

Key recommendations

Key Issues highlighted

- Delay in payment of both material and wage component.
- Revolving fund of Rs. 200 for material component is insufficient.
- Admissible Administrative expenditures (6%) are insufficient to meet man power requirement for scheme.
- National mobile monitoring software which permits Real - time attendance of workers

- Examine scope of reverse convergence implemented by line departments.
- Enhance size of revolving fund for timely and regular flow of funds for material component.
- A standard operative procedure for streamlining payment for material cost.
- Institutionalise social Audit in letter and spirit.
- MGNREGS under MGNREG Act

2005, guarantees 100 (extendable upto 150 days) of wage employment in financial year to a rural household whose adult members volunteer to do unskilled manual work.

- Permissible works include land development and soil conservation water harvesting, etc. on both community & private lands.
- Wage and material costs is mandated to be in proportion of 60 : 40
- Centre owes ₹ 4700 Crore of wages of 18 States and 545 Crore worth material costs to 19 states.

Case for reforming collegium : Suggestions by Law Minister

Context:

- The Union Minister for Law and Justice has written to the CJI suggesting that a nominee of the government should be included in the collegium that makes recommendations for the appointment of judges.

Background:

- The suggestion to the CJI comes in the backdrop of -
 - An ongoing tussle between the government and the judiciary on the issue of the appointment of judges.
 - A Memorandum of Procedure (MoP) is pending finalisation.

What is the MOP?

- It is the official playbook agreed upon by the government and the judiciary and governs the collegium system of appointing judges.
- Since the collegium system evolved through a series of SC rulings (First (1981), Second (1993) and Third (1998) Judges Cases), the MoP is the bedrock of the process of appointments.
- The MoP was sought to be renegotiated after the SC struck down (4:1) 2015 the National Judicial Appointments Commission (NJAC).

- Draft MoPs, which include eligibility criteria, a new secretariat and a mechanism to deal with complaints against proposed candidates, were exchanged during 2015-17.

The bone of contention in the MoP and SC's take on the appointment process:

- The insertion of a "national security" clause that may prevent an appointment was a major point of contention.
- The SC in a 2017 judgement (a suo motu contempt proceeding against Justice C S Karnan, then a judge of the Calcutta HC) highlights,
 - The need to revisit the process of selection and appointment of judges to the constitutional courts.
 - The necessity to establish an effective legal regime to deal with situations where the conduct of a constitutional court judge necessitates remedial actions (other than impeachment).
- The SC has initiated a contempt case against the government for not adhering to the timelines set out in the MoP and court rulings.

Government's stand:

- The MoP is under finalisation by the Government in consultation with the SC Collegium.

- The Parliamentary Standing Committee on Law and Justice voiced concern, given that the MoP had been pending for more than seven years.

What does the Law Minister's suggestion imply?

- Government representatives should be a part of the SC (CJI and four senior-most judges of the apex court) and HC (Chief Justice and two senior-most judges of a particular HC) Collegiums.
- A departure from the NJAC

The opposition to the suggestion:

- This remedy is a poison pill for an independent judiciary.
- A representative of the Government alone attacks not only the independence of the judiciary but also the competitive balance between the ruling party and the opposition.

NCERT Notifies India's First National Assessment Regulator

Context:

- National Council for Education Research and Training (NCERT) has notified India's first national assessment regulator, PARAKH

About PARAKH:

- PARAKH has been launched as part of the implementation of the National Education Policy (NEP)-2020 that envisaged a standard-setting body:

- To advise school boards regarding new assessment patterns & the latest research, & promote collaborations between them
- To facilitate students for self-assessment of learning outcomes
- To remove disparities in the score of students enrolled with different boards

About NEP 2020

- The NEP 2020 intends to boost spending on education by enhancing the education budget to a level of 6% of the GDP.
- It has emphasised the use of the mother tongue or local language as the medium of instruction till Class 5 while recommending its continuance till Class 8 and beyond.

PM launches Aspirational Block Programme

- PM Modi has launched the Aspirational Block Programme at the second National Conference of Chief Secretaries in New Delhi.

Aim:

- To develop backward districts
- This programme is on the lines of the Aspirational District Programme (launched in 2018).
- The programme will cover 500 districts across 31 states and Union Territories initially.
- Over half of these blocks are in 6 states - UP (68 blocks), Bihar (61), MP (42), Jharkhand (34), Odisha (29) and WB (29).

Govt introduces new system to measure and grade performance of hospitals

- The National Health Authority (NHA) has introduced a new system to measure and grade hospital performance under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PMJAY)

Aim:

- To shift the focus of measuring the performance of hospitals from the volume of services provided to the value of health-

care services

- The Health Ministry announced that the new model with the reward system will consequently reduce the effects of the disease in the population in the long term

About

- The National Health Authority (NHA) has introduced a new system to measure and grade hospital performance under the flagship scheme Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY).
- The new model aims at shifting the focus of measuring the performance of hospitals from the volume of services provided to the value of healthcare services.
- Here, the payment will be outcome-based and providers will be rewarded according to the quality of the treatment delivered.
- The Health Ministry said that the new model with the reward system will consequently reduce the effects of the disease in the population in the long term.

2. State Government

Village Defence Committees (VDCs)

- Recently, Lt Governor of Jammu & Kashmir agreed to set up VDCs.
- First formed in the mid 1990s in Doda district, VDCs are a force multiplier against militant

attacks.

- It involves residents of remote hilly villages who are trained and given weapons to defend themselves.
- They function under the direction of the SP/SSP of the

district concerned with ex-servicemen, ex-policemen & able-bodied youth as members on a voluntary basis.

- VDCs are renamed as Village Defence Guards (VDGs) with increased payment

National Centre for Good Governance (NCGG)

- 1st capacity building programme for civil servants of Arunachal Pradesh on good governance started at NCGG, Mussoorie campus.
- NCGG is an autonomous institute under Department of Administrative Reforms and Public Grievances with its headquarters at New Delhi.
- Institute is involved in conducting training and research programmes for improved public service delivery and good governance models.
- It provides a platform for exchange of ideas between civil servants of different countries and also helps in providing opportunities to collaborate and implement new ideas and concepts.

Horizontal Reservation

- Uttarakhand Governor gave not to 30% horizontal reservation in government jobs for Uttarakhand women.
- Horizontal reservation refers to equal opportunity provided to categories of beneficiaries such as women, transgender community, and differently abled, cutting through vertical categories.
 - It is to be applied separately across each vertical category.
 - Here, 30% reservation for women will be independently applied in each category (SCs, STs, OBCs,

Unreserved). Example Reservation under Article 15(3).

- Whereas, Vertical Reservation is reservation for Scheduled Castes, Scheduled Tribes, and Other Backward Classes.
 - It applies separately for each of groups specified under law.
 - Example - Reservation under Article 16(4).

Tripura signs agreement with ADB for power project

- Tripura government has signed an agreement with the Asian Development Bank (ADB) for a power project worth Rs 2,275 crore.
- Of the total cost of the project, the state government would spend an amount of Rs 455 crore.
- The project include the replacement of Rokhia's existing 63 MW (3X21 MW) Open Cycle power project with a 120 MW Combined Cycle power project.
- The project would also boost the efficiency of the Gumti hydroelectric power plant in Gomati district.

Government forms Committee to protect Ladakh culture, language & employment

- The government of India has constituted 17 member, High Powered Committee (HPC) under the Chairmanship of Minister of State for Home Affairs Nityanand Rai.

Reason:

- To discuss measures to protect unique culture, language and employment of Ladakh.
- The committee includes Ladakh LG, RK Mathur; MP Jamyang Tsering Namgyal;
- Chairmans of Leh and Kargil Hill councils, representatives of Apex Body Leh, Kargil Democratic Alliance and nominee officials of Home ministry.
- Ladakh Lieutenant Governor RK Mathur, MP Jamyang Tsering Namgyal, Chairmans of Leh and Kargil Hill councils, representatives of Apex Body Leh, Kargil Democratic Alliance and nominee officials of Home ministry are among the members in High powered committee.
- The Committee will discuss the protections to Culture and Language considering the geographical location and strategic importance of Ladakh.
- It will also discuss the protections to land and employment for the people, inclusive development, employment generation, and measures related to empowerment of Ladakh Autonomous Hill Development Councils of Leh and Kargil.

'SMART' program for Ayurveda professionals to boost R&D in Ayurveda in the country

About:

- The National Commission for Indian System of Medicine

(NCISM) and the Central Council for Research in Ayurvedic Sciences (CCRAS), the two prominent institutions under the Ministry of Ayush, Government of India for regulating medical education and conducting scientific research respectively, have launched 'SMART' (Scope for Mainstreaming Ayurveda Research in Teaching Professionals) program aimed to boost scientific research in priority healthcare research areas through Ayurveda colleges and hospitals.

- The program was launched by Vaidya Jayant Deopujari, Chairman, NCISM and Prof. Rabinarayan Acharya, Director General, CCRAS in the presence of Prof. B. S. Prasad, President of Board of Ayurveda, NCISM and other senior officials.
- While highlighting key points of 'SMART', Prof. Vaidya Rabinarayan Acharya, Director General, CCRAS said, "The proposed initiative is conceptualised with an objective to identify, support and promote innovative research ideas in healthcare research areas including Osteoarthritis, Iron Deficiency Anaemia, Chronic Bronchitis, Dyslipidemia, Rheumatoid Arthritis, Obesity, Diabetes Mellitus, Psoriasis, Generalised Anxiety Disorder, Non-alcoholic fatty liver disease (NAFLD)".
- He also added, "The eligible Ayurveda academic institutions may apply by 10 January, 2023.

All details regarding contact information, eligibility criteria and application process has been shared to all recognized academic institutions and hospitals through NCISM".

Health network

- "The large network of Ayurveda colleges and hospitals across the country is an asset for the country in terms of its healthcare needs.
- This network has not only been offering healthcare services in hardest times, but it also has contributed significantly in terms of healthcare research in the country.
- The 'SMART' program will certainly motivate teachers for taking up projects in designated areas of healthcare research and create a large database."

Foreign universities will need UGC's nod to set up campuses in India

- University Grants Commission's (UGC) Chairman M Jagadesh Kumar said that foreign universities can set up their campuses in India but they will need the commissions's nod to set up before doing so.
- The initial approval will be for 10 years.
- In the draft regulations for 'Setting up and Operation of Campuses of Foreign Higher Educational Institutions in India', UGC said that foreign varsities with campuses in the

country will only be allowed to offer full-time programmes in physical mode and not online or distance learning.

- These universities will have the freedom to devise their own admission process and fee structure.
- The foreign varsities will also have to ensure that the quality of education imparted at their Indian campuses is on par with their main campus.
- On matters related to funds and funding, he said that cross-border movement of funds will be according to the Foreign Exchange Management Act.

Odisha: Talcher fertilizer plant to be functional by Oct 2024, says Mandaviya

Talcher (Odisha) [India], January 7 (ANI):

- Fertilizer projects in Odisha's Talcher will be operational by October 2024 and once launched will be India's largest and first coal gasification plant, said Union chemicals and fertilizers Mansukh Mandaviya
- Talcher Fertilizers Ltd has been mandated by the government to revive the erstwhile Talcher plant of FCIL by setting up a new coal gasification-based urea plant with an installed capacity of 12.7 lakh tonne per annum (LMTPA)
- Coal gasification plants are strategically important as coal prices are non-volatile and

domestic coal is abundantly available.

- India's agriculture sector requires fertilizers for the sector to flourish and the country is currently dependent on imports and domestic production of fertilizers.
- "Under the visionary leadership of Prime Minister, India set out the target to become *aatmanirbhar* in this field as well. India's domestic production of urea will see a major boost with five new fertilizer plants coming up in the country.
- Four of these plants are already functional while Talcher is a coal gasification plant which will become functional by October 2024," said Mandaviya while reviewing the progress of the Talcher unit on-site in the presence of Union minister Dharmendra Pradhan.
- Revival of the FCIL Talcher unit is being undertaken by Talcher Fertilizers Ltd. (TFL), a company promoted by GAIL (India) Ltd. (GAIL), Rashtriya Chemicals and Fertilizers Ltd. (RCF), Coal India Ltd. (CIL), and Fertilizers Corporation of India Ltd. (FCIL).
- "Government is taking significant steps in making country *Aatmanirbhar*. The fertilizer is sector is one of them.
- By utilizing new technological interventions like coal gasification in our fertilizer plants and using our own *sampada* (resources) like coal, India is

moving towards self-sufficiency in the Urea sector.

- With this vision, the Government of India has been reviewing the progress of Talcher unit which will be India's largest and first coal gasification urea plant," Mandaviya said, according to a government release.
- Mandaviya also said that the project will be a significant step towards ensuring the energy security of the country by harnessing the vast coal reserves of the country in a manner that is more environmentally friendly than direct-fired coal projects.
- The start of all five plants would add 63.5 LMTPA indigenous urea production capacity in the country.
- Besides Talcher, four other operational plants are at Ramagundam, Gorakhpur, Sindri, and Barauni.

Kerala becomes country's first fully digital banking state

- Kerala Chief Minister, Pinarayi Vijayan has declared Kerala as the first state in the country to go fully digital in its banking service.
- It was possible due to social interventions through local self-government institutions along with infrastructure development and technological advances in the banking sector.
- He has also announced that the

ambitious Kerala Fibre Optic Network (KFON) project of the state government will reduce the digital divide.

- This achievement was possible due to social interventions through local self-government institutions along with infrastructure development and technological advances in the banking sector.
- "In order to make the digital services universally accessible, we need to ensure that the digital divide is completely eliminated,"
- The Chief Minister also said the ambitious Kerala Fibre Optic Network (K-FON) project of the state government, which was almost 90 per cent completed, will reduce the digital divide.
- "The K-FON will ensure internet facility to everyone in the state and 17,155 km-long optic fibre cable network has been laid.
- Once the project gets completed, internet will be available to everyone in the state either for a cheaper price or for free-of-cost,"
- On the occasion, the Chief Minister also pointed out that Kerala received three 'Digital India' awards today for the advancement in the digital sector.
- "We received silver medal for Ksheerashree portal, platinum award for Digital Workforce Management System and gold medal for District Administra-

tion of Kottayam," Vijayan said.

- He also warned the people to remain vigilant about the rise in cyber crimes that may increase in the banking sector with its advancement.
- "The government has created an Economic Offences Wing in the state police to tackle such cyber crimes," he added.

High - Powered Committee For Ladakh

Context:

- Recently a high-powered committee has been formed in the Union Territory of Ladakh.

Need for the committee:

- There has been increasing demand for the inclusion of Ladakh under the 6th Schedule.
- Civil society groups in Ladakh have been demanding the protection of land, resources and employment for the past three years after the special status of the erstwhile State of Jammu and Kashmir under Article 370.
- The committee will discuss measures to protect the region's unique culture and language taking into consideration its geographical location and strategic importance; ensure the protection of land and employment for the people of Ladakh; strategies for inclusive development and discuss issues related to the empowerment of the Ladakh Autonomous Hill District Councils of Leh and Kargil.

Sixth Schedule

- The sixth schedule under Article 244 of the Constitution protects the autonomy of tribal populations through the creation of autonomous development councils which can frame laws on land, public health and agriculture.
- As of now, ten autonomous councils exist in Assam, Meghalaya, Tripura and Mizoram.

NCST Recommendation:

- The National Commission for Scheduled Tribes (NCST) has recommended that the Union Territory (UT) of Ladakh be included in the Sixth Schedule of the Constitution.

Reasons behind the demand:

- It is estimated that more than 90% of Ladakh's population is tribal.
- The primary Scheduled Tribes (STs) in Ladakh are Balti Bada, Bot (or Boto), Brokpa (or Drokpa, Dard, Shin), Changpa, Garra, Mon and Purigpa.
- The Ladakh region has several distinct cultural heritages by communities such as Drokpa, Balti and Changpa, among others, which need to be preserved and promoted.

What is the government's stand?

- Not keen to give any special status to Ladakh, the MHA informed a parliamentary standing committee recently that the objective for inclusion of the tribal population under the

sixth schedule is to ensure their overall socio-economic development, which, the UT administration has already been taking care of and that sufficient funds are being provided to Ladakh to meet its overall developmental requirements.

- The Ladakh administration recently increased the reservation for the Scheduled Tribes in direct recruitment from 10% to 45% which will significantly help the tribal population in their development.

SC Dismisses PIL Challenging Committees Up by Gujarat and Uttarakhand For Uniform Civil Code

Context:

- The SC refused to entertain a PIL challenging the decisions of the Uttarakhand and Gujarat governments to constitute committees for implementing Uniform Civil Code (UCC) in their respective states.

Background:

- The promulgation of the UCC emerges as a positive obligation and not duty of the State under Article 44 of the Constitution in the Directive Principles of State Policy (DPSP).
- Goa's Portuguese Civil Code of 1867 is an example of a common family law prevalent in a State.
- Both the Uttarakhand and Gujarat governments have

constituted committees to look into the issue of implementation of UCC.

Governor - CM Rift in TN

Context:

- There has been a dispute between the Tamil Nadu Governor and the state government recently.

Background:

- The Governor, while delivering his customary address to the House, omitted certain paragraphs from the text prepared by the State government.
- He left out the references to national and regional stalwarts and the phrase "Dravidian model of governance".
- He skipped describing Tamil Nadu as "a haven of peace" - in terms of the law-and-order situation, its ability to attract foreign investments, etc.
- The CM moved a motion to take on record only the transcript distributed to legislators, prompting the Governor to walk out of the House.
- The state government has sought the President's intervention to ensure that the Governor acts as per Article 163 (1) [Council of Ministers to aid and advise Governor] of the Constitution.

What triggered the tussle?

- Since the Governor took office the ruling party (DMK) has demanded his resignation for

failing to forward a Bill to the President.

- The Assembly passed a Bill to exempt government seats in undergraduate medical and dental courses from the National Eligibility-cum-Entrance Test (NEET).
- Even though the Bill is presently pending Presidential assent, other Bills are awaiting the Governor's approval

Similar instances in the past of Governor- State government tussles:

- In Kerala, at least three Governors had skipped sections during their Assembly address since January 1969.
- In 1965, the then West Bengal Governor, annoyed by the Opposition's interruptions, walked out of the Assembly without addressing the House.
- In 1960, then-President Rajendra Prasad made certain corrections in the printed copies of the address.
- In 1988, then President R. Venkataraman, changed (in his address) the expression "My government" to "The government" as the original practice was a part of the British legacy.
- Former President Pranab Mukherjee (2012- 2017), did not shy away from making suggestions at the appropriate for a.

Conclusion:

- According to the British constitutional law expert Ivor Jen-

nings, the Governor can correct errors and suggest changes or revisions to the address, but the Cabinet has the final say.

National clean air programme

Context:

- Four years since the Centre launched the National Clean Air Campaign (NCAP), analysts found that progress has been slow and pollution has only incrementally reduced in most cities.

The Launch:

- In January 2019, the Ministry of Environment, Forest and Climate Change (MoEFCC) launched the National Clean Air Programme (NCAP) to prepare clean air action plans.

The mandate of the National Clean Air Programme (NCAP) -

- The goal of NCAP (annual average ambient air quality standards at all locations in the country): 20%–30% reduction of PM2.5 and PM10 concentration by taking 2017 as the base year for the comparison of concentration.
- Under NCAP, 132 non-attainment cities have been identified across the country based on the Air Quality data from 2014-2018.
- Preparation of the city-specific action plans including measures to strengthen the monitoring network, reduce

vehicular/industrial emissions, and increase public awareness.

- Implementation of the city-specific action plans to be regularly monitored by Committees at the Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee.

Objectives of NCAP

- To augment and evolve effective and proficient ambient air quality monitoring networks across the country for ensuring a comprehensive and reliable database
- To have efficient data dissemination and public outreach mechanism for timely measures for the prevention and mitigation of air pollution
- To have a feasible management plan for the prevention, control and abatement of air pollution.

Performance of National Clean Air Programme:

Positive

- **Monitoring station:** Out of the targeted 1500 manual monitoring stations to be installed across the country, 818 have been installed.
- **Region-specific programme:** city-specific action plan has been developed for all the major cities of India.
- For instance, Delhi, Mumbai etc.
 - 131 cities of the country have developed City Action Plans and Micro Action Plans

- **PRANA web portal:** The Portal for Regulation of Air Pollution in Non-Attainment Cities which provides all information related to various policies/programs/schemes/activities of the stakeholders along with the progress made towards improvement in air quality across the country.
- **Improvement:** There has been an overall improvement in Particulate Matter concentration in 95 cities including 20 cities conforming to the National Ambient Air Quality Standards in the year 2021-22 compared to 2017.

The issue facing NCAP:

- **Unsatisfactory performance:** The CSE in its national analysis of PM2.5 levels in cities for which data is available found that between 2019 and 2021, only 14 of 43 (NCAP) cities registered a 10% or more reduction in their PM2.5 level between 2019 and 2021.
 - On the other hand, out of 46 non-NCAP cities, 21 recorded significant improvement in their annual PM2.5 value with a 5% or more decline between 2019 and 2021.
 - There is hardly any difference between the performance of NCAP and non-NCAP cities between 2019 and 2021.
- **Funding issue:** For disbursing funds, the Central Pollution Control Board, which coordinates the programme, only con-

siders levels of PM10, the relatively larger, coarser particles.

- However, PM2.5, the smaller, more dangerous particles, aren't monitored as robustly in all cities, mostly due to the lack of equipment.
- **Compartmentalizing rural-urban areas:** The scheme focuses on air pollution mitigation within cities while ignoring rural air pollution thus compartmentalizing both.
 - But cities like Delhi are significantly affected by rural air pollution, hence making purely city-based efforts less ineffective.
- **Sluggish improvement:** The progress is even more sluggish in equipping all manual stations with PM2.5 monitoring, where only 261 stations have PM2.5 monitoring facilities.
- **Almost a quarter of NCAP cities with real-time monitoring doesn't meet the minimum data completeness requirement:** In 2021, 15 out of the 63 NCAP cities (24 per cent) did not meet the minimum data completeness requirement (60 days of valid 24-hour values in each quarter of the year).
- **In 2019, the number was lower:** only 16 per cent did not meet the requirement.
- **No carrying capacity studies:** None of the 132 non-attainment cities has completed their carrying capacity studies.
- Carrying capacity is the region's

ability to accumulate and disperse emissions while maintaining breathable air quality.

- In 93 cities, the study is either undergoing or at the MoU/proposal stage.

Conclusion

- It is important that NCAP be made legally binding on responsible authorities while setting interim (WHO interim targets) and long-term targets to achieve breathable air equivalent to WHO guideline levels over the next decade.
- Further, enhancing transparency in the allocation and utilisation of finances and tracking the indicators through publicly available information under the

PRANA web portal developed by CPCB can be a way forward.

Doctor Didis of Jharkhand

- Doctor Didis (or Pashu Sakhi) of around 1,000 women in all 24 districts of Jharkhand have been recruited since October 2013 for the last mile of livestock management

Values that can be learnt:

- **Social engagement and persuasion:** They advise farmers on health checks of their livestock, vaccinations, deworming, hygiene, breeding, feeding and management of animal waste.
- These women go door to door when called.

- **Collaboration:** Jharkhand Government (under its Jharkhand Opportunities for Harnessing Rural Growth (JOHAR)) and central government (under National Rural Livelihood Mission) together with World Bank

Capacity building of community resources:

- The pashu sakhis receive a 30-day training program (Introductory, Practical, and Higher) at three levels in seven-day instalments on how to care for poultry, goats, and pigs.

What is social capital?

- Social capital is a set of shared values or resources that allows individuals to work together in a group to effectively achieve a common purpose.

VIII. Geography-Geographical marks

Spititual Town Joshimath Battles a sinking feeling

- Reportedly, an expert panel set up by the Uttarakhand government found that ground subsidence has induced structural defects in Joshimath.

About the land Subsidence

- It is the gradual settling or sudden sinking of Earth's surface because of underground

material movement, a super imposed load or a combination of both.

- It can be caused by natural and human activities.
- It can damage buildings, sewer lines, storm drainages, bridges and highways etc. and cause accidents which can cost people lives.

Reason for land subsidence in Joshimath

- Unstable foundation of the town as it is situated in an old

landslide zone.

- Close proximity to major tectonic discontinuities.
- It is situated in the middle slopes of the hill bound by streams such as Kartmanasa and Dhaknala along with Dhau-liganga and Alaknanda rivers.
- Burgeoning Anthropogenic pressure, i.e. Building of dams, numerous homes, resorts ect. with football higher than its carrying capacity.

Heat waves in India

Context :

- A new report by the World Bank suggests India could soon become one of the first places in the world to experience heat waves that break the human survivability limit.
- India has witnessed a concurrent increase in meteorological droughts and heat waves over the last 60 years.

About Heatwaves

- A heatwaves is a period of abnormally high temperatures, more than the normal maximum temperature that usually occurs during the summer season.

About Human Survivability limit

- The Human Survivability limit refers to the rule of thumb, which states human can survive three minutes without air, three days without water, three weeks without food.

Negative effect of Heatwaves

On Indian Economy

- Analysis by McKinsey and company shows that lost labour from rising heat and humidity could put up to 4.5% of India's GDP.

On Food and Public Health

- A single temperature lapse in the journey can break the cold chain, spoiling fresh produce & weakening the potency of vaccines.

On Human Health

- It can alter human behaviour, the transmission of diseases, air quality, and critical social infrastructure such as energy transport, water.

Way forward to sustainability

- To mitigate climate change by reducing green house gas emission and minimising the rise in global mean temperature.
- New initiatives to create early warning and response systems and improved communication approaches.

BLACK CARBON AEROSOLS

Context:

- Black carbon aerosols have indirectly affected the mass gain of the Tibetan Plateau glaciers by changing long-range water vapour transport from the South Asian monsoon region.
 - The South Asia region adjacent to the Tibetan Plateau has among the highest levels of black carbon emission in the world.

About Black Carbon:

- Black carbon is a short-lived climate pollutant with a lifetime of only days to weeks after release in the atmosphere.
- Black carbon is formed by the incomplete combustion of fossil fuels, wood, and other fuels

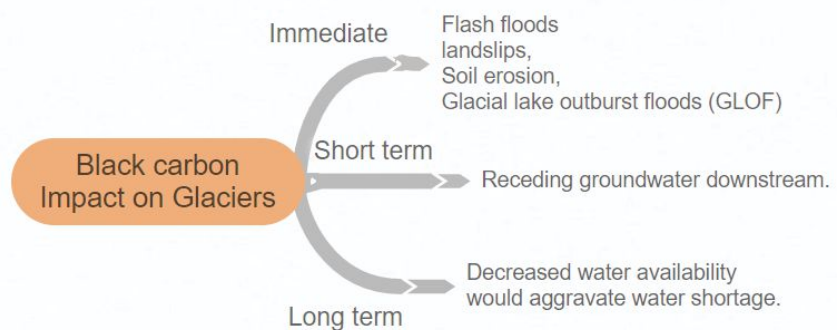
Impact of Black Carbon on Cryosphere

Rapid melting of Glaciers

- Asian Brown Cloud (ABC): A man-made cloud of carbon emissions, dust, and other pollutants causes less sunlight, less rain, and an inverse warming effect, which causes glacier melting to accelerate.

Glacier retreat:

- Gangotri glacier retreated 850 meters between 1996 and 1999; as a result of black carbon deposits due to stubble burning and forest fires
- Increasing Glacial lakes
- Changes in Snow Albedo
- Livelihood impact
- Respiratory and cardiovascular health impacts on humans



Short-term & Long-term impacts

Way Forward:

- Policies in place to reduce black carbon emissions – Enhancing fuel-efficiency standards, phasing out diesel vehicles, promoting electric cars etc.
- Aggressively curbing black carbon emissions
- New economically and technically feasible policies can help to contain glacier melt.
- Regional cooperation to protect these resources will pay important dividends for the health and well-being of the people in the region

How Climate Change Fuels Tropical Cyclones

Context:

- It is clear that climate change increases the upper limit on hurricane strength and rain rate and that it also raises the average sea level and therefore storm surge.

Factors that fuel tropical cyclones:

- **Rainfall** : Temperature has a clear influence
- The temperature of both the ocean and atmosphere are critical to hurricane development.
- Hurricanes are powered by the release of heat when water that evaporates from the ocean's surface condenses into the storm's rain.

- A warmer ocean produces more evaporation, which means more water is available to the atmosphere.
- A warmer atmosphere can hold more water, which allows more rain.
- More rain means more heat is released, and more heat released means stronger winds.

Storm surge

- The rise in water at a coast caused by a storm is related to a number of factors including storm speed, storm size, wind direction and coastal sea bottom topography.
- Climate change could have at least two important influences.

Decoding Joshimath

Context:

- The Uttarakhand government has banned construction work in and around Joshimath due to land subsidence, which has resulted in cracks in over 560 homes, prompting panicked locals to protest.
- Joshimath is the starting point for many Himalayan Mountain climbing expeditions, pilgrimage sites such as Badrinath and Hemkund Sahib.
- It is the location of one of Adi Shankara's four cardinal monasteries.

Science behind the subsidence:

Location, topography:

- Also known as Jyotirmath,

it is a town (of over 20,000 population) in the Garhwal Himalayas in Chamoli District in Uttarakhand, located on the NH-7 (Rishikesh-Badrinath) at an altitude of 1890 metres.

- It is situated in the middle slopes of a hill bounded by the Karmanasa and Dhaknala streams on the west and the east and the Dhauliganga and Alaknanda rivers on the south and the north.
- According to the Mishra Commission report (1976), the first instance of subsidence in Joshimath was reported way back in 1976 and the town is -
 - Located on the site of ancient landslides
 - Covered with thick layer of overburden material
- The town area is prone to landslides and highly vulnerable to sinking due to scattered and highly weathered gneissic rocks with a low bearing capacity and loose soil due to seepage from streams uphill.

Extreme weather events:

- Flood events of June 2013 and February 2021 (flooding of Rishi Ganga) had adverse impact on the landslide zone as a result of extreme erosion.
- According to the latest satellite data, mountain streams have expanded their channels and changed course, thereby inducing more slope instability in an already fragile belt.

Geology:

- According to the Uttarakhand State Disaster Management Authority (USDMA), Joshimath falls in Zone V of the Seismic Zonation Map and has witnessed several earthquakes of magnitude of less than 5 on the Richter scale.
- Joshimath being on a fault line makes it highly vulnerable to sinking because of tectonic activity.

Unplanned construction:

- The Border Roads Organisation (BRO) is building the Helang bypass that will reduce the distance to Badrinath shrine by about 30 km, using heavy machinery.
- Hydroelectric (HE) schemes have been sanctioned around Joshimath and Tapovan, including the Vishnugad HE Project

and a Tunnel Boring Machine (TBM) was employed for excavating the tunnel for the project.

- In 2009, it punctured a water-bearing strata & experts had warned that this sudden & large-scale dewatering of the strata had the potential of initiating

ground subsidence in the region.

Improper water drainage :

- According to the USDMA, this could be the reason for increase in ground seepage of water from the surface, which is a probable cause for subsidence.

Preventive measures

Immediate	Long-term
<ul style="list-style-type: none"> • Relocating residents to a safer place. • Experts recommend that all development and hydroelectric projects in the region be halted completely. 	<ul style="list-style-type: none"> • The town's planning must be reimaged to accommodate the new variables and changing geographical factors. • One of the most important factors that needs to be studied and redeveloped is drainage and sewer planning. • Experts have also suggested replanting in the region, particularly in vulnerable areas, to retain soil capacity.

Conclusion :

- To save Joshimath, the government and civil bodies must

work together, with the assistance of military organisations such as the Border Roads Organisation

IX. Environment

Project Nilgiri Tahr

- Tamil Nadu is set to implement project Nilgiri Tahr, aimed at developing a better understanding of its population.
- The Project, to be set up at a cost of ₹ 25.1 Crore will be implemented during the 2022 - 27 period.

About Nilgiri Tahr

- It is the only mountain ungulates

in Southern India amongst the 12 species present in India.

- It is the state animal of Tamil Nadu.
- It is endemic to the western ghats & locally known as "Varaiaadu".
- IUCN status : Endangered.

No Action plan by Ministry of Environment, Forest & Climate Change to handle Plastic waste

- Findings are part of a compli-

ance audit by comptroller and Auditor General to assess effectiveness and Compliance of provision of plastic waste management Rules 2016 (PWM).

- PWM Rules 2016, provides statutory framework for plastic waste management in an environmentally sound manner throughout the country.

Key Findings

- PWM Rules 2016, could not be

implemented effectively due to a lack of an action plan by the MOEF & CC.

- No uniform framework to implement extended producer's Responsibility.
- Delay in taking initiatives for elimination of single use plastic.
- Absence of guidelines and standards for monitoring of plastic pollution.

Recommendation

- A system for effective data Collection in relation to generation, collection and disposal of plastic waste.
- Carry out comprehensive assessments quantity of plastic waste being generated and collect data according to population size, geographical size of area etc.
- Local bodies may expedite process of notifying their by - laws by incorporating PWM Rules.

India Recycles only 30% of 3.4 MT plastic waste generated annually : Report

- Report titled 'Innovation in Plastics, The Potential and Possibilities' was released by Marico Innovation Foundation and developed in association with Indian Institute of Science and Praxis Global Alliance.
- It examines plastic waste management ecosystem in India to identify challenges and oppor-

tunities with special emphasis on business and technological innovations.

Key findings of report

- India produces 3.4 million tonnes of plastic waste in a year, only 30 percent of it is recycled.
- Rest of plastic waste is sent to landfills or aquatic dumps.
- Maharashtra, Gujarat and Tamil Nadu together contribute 38 percent to total plastic waste generated in India.
- 94% of recycled plastic waste is shredded in India using mechanical recycling method.

Impact of plastic waste:

- Greenhouse gas emissions i.e., carbon dioxide, methane; Contamination of entire food chain due to presence of microplastics; Threats to animals especially marine species etc.

Recommendations

- Landfill and incineration taxes must be levied in India to encourage recycling.
- Authorise 'pay-as-you-throw' system, which requires citizens to pay a variable rate per kilogram for a bag of mixed garbage.
- Regulate entire life cycle of plastic bags from manufacturing, imports to disposal

Initiatives for Plastic Waste Management (PWM)

- PWM Amendment Rules, 2021 banned use of single use plastic

(SUP) products from July 2022.

- Guidelines on Extended Producers Responsibility (EPR) on plastic packaging.
- National Dashboard on Elimination of SUP.

NCST : New Forest (Conservation) Rules Vs Forest Rights Act

Context:

- The conflict between the government and the National Commission for Scheduled Tribes (NCST) over the Forest (Conservation) Rules, 2022, seems to be escalating.

Background:

- The Union Environment Ministry notified the Forest (Conservation) Rules, 2022, under the Forest Conservation Act, 1980, thus replacing the Forest (Conservation) Rules, 2003
- NCST had raised concerns about the provision in the new rules that proposes to do away with the consent clause for the diversion of forest land for other purposes and recommended putting these rules on hold.
- However, the government insisted that the rules were framed under the Forest (Conservation) Act, 1980 and that the NCST's apprehension of these rules being in violation of the Forest Rights Act, 2006, is not legally admissible

The Forest (Conservation) Act (FCA), 1980	The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or the Forest Rights Act (FRA), 2006
<ul style="list-style-type: none"> It regulates deforestation by prohibiting the felling of forests for any "non-forestry" purpose without prior approval from the central government. 	<ul style="list-style-type: none"> It recognizes forest-dwelling tribal communities' and other traditional forest dwellers' rights to forest resources on which these communities rely for a variety of needs.
<ul style="list-style-type: none"> The clearance process includes obtaining permission from local forest rights holders as well as wildlife authorities. 	<ul style="list-style-type: none"> It imposes on the Gram Sabha and rights holders the responsibility of biodiversity conservation and protection, by preventing any destructive practices affecting these resources.
<ul style="list-style-type: none"> The Centre has the authority to deny such requests or to grant them with legally binding conditions. 	<ul style="list-style-type: none"> Under the Act, the Gram Sabha is a highly empowered body that allows the tribal population to have a decisive say in determining local policies and schemes that affect them.

The Forest Conservation Rules, 2003	The Forest (Conservation) Rules, 2022
<ul style="list-style-type: none"> There are two stages of approval ('In-Principle' and 'Final', after given conditions are met) prescribed for any application by any entity to use the forest land. 	<ul style="list-style-type: none"> The Central Government can give its final approval and thereafter leave it to the state government to pass an order for de-reservation or diversion or assignment.
<ul style="list-style-type: none"> Nodal Officer - Divisional Forest Officer and the District Collector - Conservator of Forests - State Administration - MoEFCC 	<ul style="list-style-type: none"> It is then left to the state government now to make sure that the claims of forest dwellers are settled.
<ul style="list-style-type: none"> The District Collector shall complete the process of recognition and vesting of forest rights in accordance with the provisions of the FRA (obtain the consent of each Gram Sabha). 	<ul style="list-style-type: none"> However, the collector is not required to obtain the consent of Gram Sabhas before the In-principle approval

- The Food and Agriculture Organization (FAO) has released this report, under the framework of FAO's Green Urban Oases Programme

Key points highlighted by the report:

- 35% of the world's largest cities (including New Delhi, Mexico City etc.) are built on the world's dryland
- Urban policies have yet to incorporate forestry and greening strategies in the majority of dryland cities

Recommendations:

- Select local trees for green spacing
- Build local capacity and involve the community to create a sense of ownership
- Create policies for urban greening

About the Green Urban Oases (GUO) Programme:

- GUO program contributes to FAO's Green Cities Initiative

Concern about the new Rules:

- The Gram Sabha's approval had significant persuasive power and could influence decisions to proceed with the diversion process.

- However, the new Rules eroded Gram Sabha's role.

Urban Forestry & Urban Greening in Drylands

Context:

(2020) which aimed to improve the livelihoods of urban and peri-urban populations in at least 100 cities in the next 3 years.

The objective of the programme:

- Turn dryland cities into "green urban oases"
- Strengthen their overall resilience to climatic, health, food, and economic crisis
- To reduce the impact of urbanization on biodiversity and the surrounding natural environment

What are drylands?

- United Nations Environment Programme (UNEP) defines drylands according to an Aridity Index (AI), which is the ratio between average annual precipitation and potential evapotranspiration; drylands are lands with an AI of less than 0.65 (Zero Point six five)
- Dryland systems are ecosystems characterised by a lack of water.
- They include cultivated lands, scrublands, grasslands, savannas, semi-deserts & true deserts.
- It makes up around 41% of the earth's land (mainly in Asia and Africa).

Related news:

- Previously (in October 2022), Hyderabad had bagged the prestigious World Green City Award presented by the International Association of Horticultural Producers (AIPH) for its initiative "Green Garland to the

State of Telangana (Telangana Ku Haritha Haram)".

- Hyderabad also bagged the award in the 'Living green for economic recovery and inclusive growth'.

What is a cold wave?

Context:

- Delhi and other parts of north-west India have been currently reeling under a cold wave spell.

Background:

- In Delhi (the Safdarjung weather station), the lowest minimum temperature recorded this month was 1.9 degrees Celsius on January 8.

What is a cold wave?

- In the plains, the Indian Meteorological Department (IMD) marks a cold wave in terms of minimum temperatures -
 - When the minimum temperature is 4 degrees or less
 - When the minimum temperature is less than 10 degrees and 4.5 to 6.4 degrees below the normal.

Reasons for the temperature drop in north & north-west India:

- Large-scale fog cover, preventing sunlight from reaching the surface and affecting the radiation balance.
- Light winds and high moisture near the land surface have been contributing to the fog.

- Foggy or cloudy nights are usually associated with warmer nights, but if the fog remains for two or three days, cooling begins even at night.
- While westerly and north-westerly winds of around 5 to 10 kmph in the afternoon have also been contributing to the dip in temperature.
- Absence of western disturbances over the region.
- Western disturbances are storms from the Mediterranean region, which are associated with a change in wind direction, bringing easterly winds to northwest India

Deep - Water Circulations of the Indian Ocean

Context:

- New studies have shown that the global overturning circulation controls ocean heat distribution and atmospheric carbon dioxide levels, thus playing a critical role in global climate.

What does the new study show?

- Studies have indicated that tectonically driven changes in the ocean gateways such as the closure of the Central American Seaway (a body of water that once separated North America from South America), since the late Miocene period, had a dramatic impact on the GOC.

What is Global Overturning Circulation (GOC)?

- It is the equatorward transport of cold, deep waters and the poleward transport of warm, near-surface waters.
 - Atlantic Meridional Overturning Circulation (AMOC) is one part of this circulation apart from Pacific Deepwater, Southern Ocean Meridional Overturning Circulation etc.
 - AMOC has undergone exceptional weakening in the last 150 years compared to the previous 1500 years.
 - Climate models suggest that the AMOC will weaken over the 21st Century as greenhouse gases increase
- It is a Thermohaline circulation (THC) and distributes heat and nutrients throughout the world's ocean basins.

Mechanism

- GOC carries warm surface waters from the tropics towards the Northern Hemisphere, where it cools and sinks.
- It then returns to the tropics and then to the South Atlantic as a bottom current.
- From there it is distributed to all ocean basins via the Antarctic circumpolar current.

Reasons behind the slowing down of AMOC

- The slowing down is anthropogenic impact, and these abrupt

changes are destabilizing the AMOC, which could collapse the system.

- There are various reasons behind the current slowing down
 1. Global warming can cause a weakening of the major ocean systems of the world.
 2. Melting of Glaciers - Arctic ice called the "Last Ice Area" has been melting. The freshwater from the melting ice reduces the salinity and density of the water. As the water is unable to sink as it used to, it weakens the AMOC flow.
 3. Warming of the Indian Ocean - As the Indian Ocean warms faster and faster, it generates additional precipitation, thus reducing the precipitation in the Atlantic Ocean, causing higher salinity in the waters of the tropical Atlantic. This saltier water, as it comes north via AMOC, will get cold much quicker than usual and sink faster.

Human Disturbance Altering Habitats, Routines of Animals

Context:

- A new finding on animal behaviours An animal must be at the right place, at the right time, to avoid predators, find food, and reproduce successfully.
- **As an analogy:** The interactions between the animals in

a given ecosystem are like a theatrical production.

- For the production to be a success, each actor has to be on stage, in the right place, and they must act and deliver their lines at the right time.

Threats:

- As per the new study, human activities might disturb these ecological interactions and increase interspecies encounters.
- **Impact of farms:** Wild animals of different species were more likely to come to human-altered landscapes, like farms than in more undisturbed locations, such as national forests.
- Frequent interaction can lead to intensifying competition for resources or increasing the risk of interspecies disease transmission.
- Even when the animals do not come face-to-face, simply hearing or smelling a predator can have "dramatic effects" on the behaviours of prey species

What is an ecological niche?

- In ecology, the term "niche" describes the role an organism plays in a community.

What is an Ecosystem?

- An ecosystem is a community of living organisms interacting with each other and their non-living environment.

What makes up an ecosystem?

- All living things (plants, animals, and bacteria).

- Non living things (the sun, rocks, and soil)

In another study (DTE), it has been found that:

- Ants may be unable to adapt to global warming, leaving them highly vulnerable to the impacts of climate change.
- The insects are cold-blooded creatures, also called ectotherms.
- Their body temperatures depend on external sources like sunlight.
- Humans (endotherms), on the other hand, maintain their body temperature without relying on the environment.

Importance of Ants:

- Ants are often called "ecosystem's engineers".
- These insects move the soil during nest-building & foraging, affecting the level of nutrients in it.

Protests over ESZ classification

Context:

- The creation of the Ecologically sensitive zones (ESZ) has sparked protests in Kerala and can be a hint of what is likely to occur in other parts of the country.
- **ESZ Context:** The problem begins with a notification that ought to have been community-specific but which a ministry offered as a 'one size fits all' solution.

Background:

- Protected areas cover 5.26% of India's land area as 108 national parks and 564 wildlife sanctuaries notified under the Wildlife (Protection) Act 1972 (WPA).
- These protected areas are based on the 'fortress conservation model'.
- For example, activities permitted in 'reserve forests' are not permitted in national parks and wildlife sanctuaries.
- Surrounding these protected areas is an area of approx. 3.4% of the country's land, falls under the ESZ regime.
- Governments have notified 341 ESZs in 29 States and 5 UTs, while another 85 ESZs are awaiting notification.
- Together, protected areas and the ESZs cover 8.66% of India's land area.

What are ESZ/Ecologically Fragile Areas (EFA)?

- **Meaning:** ESZ is intended to protect 'protected areas' - national parks and wildlife sanctuaries - by effectively creating insulating layers around such protected areas where humans and nature can be at peace with each other.

Objectives of creating ESZ:

- To create a shock absorber by regulating and managing the activities around protected areas.

- To serve as a transition zone between areas of high protection and areas of lower protection.
- **Notified and regulated by:** They are notified by the Union Ministry of Environment, Forest and Climate Change (MoEFCC) and regulated under the Environment Protection Act 1986 (though the EPA does not mention the word 'ESZ').

Criteria to designate ESZ:

- Based on species (endemism, rarity, etc)
- Based on the ecosystem (sacred groves, frontier forests, etc)
- Based on geomorphological features (uninhabited islands, origins of rivers, etc)

Extent of ESZ:

- An ESZ's distribution can vary in breadth and extent.
- For example, the extent of ESZ from the boundary of a protected area ranges from 0 to 45.82 km (in Pin Valley National Park, HP).
- The ESZs span notified forests outside protected areas, most of which could also come under gram sabhas' jurisdiction under the FRA.

Issues with ESZ:

Not in sync with FRA and PESA:

- The Forest Rights Act (FRA) 2006, recognises the customary and traditional rights (both

individual and collective) of forest-dwellers on forest land, including inside protected areas.

- Under the FRA, a new category of forests called 'community forest resource' (CFR) has been created and has to be managed by the Gram Sabhas.
- Similarly, the Provisions of the Panchayat (Extension to Scheduled Areas) Act (PESA) 1996, empower Gram Sabhas to safeguard and preserve community resources on forest and revenue lands in Scheduled Areas.
- However, the MoEFCC has shown no inclination to amend the Indian Forest Act 1927, the Wildlife (Protection) Act and the EPA 1986 to comply with PESA and FRA.

The case of Kerala:

- The Western Ghats (WG) cover 48% of Kerala and nearly 30% of the state is covered by forests.
- There is also a network of lakes, canals and wetlands, as well as a 590-kilometre-long coastline, all of which are governed by a set of environmental conservation laws.
- This leaves little space for its 3.5 crore population, which has a population density of 900 people per square km (much higher than the national average).
- According to an SC directive, at

least one km from the boundary of every protected area in Kerala should be marked as ESZ

- The Kerala State Assembly recently unanimously passed a resolution urging the Central Government to exempt the state's human settlements, farmlands, and public institutions from the ESZ's scope.

Conclusion:

- Mining and other activities have long depleted the nation's natural resources.
- As a result, the government's role should not be limited to that of a "facilitator" of economic activity.
- It must strive to achieve long-term sustainable development by balancing economic development, environmental conservation and the rights of forest dwellers.

Insta Curious:

- The fortress conservation model is based on the belief that biodiversity protection is best achieved by creating protected areas where ecosystems can function in isolation from human disturbance.
- It assumes that local people use natural resources in irrational and destructive ways, and as a result cause biodiversity loss and environmental degradation.

Asian Waterbird Census (AWC) 2023

Context:

- Wetlands International's largest annual water bird census named "Asian Water Bird Census" (AWC) 2023" began on January 7, 2023, across Asia and Australasia simultaneously and will conclude on January 22, 2023

About AWC:

- AWC (started in 1987) is part of the International Waterbird census coordinated by Wetland International In India, AWC is coordinated by the Bombay Natural History Society (BNHS) (founded in 1883, an NGO) and Wetland International (NGO).

Significance:

- AWC supports the conservation of wetlands and water birds worldwide.
- AWC data is used to promote national water bird and wetland conservation and for other initiatives such as:
 - Waterbird Population Estimates Programme (WI)
 - Global Species Programme (Red List, by IUCN)
 - Important Bird Area Programme (BirdLife international)
 - Bonn Convention (for Migratory Species)
 - Central Asian flyway Action plan

X. Economy-Economy, Socio-Economic issue

1. Economy

Reserve Bank of India Released Report on trend & progress of Banking in India 2021-22

- Report is a statutory publication in compliance with Banking Regulation Act, 1949.
- It presents performance of banking sector, including co-operative banks and non-banking financial institutions.

Key Highlights of Report

- Consolidated balance Sheet of scheduled commercial Banks (SCB) registered double digit growth in 2021 - 22, after a gap of seven years.
- Gross non-performing assets ratio of SCBs has declined from its peak at around 9% in 2017 - 18 to reach 5 - 8% at end - march 2022.
- Financial performance of urban co-operative banks showed improvement characterised by augmented capital buffers, decline in GNPA ratio and improved profitability indicators.

Reasons for declining NPA

- Loan write-off by Public Sector banks.

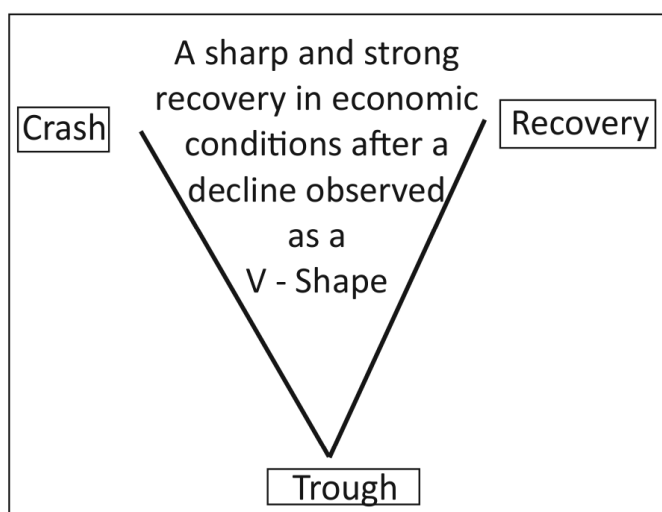
- Upgradation of loans in private banks
- Reduced share of large borrowings.

NPA Vs Loan Write off

NPA	Loan Write off
<ul style="list-style-type: none"> • Loan or advance for which principal or interest payment remained overdue for a period of 90 days. • Three categories of NPA <ul style="list-style-type: none"> ○ Sub standard Asstes : NPA for less than or equal to 12 Months ○ Doubtful Assets : Standard assets for a period of 12 months. ○ Loss Assets : Considered uncollectable. 	<ul style="list-style-type: none"> • Bank writes off a loan after borrower has defaulted on loan repayment and their is a very low chance of recovery. <ul style="list-style-type: none"> ○ Lender their moves defaulted loan, out of assets side & reports amount as loss. • Loan write off saves money from provisioning and reduces tax liability. • Loan write - off is different from loan waive off.

V - Shape Recovery

- The Indian Civil Aviation Sector is witnessing a strong V - Shaped Recovery.
- V - Shaped recovery is a type of economic recession and recovery.



ery which resembles V shape.

- i.e. Sharp rise to a previous peak after a sharp decline in various economic indicators.
- This includes, indicators such as Gross domestic product, employment manufacturing data etc.
- Similarly we have other recovery types such as L - Shaped recovery (no recovery) U - Shaped (longer recovery) W - Shaped (full recovery after a second dip) and K - Shaped (recovery in different direction)

G20 Digital innovation Alliance launched by Meity

- Ministry of Electronics and Information and Technology is the Nodal agency for the G20 Digital Economy working group.
- During India's G20 presidency the Meity will focus on three priority areas, namely Digital public infrastructure, cyber security, and digital skill development.

About G20 - DIA

- Its objective is to identify, recognize and enable the adoption of innovative and impactful digital technologies developed by Start - ups, from G 20 nations as well as the invited non - member nations.
- It seeks digital solutions in the six themes viz, Agri - tech, Health - tech, Edu - tech, Fin - Tech, Secured Digital infrastructure and circular economy.

Microfinance Institutions (MFIs) to play leading role in India's Economic Growth

- Findings are part of a study by Price water house Coopers (PwC) and Association of Microfinance Institutions of India that also highlighted:
 - MFIs offered credit to around 6 crore borrowers, from low-income households, in the last few years.
 - Challenges faced by MFIs: diverse nature of customer segments such as small farmers, vendors and labourers; dependence on physical modes of interaction etc.
- Microfinance is a form of financial service which provides small loans and other financial services to poor and low-income households.
- Malegam Committee (2011) helped establish microfinance as a legitimate asset class.
- Microfinance Delivery Model in India includes:
 - Scheduled commercial banks lending both directly as well as through business correspondents (BCs) and self-help groups (SHGs).
 - Cooperative banks.
 - Non-banking financial companies (NBFCs).
 - MFIs registered as NBFCs as well as in other forms.

Significance:

- Women's empowerment by routing credit directly to women, there by enhancing their status within their families, community and society at large.
- Provision of credit to poor without need for collateral.
- Promote financial inclusion and Employment generation.

Challenges:

- Over-indebtedness of borrowers, Comparative high-interest rate, Over-reliance on commercial banks for funds availability

Govt & Asian Development Bank sign several loan agreements to boost infrastructure sector in India

- Several loan agreements have been signed today by the Government and the Asian Development Bank to boost the infrastructure sector in the country.
- The Finance Ministry said, a loan agreement was signed worth 350 million US dollars to improve connectivity in Maharashtra, and a loan agreement worth 300 million US dollars will be utilised to upgrade over 300 kilometres of State highways and major district roads in Assam.
- To improve energy security, quality of supply, efficiency, and resilience of the power sector in Tripura, the Asian Development

Bank and the Government has signed a 220 million dollar loan agreement.

- The Ministry said, a loan agreement worth 350 million US dollars was signed to build new lines and improve the connectivity of the metro rail system in Chennai.

Sovereign Green Bonds

Context:

- Reserve Bank of India (RBI) announced recently that it will, for the first time, issue Sovereign Green Bonds (SgrBs) in the current financial year.
- The bond will be for a 5-year and a 10-year tenure of Rs 4,000 crore each.

What is a bond?

- A bond represents a promise by

a borrower to pay a lender their principal and usually interest on a loan.

- Bonds are issued by governments, municipalities, and corporations
- The interest rate (coupon rate), principal amount, and maturities will vary from one bond to the next in order to meet the goals of the bond issuer (borrower) and the bond buyer (lender)

What does green bond mean?

- They're a debt instrument public and private entities issue to finance eco-friendly projects.
- Sustainable finance has become crucial to initiatives on reducing the devastating effects of the climate crisis.

How does green bond work?

- Borrowers issue green bonds

(debt securities) to secure financing for projects that will have a positive environmental impact, such as ecosystem restoration or reducing pollution.

- Investors who purchase these bonds can expect to make a profit as the bond matures.
- In addition, there are often tax benefits for investing in green bonds.

Features of the current Green bond:

- SGrBs were 1st announced in Union Budget 2022-23
- Issued through a uniform price auction
- 5% reserved for the retail investor
- Can be traded in the Secondary market
- Non-residents can also invest

2. Socio-Economic

National Commission for women issues Advisory to ensure safety of women in Educational Institutions

- Chief Secretaries of all the states and UTs are advised to direct all coaching institutes / educational institution to :
 - Ensure strict implementation of sexual Harassment of Women at workplace

(Prevention, Prohibition, Redressal) Act, 2013(referred posh act)

- Conduct a background check on responsible for running coaching centres.
- Features of POSH Act
 - Defines sexual harassment at workplace and creates a mechanism for redressal of complains.
 - Wide definition of aggrieved woman to cover all, irre-

spective of their age or employment status and whether in organised or unorganised sectors, public or private, and covers clients, customers and domestic workers as well.

- An internal complaints committee is mandatory in every private or public organisation that has 10 or more employees.
- District officer to constitute

local Committee to receive complaints from organisations with less than 10 workers or if complaint is against the employer itself.

RBI To issue Sovereign Green Bonds (SGrBs) in two tranches of Rs. 8000 Crore each

- RBI will issue 5-year and 10-year green bonds of Rs 4,000 crore each in current financial year.
- Green bonds are bonds issued by any sovereign entity, inter-governmental groups or alliances and corporates with the aim that proceeds of bonds are utilised for environmentally sustainable projects.
 - SGrBs were announced in Union Budget 2022 -23 and framework for SGrBs was issued (by Ministry of Finance) in November 2022.
- Eligible projects under SGrBs framework include projects of renewable energy, energy efficiency, clean transportation, climate change adaptation, sustainable water and waste management, pollution prevention and control, green buildings, and biodiversity conservation.

Significance of Green Bonds

- An important financial instrument to deal with threats of climate change and related challenges.
- Influence business strategy by

offering investors a platform to engage in good practices.

- Will help India in tapping requisite finance for deployment in public sector projects aimed at reducing carbon intensity of economy.

Challenges in realising potential of Green Bonds

- Greenwashing due to eligibility of wide range of projects.
- Lack of robust impact assessment framework to quantify environmental outcomes.
- Liquidity issues for investors as it is still a small market

SGrBs By RBI will be

- Issued through Uniform Price Auction and 5% will be reserved for retail investors.
- Eligible for Repo and Statutory Liquidity Ratio (SLR) purpose.
- Eligible for trading in the secondary market.
- Designated as specified securities for investment in Government Securities by non-residents.

Gini Coefficient

- SBI Ecowrap study analyzed the impact of share of Rice and wheat procurement on Gini Coefficient for 20 and 9 States respectively.
- Gini coefficient is a statistical measure to gauge the rich-poor income or wealth divide.
- It ranges from 0 (or 0%) to 1 (or 100%) with which 0 represents

perfect equality, and 1 represents perfect inequality.

- Values over 1 are theoretically possible due to negative income or wealth.
- A general rise in Gini Coefficient indicates that government policies are not inclusive and may be benefiting rich as much as or even more than poor.
- Gini figure below 0.40 is generally considered to be within tolerable limits.

$$\text{Gini Coefficient} = \frac{A}{A+B}$$

Reserve Bank of India (RBI) Released state finances : A study of Budgets of 2022 - 23 Report

- It is an annual publication that provides information, analysis and an assessment of finances of State governments for 2022-23.
- Theme of this year's Report is "Capital Formation in India - The Role of States".

Key findings of report

- State's Gross Fiscal Deficit (GFD) is budgeted to decline to 3.4 percent of GDP in 2022-23 from 4.1 percent in 2020-21.
 - GFD is excess of total expenditure including loans net of recovery over revenue receipts (including external grants) and non-debt capital receipts.
- States' debt is budgeted to ease to 29.5 percent of GDP in 2022-

23 as against 31.1 percent in 2020-21.

- In 2022-23, states have budgeted higher capital outlay than in previous three years.

Recommendations

- Increase allocations of capital expenditure for sectors like health, education etc.
- Create a capex buffer fund during good times to smoothen and maintain expenditure quality and flows through economic cycle.
- Strengthen timely devolution mechanism to local bodies through State Finance Commissions.
- Encourage and facilitate higher inter-state trade and businesses

Capital Formation

- It refers to process by which resources are invested in Assets like plants, machinery etc. and Human Capital through education, health, skill development etc.
- In 2021, India's capital investment / GDP ratio of 31.2 percent in 2021 is higher than other BRICS nations.

Annual Status of Education Report (ASER) 2022 Released by NGO pratham

- ASER (first conducted in 2005) is an annual, citizen-led household survey to understand whether children in rural India

are enrolled in school and whether they are learning.

- Whereas, National Achievement Survey (NAS) is undertaken by Ministry of Education. It provides structured feedback on student learning levels at District, State, and national levels.

- ASER 2022 is first field-based 'basic' nationwide ASER since 2018.

- In ASER 2022, children in age group of 3 to 16 years were surveyed to record their schooling status and assess their basic reading and arithmetic skills

Key Findings

Parameters	Data	Trend wrt 2018
Overall enrollment in age group 6-14	98.4% in 2022	Increase
Proportion of 15-16-year-old girls not enrolled	7.9% in 2022	Decrease
Children taking Paid private tuition classes from 1 st to 7 th standard	30.5% in 2022	Increase
1. Reading ability of class 3 2. Arithmetic ability (subtraction) of class 3	<ul style="list-style-type: none"> • 20.5% in 2022 • 25.9% in 2022 	<ul style="list-style-type: none"> • Decrease • Decrease
Average teacher attendance	87.1% in 2022	Increase
Schools with drinking water available	76% in 2022	Increase
Schools with useable girls' toilets	68.4% in 2022	Increase

Centre issues guidelines to social media influencers to regulate promotions

- The guidelines are aligned with those guidelines issued under Consumer Protection Act (CPA), 2019
 - Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022 was issued under CPA, 2019
 - It provides a framework for protecting consumers

against unfair trade practices and misleading advertisements.

Need for the guidelines:

- There has been increased use of social media for promotional activities and influencer violations comprising almost 30% of ads taken up by the Advertising Standards Council of India .
- India's social media influencer market expected to reach 2,800 crore by 2025 (from ₹ 1,275 crore in 2022).

Key highlights

- Any celebrity, influencer or virtual influencer must disclose any material connection (trips or hotel, etc.) with the advertiser.
- Disclosures must be prominently and clearly displayed (hard to miss.)
- Endorsements must be made in simple, clear language and terms such as "advertisement," "sponsored," or "paid promotion" can be used.
- The product and service must have been actually used or experienced by the endorser.
- Non-compliance can lead to a jail term of up to 2 years and penalty of Rs 50 lakh

Ethical Issues in Misleading Advertisements

- **Deceptive marketing:** Posting an ad without mentioning that it is an advertisement.
- In authentic partnerships and content
- Influencers may falsely portray a lifestyle or use of a product.
- Leads to unrealistic standards of lifestyles goals that are unattainable.
- Violates Right to Choose, Right to be informed and Right to be safeguarded against harmful products and services

Economy at risk from move to clean energy

- A recent study has highlighted that India's financial sector is highly exposed to risks of

economy transitioning from being largely dependent on fossil fuel to clean energy as :

- 60% of lending to mining sector was for oil and gas extraction.
- 20% of manufacturing sector debt is for petroleum refining and related industries.
- High-carbon industries like power generation, chemicals, etc, have less financial capacity to respond to shocks and stresses due to transition.
- In the recent years, India has shown its commitment to environmental stewardship, climate action and focus on renewables by focusing on clean energy.
 - Clean energy is broadly defined as energy derived from renewable, zero-emissions sources, as well as energy saved through energy efficiency measures.
 - Need is felt because of reasons like inexhaustible resources, energy security by reducing import dependency, reduced carbon emissions to meet global commitments, cleaner environment etc.

Steps taken by India

- PM announced net-zero commitment by 2070.
- Policies like Green hydrogen policy, Offshore wind policy etc.
- Schemes such as PM-KUSUM, FAME INDIA etc.

- Union Budget 2022-23 provides roadmap for clean energy and climate mitigation

India's unemployment rate rises at 8.30% in Dec 2022

- According to the data, released by the Centre for Monitoring Indian Economy (CMIE), India's unemployment rate in December 2022 has been increased to a 16-month high at 8.30% from 8% in November 2022.
- The urban unemployment rate has been increased to 10.09% in December from 8.96%.
- While, the rural unemployment rate has been slipped to 7.44% from 7.55%.
- In December, the unemployment rate rose to 37.4% in Haryana, followed by Rajasthan (28.5) and Delhi (20.8%).

Lumpi - Provacind Vaccine

Context:

- Agrinnovate India Limited (AgIn), the commercial arm of DARE, Ministry of Agriculture and Farmers' Welfare granted "Non-Exclusive Rights" for Commercial production of "Lumpi-ProVac", to Institute of Veterinary Biological Products (IVBP), Pune
 - ICAR (Indian Council of Agricultural Research) has developed this vaccine for Lumpy Skin Disease (LSD)

About Lumpi-ProVac

- Lumpi-ProVac is safe in animals and induces LSDV-specific antibodies and cell-mediated immune response.
- The vaccine is used for the prophylactic immunization of animals against Lumpy Skin Disease, which illicit protection for about one year
- The vaccine is a homologous, live attenuated vaccine to protect against Capripoxvirus (which causes LSD).
- The virus is genetically similar to Goatpox and sheeppox.
- It is transmitted by flies and mosquitoes or ticks (blood-feeding insects).
- LSD doesn't affect humans
- The Indian Council of Agricultural Research (ICAR) is an autonomous body responsible for co-ordinating agricultural education and research in India.
- The Union Minister of Agriculture serves as its president.
- It is the largest network of agricultural research and education institutes in the world.

Kala - Azar Cases Decline

Context:

- There has been a 98.7 per cent decline in cases of Kala-azar from 44,533 in 2007 to 834 in 2022 in India
 - India is committed to eliminating Kalaa-Azar from the country by 2023

- Elimination is defined as reducing the annual incidence of Kala Azar (KA) to less than 1 case per 10,000 people at the sub-district level.

About Kala-azar

- Visceral leishmaniasis (VL), also known as kala-azar, is the most severe form of leishmaniasis and, without proper diagnosis and treatment, is associated with high fatality.
- It is also a neglected tropical disease (NTD)

Spread:

- Caused by protozoan parasites of the Leishmania genus (transmitted through the bite of Sand flies), migrates to the internal organs such as the liver, spleen (hence "visceral"), and bone marrow.
- Signs and symptoms include fever, weight loss, fatigue, anaemia, and substantial swelling of the liver and spleen.
- Kala-azar is considered the second deadliest parasitic killer in the world after Malaria
- Kala-azar is endemic to the Indian subcontinent in 119 districts in four countries (Bangladesh, Bhutan, India and Nepal)
- It is endemic to four states Bihar, Uttar Pradesh, Jharkhand and West Bengal
- It is a treatable disease with anti-leishmanial medicines

Government steps:

- National Kala Azar Elimination Programme; National Vector Borne Disease Control Programme (NVBDCP)

Mission Parivartan

Direction:

- The example can be used to show changes in society but also deep-seated mentality remains an obstacle to women's empowerment.
- It is a joint venture of the Delhi government and automaker Ashok Leyland to induct women drivers into Delhi Transport Cooperation and cluster buses for promoting women's safety in public transport.
- Under this programme, the women drivers underwent a comprehensive training programme where they were also taught how to repair a bus in case it breaks down.

However, they face various issues in doing their jobs:

- Bus driving and transport sector is seen as a male-dominated field and women are often not accepted
- Lack of respect for women drivers
- Heated arguments by male passengers often while being drunk
- Taunts by men peers: E.g. "If you don't know how to drive, why did you even become a driver?"

Kollam

Context:

- Kollam is India's first Constitution-literate district.
- 2,200 trainees: As part of the ambitious campaign, around 16.3 lakh people in the district above the age of 10 have been educated on various aspects of the Constitution and the strenuous process involved 2,200 trainers called 'senators'.
- During the seven-month campaign, the senators visited schools, offices, auto stands and tribal councils to spread awareness.
- As part of the campaign, the Preamble of the Constitution has been distributed in all households and installed at government, quasi-government and private institutions and schools
- Kollam will be officially declared India's first Constitution literate district by Chief Minister Pinarayi Vijayan

What Plagues Rural Health care?

Context:

- According to the Union Ministry of Health & Family Welfare's Rural Health Statistics 2021-2022, India's rural healthcare system continues to be plagued by a shortfall on two critical fronts - doctors and infrastructure.

The Indian healthcare system is divided into:

- **Sub-centres (SC):** These are the first point of contact for a patient, catering to a population of 3,000-5,000.
- **Primary Health Centres (PHC):** SC is succeeded by a PHC, which is required to look after the daily needs of 20,000-30,000 people (50,000- 75,000 in urban areas).
- **Community Health Centres (CHC):** They provide referrals and access to specialists, catering to 80,000-120,000 people (0.25-0.5 million in urban areas).

Key highlights of the Rural Health Statistics 2021-2022:

- There is a shortage of 83.2% of surgeons, 74.2% of obstetricians and gynaecologists, 79.1% of physicians and 81.6% of paediatricians.
- Less than half the PHC (45%) function on a 24x7 basis.
- Of the 5,480 functioning CHCs, only 541 have all four specialists.
- SC, PHC and CHC facilities are overburdened across the board, with SCs currently looking after more than 5,000 people, PHCs catering 36,049 people and CHCs to 164,027 people.
- This, coupled with a human resource shortage (like auxiliary nurse midwives - ANM), plagues access to adequate and quality healthcare.

- The shortage was most pronounced in Uttar Pradesh, Gujarat, Himachal Pradesh, Odisha and Uttarakhand.
- SCs, PHCs and CHCs had more staff in 2021, at the height of the deadly second wave of COVID-19, as compared to now.

Other challenges faced:

- Low quality of care
- Poor accountability
- **Absenteeism:** "Even if the personnel are present, their level of participation in providing health services, may not be at desirable levels due to lack of supplies, inadequate infrastructure facilities, poor monitoring of the staff, and so on." - Economic Survey 2018-19
- Lack of awareness
- Limited access to facilities
- According to the National Health Profile (NHP) 2019, there are only 1.5 government hospitals per 100,000 population in rural India, compared to 3.5 in urban areas

Government initiatives to transform rural healthcare:

- Under Ayushman Bharat, the existing SCs and PHCs are being transformed into AB-Health and Wellness Centres (HWCs) to deliver preventive, curative, palliative and rehabilitative services which are universal, free and close to the community.

- PM Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) envisages increased investments in public health to provide better access to health in rural areas by:
 - Strengthening of HWCs in villages and cities for early detection of diseases
 - Support for Block Public Health Units (BPHU) in 11 high-focus States
 - Integrated district public health laboratories in all districts, etc.
- National Ambulance Service under National Health Mission (NHM) for free transportation to health facilities.

Contribution of the National Rural Health Mission (NRHM):

- While there has been a decline in the past year, a huge improvement has been recorded as compared to 2005, when the government launched the NRHM (now subsumed under NHM).
- For example, the number of allopathic doctors at PHCs has increased from 20,308 in 2005 to 30,640 in 2022, which is about a 51% increase.

Conclusion:

- The focus should be placed on improving rural healthcare infrastructure and human resources.
- This will ensure that Indians living in even the most remote

areas have access to effective healthcare.

- This would be in line with India's commitments as a welfare state and would also aid in the achievement of SDG 3 - Health for All.

Human Resources for Health (HRH)

- As per WHO, Human Resources for Health (HRH) are defined as "the stock of all individuals engaged in the promotion, protection or improvement of population health".
- This includes both public and private sectors and different domains of health systems, such as personal curative and preventive care, non-personal public health interventions, disease prevention, health promotion services, research, management and support services
- Health systems require human resources for health (HRH) to ensure healthcare for all.
- According to the World Health Organisation (WHO), HRH scarcity primarily affects low- and lower-middle-income countries (LICs and LMICs) like India

Quote:

- Dr Devi Shetty, one of India's most renowned doctors, remarked, "Beds do not treat people. Doctors, nurses, and paramedics are the ones who do it."

Malnutrition Risking Children's lives : WHO

Context:

- According to the World Health Organization (WHO), conflict, climate shocks, the ongoing impacts of COVID-19 and rising living costs are rendering increasing numbers of children acutely malnourished

Malnutrition:

- Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and or nutrients.
- It covers 2 broad groups of conditions -
 - Undernutrition: It includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals).
 - Overweight: It includes obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes, and cancer).

Findings of the WHO:

- The global food crisis is leading to a health crisis, resulting in a vicious cycle - malnutrition leads to disease and disease leads to malnutrition.
- Wasting acute malnutrition, which is the deadliest form

of undernutrition, is a major threat to children's lives and their long-term health and development.

- More than 30 million children in the 15 worst-affected countries suffer from this and 8 million of these children are severely wasted.
- Meanwhile, critical health, nutrition and other life-saving services are becoming less accessible.

Efforts taken in this direction:

- Five UN agencies including WHO is calling for accelerated progress on the Global Action Plan on Child Wasting.
- These agencies are Food and Agriculture Organization (FAO), UN Refugee Agency (UNHCR), United Nations Children's Fund (UNICEF), World Food Programme (WFP) and WHO.
- The action plan aims to prevent, detect and treat acute malnutrition among children in the worst-affected countries: Afghanistan, Burkina Faso, Chad, etc.

Way ahead:

- There is the need for urgent decisive and timely action to prevent this crisis from becoming a tragedy.
- Greater investment in support of a coordinated UN response is the need of the hour.

Malnutrition in India:

- Despite decades of investment to tackle this malaise, India's child malnutrition rates (which contributes to a third of the global burden of undernutrition) are still one of the most alarming in the world.
- The Global Hunger Index (2022), which is calculated on the basis of total undernourishment of the population, child stunting, wasting and child mortality, places India at the 107th spot among 121 countries.

Guidelines to social media influencers

Context:

- The Centre has released endorsement guidelines for celebrities and social media influencers that mandate compulsory disclosure of monetary or material benefits of a product or a brand they are promoting through their social media platforms.
- The new guidelines emphasize the increased risk of consumers being misled by advertisements and unfair trade practices by some individuals on social media platforms.
- Non-disclosure of brand affiliations by influencers may invite a penalty of up to Rs 50 lakh.

What is 'Endorsement'?

- Endorsements are a form of advertising that uses famous

personalities or celebrities who command a high degree of recognition, trust, respect, or awareness among the people.

- Advertisers and clients hope such approval, or endorsement by a celebrity, will influence buyers favourably.
 - For example, Sachin Tendulkar endorsing motorcycles and biscuits can influence young men or children who look up to him as a role model.

How often do we follow influencers?

- A report by iCubesWire Survey, a digital media marketing company, suggests that a major percentage of Indians choose brands based on the suggestions by influencers.
- 34 per cent of the respondents of the survey said they buy products or services after watching the social media posts of influencers.
- This content can be in the form of reels on Instagram or videos on popular social media platforms, including YouTube, Facebook, and Twitter, among others.
- **Who should disclose:** Individuals groups who have access to an audience and the power to affect their audiences' purchasing decisions or opinions about a product, service, brand, or experience, because of the

influencer 'celebrity' authority, knowledge, position, or relationship with their audience.

A material connection could include but is not limited to benefits and incentives, such as:

- Monetary or other compensation.
- Free products with or without any conditions attached, including those received unsolicited, discounts, and gifts.
- Contest & sweepstakes entries.
- Trips or hotel stays.
- Media barter.
- Coverage and awards.
- Any family, personal, or employment relationship.

Acts against misleading advertisements in India:

- The new guidelines are in alignment with the Consumer Protection Act, of 2019, which was enacted to protect consumers from unfair trade practices and deceptive advertising.
- The department of consumer

affairs published Guidelines for the Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022.

- The criteria for valid advertisements are outlined in these guidelines, as are the responsibilities of manufacturers, service providers, advertisers, and advertising agencies. These guidelines also addressed celebrities and endorsers.
- It states that misleading advertising in any form, format, or medium is illegal.

Global Scenario:

- In the United States, the Federal Trade Commission (FTC) has guidelines for endorsements and testimonials in advertising, which also apply to social media.
- These guidelines require that any endorsements or testimonials be truthful and not misleading and that any material connections between the endorser and the advertiser be disclosed.

- In the UK, the Committee of Advertising Practice (CAP) and the Broadcast Committee of Advertising Practice (BCAP) provide guidance on advertising and sponsorship across all media, including social media influencer marketing.
- Unethical Aspects of Celebrity Endorsement – We had already covered this in one of our previous articles – Responsibility of Celebrity Endorsers

A Gentler Workplace

Context:

- Recently Chief Justice of India (CJI) Chandrachud brought his daughters to Supreme Court.

Other examples of children in the workplace:

- Jacinda Ardern (New Zealand's prime minister) just became the first world leader to give birth in office in almost 30 years.
- Australian Politician Larissa Waters became 1st in the world to breastfeed her baby in Parliament.

XI. Science and technology

H9N2 Vaccine

- ICAR - National Institute of High Security Animal Diseases (ICAR - NIHSAD)
- Bhopal has transferred first indigenous vaccine technol-

ogy for H9N2 avian influenza Virus in chickens to four private companies.

- Vaccines will increase income of poultry farmers by reducing economic loss due to disease.

- H9N2 is a sub type of influenza. A virus, which causes human influenza as well as bird flu.
- H9N2 has been found in more than 50 species of wild birds and other mammals including humans, cats, dogs, pigs etc.

- Transmission of virus infection is due to direct or indirect contact with infected live or dead poultry.

InCoVACC Nasal Vaccine

- Hyderabad - based Bharath Biotech stated that its nasally administered vaccine incovacc, would be available for public use in January 2023.

About inCOVACC

- It will be rolled out as a booster dose for those above 18 years of age.
- It is world's first intranasal vaccine for COVID to receive approval for primary 2 dose schedule, and as a heterologous booster dose.
- Unlike Covazin, which was an inactivated SARS - COV 2 virus, nasal vaccine contains only a part of it, namely spike protein.

Vande Metro hydrogen trains

- Designed and built in India, Vande metro hydrogen trains would roll out by 2023.
- Germany was the first country that started operating hydrogen - powered trains for the first time in the world in August 2022.
- These trains make very little noise and emit no pollution.
- It only emits just steam and evaporated water.

Ministry of Science and Technology Notified the National Geospatial Policy 2022

- Policy seeks to strengthen the geospatial sector to support national development, economic prosperity and a thriving information economy.

Keylights of the policy

- Union Government to constitute geospatial Data promotion and Development Committee which will act as the apex body for the sector.
- Operationalization of a National Geospatial Data Registry for efficient access to the National fundamental and sectoral Geospatial Data.
- Survey of India's topographic data.
- Recognizes 14 Global fundamental Geospatial Data themes considered fundamental to development of a country's integrated Geospatial information infrastructure and supporting SDGs.
- National Digital twin strategy would be devised by GDPDC.

- Geospatial Technology is a combination of techniques like geographic Information system (GIS), Global positioning System (GPS), Earth observation and scanning to perform geographic mapping and

analysis of Earth and human societies.

- It has applications in almost every domain of the economy ranging from agriculture to industries, development of urban or rural infrastructure, administration of banking and finance etc.
- It is now widely accepted as a critical national infrastructure.

Brahmos

- Indian Air force, successfully fire extended Range version of Brahmos air launched cruise missile.

About Brahmos missile

- It is a joint venture of India and Russia, and its name is derived from Brahmaputra and Moskava rivers.
- It can be launched from land, air, sea, under water.
- Its range was originally capped at 290 km as per obligations of the missile Technology control Regime.

Dark Sky Reserve

- Talacauvery in Kodagu District, Karnataka has emerged as South India's Hanle.
 - Hanle (in Ladakh) is India's first Dark Sky Reserve.
- Dark Sky Reserve is a designation given to a public or private land with

- Exceptional or distinguished quality of starry nights, and
- Nocturnal environment that is specifically protected for its scientific, natural, educational, cultural, heritage and/or public enjoyment.
- Dark Sky location depends on light pollution which is measured on Bortle Scale.
 - Bortle Scale measures night sky's brightness on a nine-level numerical scale with lesser numerical scale representing darkness.

Cloud Forest

- A new report suggested that Cloud Forest Bond will incentivise governments to protect their cloud forests.
- About Cloud Forests (montane rainforests):
 - Refer to vegetation of tropical mountainous regions where there is heavy rainfall and persistent condensation resulting from cooling of moisture being pushed upwards by mountains.
 - Usually characterized by a persistent, frequent and seasonal low-lying layer of mist and cloud cover usually at canopy level.

- Only found in tropical areas with tall mountains.

Earth Radiation Budget Satellite (ERBS)

- NASA's retired ERBS is expected to re-enter Earth's atmosphere.
- Launched in 1984 (intended for two years), ERBS was part of NASA's three-satellite Earth Radiation Budget Experiment (ERBE) mission.
- It carried instruments to measure Earth's radiative energy budget and stratospheric constituents, including ozone.
 - Energy budget, balance between amount of energy from Sun that Earth absorbs or radiates, is an important indicator of climate health.
- Stratospheric Aerosol and Gas Experiment II (SAGE II) on ERBS collected important data that confirmed ozone layer was declining on a global scale.

Prithvi - II

- Defence Research and Development Organisation (DRDO) carried out a successful test launch of tactical ballistic missile Prithvi-II.
- Prithvi-II missile, which is powered by light propulsion twin engines, has a range of around 350 km and can carry 500-1,000 kg of warheads.
 - It uses an advanced inertial navigation system to strike the set target.

- Prithvi was developed by DRDO under Integrated Guided Missile Development Programme (conceived by Dr A P J Abdul Kalam).
- Other missiles under this program:

- Agni, Trishul, Akash, Nag

Small Magellanic Cloud (SMC)

- NASA's James Webb telescope has found a star formation (Called NGC 346) in a dynamic cluster that lies within SMC.
- Visible to naked eye from southern hemisphere, SMC is smaller of the two irregular galaxies that make up Magellanic Clouds.
 - These two galaxies orbit the Milky Way once every 1,500 million years, and each other once every 900 million years.
- Magellanic Clouds were formed at about same time as Milky Way Galaxy, approximately 13 billion years ago.

ISRO's Venus mission Shukrayaan - I could be shifted from 2024 to 2031

- ISRO stated that it is yet to receive approval from Indian government for Venus mission, as a result mission may be delayed until 2031.
 - In 2031, Earth and Venus would be aligned in manner that it would require mini-

mum amount of propellant for spacecraft to enter Venus orbit.

- Shukrayaan I will be an orbiter mission. Its scientific payloads include high-resolution synthetic aperture radar and ground-penetrating radar.
 - Mission is expected to study Venus's geological and volcanic activity, emissions on ground, wind speed, cloud cover, and other planetary characteristics from an elliptical orbit.
- At 850 degrees Fahrenheit, it is hottest planet in solar system.
- It rotates on its axis backward, compared to most of other planets in solar system.
- Indian scientists reported first evidence of presence of SW in Martian magnetosphere with help of data recorded by MAVEN spacecraft of NASA.
 - SW are Distinct electric field fluctuations (bipolar or monopolar) that follow constant amplitude-phase relations.
 - Their shape and size are less affected during their propagation.
- Mars Atmosphere and Volatile Evolution (MAVEN) explore the Mars atmosphere, ionosphere and how they interact with Sun and solar wind.

Mission Challenges:

- Venus has crushing air pressure at its surface, which is 90 times more than Earth's, and its atmosphere is highly toxic and filled with Sulphuric Acid that causes a powerful greenhouse effect.

Other mission to Venus:

- Venera program (Russia); Akatsuki project (Japan); VERITAS i.e., Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy, Mariner 2 and Magellan (NASA); EnVision mission (Europe) etc.
- Venus is second planet from Sun and sixth in solar system in size and mass.
 - Often referred to as Earth's twin. Both planets are almost alike in size, density and gravity.

Artificial Intelligence (AI) can help fight wildfires : World Economic Forum (WEF)

- A recent report by WEF highlighted that its FireAid initiative was helpful in managing wildfire in several regions of Turkey.
 - In 2021, average annual global cost of wildfires was around \$50 billion and released an estimated 6,450 megatonnes of CO₂ into atmosphere.

- Launched in January 2022, FireAid project (using AI system) aims to allow better prediction of wildfires and more efficient use of resources during firefighting operations.
 - FireAid predictions reduced both response time and risk to firefighters.
- AI was used to develop a digital twin for fire management, which helped firefighters in testing hypotheses of intervention measures and observing their outcomes in simulations.
 - A digital twin is a virtual representation of an object or system, is updated from real-time data, and uses simulation, machine learning and reasoning to help decision-making.
- AI and machine learning role in combating wildfires
 - Refinements in AI, real-time maps for wildfire prediction and risk mapping.
 - Sensors with inbuilt AI can collect acoustic information or operate as smoke detectors for alerting authorities.
 - Digital simulations can better plan efficient responses based on predicted outcomes.
 - UAVs can provide live images and help firefighters plan their response.

ISRO, Andhra University set up equipment to predict rip currents at sea

- Indian Space and Research Organization, National Centre for Earth Sciences (NCES), and the Andhra University (AU) have researched and concluded that constant rip current zones at Rushikonda beach and RK Beach have become a danger to the beach visitors.
- They have set up equipment to identify Rip currents to warn marines and local police.
 - Rip currents are common at all beaches across the globe.
 - People can enter the waters in rip current zones up to knee-deep levels

Digantara launches second satellite to monitor space weather

- Nagpur, Jan 3 (PTI) Space sector start-up Digantara, launched its second satellite Pushan-Alpha as a rideshare onboard SpaceX's Transporter-6 mission that soared to the low earth orbit from Cape Canaveral in Florida, US.

The Danger of Deep Fakes

Context:

- The disinformation threat has a new tool in the form of deepfakes.

What are deepfakes?

- Deepfakes are digital media

- video, audio, and images edited and manipulated using Artificial Intelligence (AI) to inflict harm on individuals and institutions.
- AI-Generated Synthetic media or deepfakes have clear benefits in certain areas, such as accessibility, education, film production, criminal forensics, and artistic expression.
- It can be exploited (hyper-realistic digital falsification) to damage the reputation, fabricate evidence, defraud the public, and undermine trust in democratic institutions with fewer resources (cloud computing, AI algorithms and abundant data).

Threats:

- 96% of deepfakes are pornographic videos, reducing women to sexual objects and causing emotional distress.
- Deepfake can depict a person as indulging in antisocial behaviours and can create social discord, increase polarization, and can even influence the election outcome
- Deepfakes can accelerate the trust deficit in traditional media and could be used by nation-state actors to create chaos in the target country, undermining trust in institutions and diplomacy.
- Misuse by non-state actors (terrorist organisations), to stir anti-state sentiments among people.

- The threat of the liar's dividend - an undesirable truth is dismissed as deepfake or fake news, giving more credibility to denials.
- Weaponization of deepfakes, use of fake news and alternative-facts narrative to dismiss an actual piece of media and truth.

What countries are doing to combat deep fakes?

China:

- Any doctored content using the technology should be explicitly labelled so that it can be traced back to its source, as per a new policy.

The European Union:

- An updated Code of Practice, that requires tech companies including Google, Meta, and Twitter to take measures in countering deepfakes on their platforms.
 - Non-compliance - 6% of annual global turnover as fine.

The U.S:

- The bipartisan Deepfake Task Force Act to assist the Department of Homeland Security (DHS) to counter deepfake technology by conducting an annual study of deep fakes.
- In India, there are no legal rules against using deep fake technology.
- However, specific laws can be addressed for misusing the tech, which includes Copyright Violation, Defamation & cybercrimes.

Case of Canada:

- While Canada does not have any regulations to tackle deep fakes, it is undertaking some of the most cutting-edge AI research with a number of domestic and foreign actors.
- Also, Canada is a member and leader in many related multilateral initiatives (Paris Call for Trust and Security in Cyberspace, Global Partnership on AI), which can be utilised to create deepfake policy in different areas.

Solutions:

- Media literacy for consumers is the most effective tool to combat disinformation and deep fakes.
- Meaningful regulations with a collaborative discussion with all stake holders to disincentivise the creation and distribution of malicious deepfakes.
- Easy-to-use and accessible technology solutions to detect deepfakes, authenticate media, & amplify authoritative sources.
- Social media platforms are taking cognizance of the deepfake issue, and almost all of them have some policy or acceptable terms of use for deepfakes.

Conclusion:

- We must all take responsibility for being critical Internet media

consumers, thinking and pausing before sharing on social media, and being part of the solution to this 'infodemic.'

Smart Program For Ayurveda

Context:

- Scope for Mainstreaming Ayurveda Research in Teaching Professionals (SMART) program has been launched to boost scientific research in Ayurveda colleges and hospitals for common issues such as Iron Deficiency, Anaemia, Obesity etc.

About NCISM

- It is a statutory body (under NCISM Act, 2020) for regulating the Indian system of medical education.

About CCRAS

- It is an autonomous body for promoting research in Ayurvedic sciences under the Ministry of Ayush.

GELBOTS

Context:

- Made out of gelatin, a gelbot is a significant advance in the world of 'soft robotics,' or robots that are fashioned out of organic and non-metallic materials.

About the Gelbots:

- A 3D-printed device move without requiring an extra power source.

- Feels like a Fruit gum rather than hard metallic surfaces of robots.
- Extremely promising materials for soft robotics.
- They rely on the principle that gels that swell or shrink in response to temperature can be used to create smart structures.
- Cheap & easy to mass produce

Uses:

- To deliver targeted medicines.
- Deployed as marine robots, patrolling and monitoring the ocean's surface.
- Minimally invasive technology for biomedical diagnosis and treatment.

Wassenaar Arrangement

Context:

- India will assume chairmanship of the plenary of the Wassenaar Arrangement for a year on January 1, 2023, just five years after joining the 42-member voluntary export control regime that monitors transfers of conventional weapons and dual-use goods.
- It facilitates Information sharing and standard setting on the conventional arms and dual-use goods and technology.

Other Multi-lateral export Control Regime:

- Zangger Committee (est 1971) for keeping a 'trigger list' of nuclear-related materials.

- India is NOT a member of it.
- NSG (est. 1975) for preventing nuclear proliferation. India is NOT a member.
- Australia Group (est. 1985) to control the development of chemical and biological weapons.
- India IS a member of it Missile Technology Control Regime (MTCR) (est. 1987): To prevent the proliferation of missile and unmanned aerial vehicle technology capable of delivering weapons of mass destruction. India IS a member of it.
- **Superceuticals-** 5G/4G Enabled smart health kiosk for measuring vitals & performing tests almost instantaneously with
- **Ambupod:** 5G/4G Enabled Auto Ambulance with basic life safety support & measurement of vitals with remote doctor support.
- **LogyAI:** Cataract Eye Screening application using the smartphone for quick & effective screening of cataract disease
- **Easiofy:** AR/VR-3D visualization application for Lung & Brain scans (CT/XRAY etc.) for effective diagnosis.
- **TechXR:** AR/VR- 3D immersive experience kit for students for enhanced learning & teaching tool for innovative teaching methods.
- **BKC Aggregators:** Fasal Salah App- personalized crop advisory for farmers to take informed decisions and connect with Mandis/Traders, state subsidies/insurance for crops
- **Dvara- Surabhi:** Unique Biometric muzzle identity of cattle to be used by the state department and insurance companies, and predicting health status of cattle to be used by dairy farmers
- **C-DOT (R&D Arm of DoT):** One-stop platform integrating all the health suits enabling Tele consultation and e-learning solution suits.

Vidisha : 1st District in India for the On-ground Deployment of Innovative 5G use

Context:

- Vidisha, an aspirational district of Madhya Pradesh became the first-ever district in India for the on-ground deployment of innovative 5G use cases offered by startups - a joint initiative by Vidisha District Administration and Centre for Development of Telematics (C-DOT), Department of Telecommunications (DoT) under the guidance of Additional Secretary (Telecom) & **Administrator USOF.**
- 5G use case promotional pilot: the following 5G/IoT use cases were demonstrated by startups in collaboration with C-DOT:

Duchenne Muscular dystrophy

Context:

- IIT Jodhpur, Dystrophy Annihilation Research Trust (DART) and AIIMS Jodhpur are working on developing an affordable treatment for a rare and incurable genetic disorder called Duchenne Muscular Dystrophy (DMD).

About DMD:

- It is the most common and fatal type of muscular dystrophy marked by progressive muscle degeneration and weakness due to alterations of a protein called "dystrophin" that helps keep muscle cells intact.
- Patients (usually children) have reduced bone density and an increased risk of developing fractures.
- India has over 5 lakh patients in the country suffering from DMD and the condition is predominantly seen in boys, but in rare cases, it can also affect girls.
- The current therapeutic options available to treat DMD are minimal and highly expensive treatment and are mostly imported from abroad.

What does the latest research include?

- DMD is patient specific. Gene Mutations occurring in a patient may vary from the other, thus

reducing the scope of universal treatment or therapeutics.

- Antisense Oligonucleotide (AON)-based therapeutics' idea is to mask specific exons in a gene sequence.
- The research team is working to replace this with molecular tags, so that customised/personalised medicine can be developed.
- Researchers have made progress in the development of generic Utrophin Modulators.
 - Utrophin and Dystrophin can co-localise in human muscle.
 - Utrophin over expression could act as a surrogate, compensating for the lack of dystrophin.

Hemo - Halt Bandage

Context:

- A newly developed bandage (by MACS-Agharkar Research Institute, an autonomous institute under DST) containing chitosan (a natural polymer that halts bleeding) and agonist (a substance that improves clotting) nanoparticles can rapidly minimize blood loss from wounds.
- Chitosan can control bleeding due to its cationic nature and hydrogel-forming ability leads to the concentration of erythrocytes & platelets in the injury site.
- Worldwide, uncontrolled haemorrhage is the leading cause of

traumatic death during accidents or injuries among the military and civilian populations.

- Severe bleeding triggers trauma due to shock, hypothermia, coagulopathy, tissue damage, and organ failure that often causes mortality.
- The Hemo-halt bandage can reduce blood loss before treatment, save lives, and reduce disabilities on the battlefield. It can also contribute to the reduction in hospitalization costs.

Using Artificial Photosynthesis to make green Hydrogen at record efficiency

Context:

- A study published has reported a way to achieve relatively high efficiency in an artificial photosynthesis reaction in which water is split into oxygen and hydrogen using sunlight and a catalyst.
- The technique is called photocatalysis.

The current method to make green hydrogen:

- The conventional way to produce green hydrogen is electrolysis, where water is split into its constituent elements by passing a large current through it.
- If both the electrolyser and the source of electricity are green, the resulting hydrogen is also green.

• Currently, most of the hydrogen in India is produced by steam-reforming:

- Methane is mixed with water in a reactor at 800-900° C and 20-30 atmospheres of pressure to yield hydrogen and carbon monoxide.
- The resulting hydrogen is thus 'grey'.

Photocatalysis:

- Photocatalytic STH is inspired by photosynthesis, where leaves use energy from incident sunlight to split water into oxygen and hydrogen.
- Here, "the process consists of a semiconductor photocatalyst wafer immersed in freshwater or seawater.
- When photons in sunlight strike the wafer, they dislodge electrons in its atoms, which trigger a redox reaction in the water and separate hydrogen and oxygen.
- The energy source is sunlight and the feedstock is water – both abundant on Earth and green by nature.

Efficiency:

- In a 10-hour test, the group recorded an efficiency of 7.4% with tap water and 6.6% with seawater, probably "the result of ions or other impurities present" in the liquids, according to the paper.

- The 9.2% record required de-ionised water.
- The STH efficiency was 3% in a 140-hour test.

START - UPs are powering India's Space Odyssey 2.0

Context:

- With the space sector opening up, start-ups have begun to rapidly transform the industry.

Measures for encouraging the private sector in the space programme:

- Indian National Space Promotion and Authorisation Centre (IN-SPACE) in Ahmedabad.
- IN-SPACE is an autonomous, single-window nodal agency, formed to promote, authorise, monitor and supervise the space activities of Non-Governmental Private Entities (NGPEs) in India.
- With the formation of IN-SPACE, over 100 companies have come up in this sector and in 2022 they raised as much as \$110 million.
- Reforms in the space sector enable more private players to provide end-to-end services.
- NewSpace India Ltd (NSIL), is mandated to transfer the matured technologies developed by the ISRO to Indian industries.
- **Change in strategy:** the present supply-based model has been changed to a demand-

driven model, wherein NSIL shall act as an aggregator of user requirements and obtain commitments.

- **Regulatory regime:** The first to be updated was the Space-Com and SpaceRS policies, further liberalizing the traditional Satellite Communication and Remote Sensing sectors, respectively, thus enabling entrepreneurs and industries to take up end-to-end activities in these domains

Private players' entry will support the Indian space Industry in the following ways:

- Participation in the private sector will give rise to new innovations and technology.
- It will provide an opportunity to harness the talent pool in the country, by providing them with immense opportunities for exploration.
- A reduction in the cost of operation with efficient practices, building a supply chain to accommodate the downstream players.
- Also, it will allow procuring non-Indian orbital resources to build their space-based systems for communication services in and outside India.

Private players find smaller satellite markets a more lucrative option.

Advantages of smaller satellites:

- Smaller satellites use industry-grade rather than space-grade components.
- These smaller satellites are parked closer to earth, where radiation is lower and have a shorter lifespan.
- Moreover, while an INSAT class satellite will cost at least ₹ 400 crores, smaller satellites can be built for just ₹10 crores
- Above all, they do not need large launch vehicles such as the PSLV or GSLV, which cost ₹300 crore and ₹450 crores, respectively.
- **Potential:** According to European Space Agency data, anywhere between 70,000 to 100,000 satellites will be launched in the next 15 years and over 80% will be small satellites weighing less than 500 kg.

Role of ISRO in the Private space industry:

- The private sector will rely on ISRO for infrastructure—be it launch facilities, tracking systems, technology transfers and capacity building
- ISRO will focus on non-commercial greater complexity scientific missions such as focusing on deep-space missions and putting an Indian in space through its Gaganyaan mission.
- ISRO has set up NewSpace India Ltd (NSIL) to handle the

- commercial end of the business.
- ISRO is the 6th largest space agency in the world and holds an exceptional success rate
- **Indian Space Association (ISpA):** ISpA aspires to be the collective voice of the Indian Space industry.
- The introduction of the Indian Space Activities Bill will give greater clarity to private players on how to be an integral part of the space sector.

Limitations of the private sector in space:

- **Policy Bottlenecks:** India is yet to legislate specific space laws to regulate the private sector.
- Hence, ensuring openness and clarity about the working framework becomes difficult in the current situation.
- **Monopolization:** Space is capital intensive industry, and only a few rich corporates can afford the investment.
- Hence, accommodating all players and ensuring an equitable platform becomes difficult.
- **Funding:** India's space budget of \$1.7 billion (in 2022) was minuscule compared to the US's \$30 billion and China's \$14 billion (which includes \$1 billion from its private players).
- **Profit Motive:** Space in general, should be an enabler of Technological equity for citizens.

- This aspect becomes difficult to ensure when private entities operate with profit interest.
- **Intellectual property issue:** The lack of a robust space-centric IPR policy in India, raises issues regarding sharing and diversification of space resources.

Conclusion

- At present, India needs a space policy, which can be clear and liberal on private players.
- With this proposed new policy for space, India wants to tap into the private sector, which could help the industry grow.

SHUKRAYAAN

Context:

- Professor at the Indian Space Research Organisation (ISRO) and advisor to its space science program, said that the organization is yet to receive approval from the Indian government for the Venus mission and that the mission could as a result be postponed to 2031.

Other countries' mission to Venus:

- Both the U.S. and the European space agencies have Venus missions planned for 2031 - VERITAS and EnVision, respectively.
- ISRO had originally hoped to launch Shukrayaan I in mid-2023 but cited the pandemic when it pushed the date to

December 2024.

- Other ISRO missions, including Aditya L1 and Chandrayaan III, have also been affected by manufacturing delays and commercial launch commitments.

James Webb Telescope Discovers its First Earth-sized Exoplanet

Context:

- James Webb Space Telescope has discovered its first new exoplanet.
- The planet is named LHS 475 b, and it is roughly the same size as Earth.

About Exoplanets:

- Exoplanets are planets that orbit other stars and are beyond our solar system.
- If an exoplanet is too close to the star, it might be too hot to sustain liquid water.
- If it's too far, it might only have frozen water.
- When a planet is at a distance that enables it to have liquid water, it is said to be in the "Goldilocks zone".

Why study exoplanets:

- Broadens our understanding of other solar systems
- Helps us piece together information about our own planetary system and origin.
- To search for living organisms in the universe

XII. Miscellaneous

Hospital Management Information System (HMIS)

- National Health Authority (NHA), is releasing beta version of Ayushman Bharath Digital mission Compliant HMIS.
- NHA is nodal agency for implementing Ayushman Bharath Digital Mission (ABDM) which aims to develop backbone for digital health infrastructure in India.
- HMIs envisions providing a digital platform for healthcare providers, particularly focusing on private clinic and small health facilities.
- HIMS will allows doctors to
 1. Generate and fetch Ayushman Bharath Health Account for their patients.
 2. View previous health records and prescriptions for registered patients.
 3. Generate and share digital standardized prescriptions.

Citizenship Norms Notified

- Under Citizenship Act, 1955 every minor child of a person who renounces their citizenship shall, there upon, cease to be a citizen of India.
- Provided that any such child may, within one year after attaining full age, make a declaration that he wishes to resume Indian Citizenship.
- Citizenship act of 1955, prescribes five ways of acquiring citizenship, viz birth, descent, registration, naturalisation and incorporation of territory.
- Act has been amended in 1986, 1992, 2003, 2005, 2019.
- Ministry of Home affairs has issued guidelines for those whose parents had renounced Indian Citizenship when they were minors but now wasnot to reclaim their nationality.

1. Index

Rule of Law Index

- After improvement in world Bank's ease of doing Business rankings now government has turned its attention to scoring better in Rule of Law Index.
- Index is published by the World justice project, a US based civil society group.
- In 2022, India was ranked 77th out of 140 countries.
- Eighth Factors that the Rule of Law Index measures :
 - Constraint on Government powers, Absense of corruption, open government.
 - Fundamental Rights order and Security, Regulatory enforcement civil Justice Criminal justice.

Social Hostilities Index (SHI)

Social Hostilities Index (SHI)	Washington - based think tank pew Research Centre	<ul style="list-style-type: none"> • The SHI measures acts of religious hostility by Private individuals, organisations or groups. • The index comprises 13 metrics, including religion - related armed conflict or terrorism and mob or sectarian violence. • At 9.4 out of maximum possible, score of 10, India's social hostilities Index in 2020 was worse than neighbouring Pakistan & Afghanistan. • India tops the Index on Social hostilities relating to religion. • The study has recorded the targeting of minorities in India during the Pandemic.
---------------------------------------	--	---

National Coal Index

Context:

- While launching the sixth-round commercial coal mines' auction for 141 coal mines, the ministry of Coal has decided to annually revise Performance Bank Guarantee (PBG) annually based on the National Coal Index (NCI) for the month of April at the beginning of the year.

Why the revision in PBG?

- Since the prices of coal fluctuate and have increased recently, the revision of PBG will ensure ease of doing business for companies and allow more investors in the coal sector.

What is PBG?

- It is a bank guarantee that needs to be submitted for each successfully auctioned coal mine by the winning entity.

- It shows that the entity has the capability to carry on the mining activity.

What is a coal auction?

- After the cancellation of coal licenses by India's supreme court, an auction-based regime was introduced in 2014, which allowed private sector participation.
- However, it was limited to captive usage in its own enduse plants. The sector has recently been opened for commercial mining by the private sector.

What is NCI?

- It is a price index reflecting the change in the price level of coal in a particular month relative to the fixed base year (2017-18 in this case)
 - The ministry of coal has started the commercial auction of coal mines on a revenue-share basis using the National Coal Index

2. Report

World Economic Forum (WEF) Releases Global Risk Report 2023

- Report is published annually based on Global Risks Perception Survey.
 - Global risk is defined as possibility of occurrence of an event or condition which, if it occurs, would negatively impact a significant proportion of global GDP, population, or natural resources.
 - Global risks ranked by severity over short and long term.

Key findings

- Top 5 risks for India are Digital inequality, Geopolitical contest for resources, Cost-of-living crisis, Debt crises, Natural disasters and Extreme weather events over short and medium term.
- Cost of living dominates global risks in next 2 years while climate action failure dominates next decade.
- Economic after effects of COVID-19 and Ukraine war resulted in rising inflation, rapid normalization of monetary policies, low-growth, low-investment era.
- Technology such as AI, quantum computing and biotechnology, etc. will exacerbate inequalities and digital divide.
- Only 34% of climate finance currently allocated to climate adaptation worldwide.

Recommendations

- Investing in multi-domain, cross-sector risk preparedness.
- Improving risk identification and foresight.
- Re-building and strengthening global risk preparedness cooperation.
- WEF established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland.

- It is International Organization for Public-Private Cooperation.

Neelakurinji (Strobilanthes Kunthiana)

- Ministry of Environment, Forest and Climate Change (MoEF) has listed Neelakurinji under Schedule III of Wildlife (Protection) Act, 1972, including it on list of protected plants.

About Neelakurinji

- It is a shrub that grows in the shola forests of Western Ghats in South India.
- Neelakurinji flowers bloom once every 12 years.
- Plant is named after the famous Kunthi River which flows through Kerala's Silent Valley National Park, where plant occurs abundantly.
 - Eravikulam National Park, near Munnar, is known for widespread blooming of kurinji.
- Blue colour of Kurinji has given Nilgiri hills its name, literally meaning Blue Mountains.

Advance Traffic Management System (ATMS)

- National Highways Authority of India (NHAI) is implementing ATMS on highways to reduce accidents.
- ATMS is an integrated solution to manage highway traffic through real time information and ensure safety.

- ATMS has been implemented for around 3,000 km of National Highways.
- In case of commercial vehicles, system check for valid fitness certificate.
- NHAI is also looking at leveraging GIS technology for analysing drone videos and Network Survey Vehicle data for identifying safety issues on highway

Criteria for gender gap reports

- World Economic Forum (WEF) will consider the participation of women at panchayat level to rank countries in its future Global Gender Gap reports.
 - Inclusion of data on women's participation at panchayat level will push India's ranking up on global stage.
- Presently, Global Gender Gap Index (first launched in 2006) benchmarks current state and evolution of gender parity across four key dimensions i.e.,
 - Economic Participation and Opportunity; Educational Attainment; Health and Survival; and Political Empowerment.

Global Risk Report 2023

Context:

- World Economic Forum (WEF) has released Global Risk Report 2023.

Key findings:

- Major global risks
 - In the next 2 years: Cost of living; Natural disasters and extreme weather events; Geoeconomic confrontation
 - In the next 10 years: Failure to mitigate climate change; Biodiversity loss and ecosystem collapse
- Major risks to India: Digital inequality; geopolitical confrontation for resources, the rising cost of living, debt crisis, natural disasters and extreme weather events
- Technologies such as AI, Quantum and Biotechnology are going to exacerbate the inequalities and digital divide (if no action is taken to mitigate it)

Economic and geopolitical risks:

- Covid-19 and Ukraine war has resulted in rising inflation, rapid normalization of monetary policies, low-growth and low-investment era
- A miscalibration between monetary and fiscal policies will raise the likelihood of liquidity shocks, signalling a more prolonged economic downturn and debt distress on a global scale.
- Geopolitical fragmentation will drive geoeconomic warfare and heighten the risk of multi-domain conflicts

- E.g. data regarding Russia's boreal forests –the biggest land-based carbon store on the planet – is no longer available for international scientific research because of the war in Ukraine.
- Concurrent shocks, deeply interconnected risks and eroding resilience are giving rise to the risk of polycrises (one crisis leading to another and the overall impact far exceeds the sum of each part)
- Food, fuel and cost crises exacerbate societal vulnerability while declining investments in human development erode future resilience
- As volatility in multiple domains grows in parallel, the risk of polycrises accelerates

Recommendations:

- Strengthening global risk preparedness and cooperation
- Risk identification and foresight of coming risks and ways to solve it
- Investment in risk preparedness
- Rethinking 'future' risks

About Global risk report:

- The Global Risks Report is an annual study published by the World Economic Forum ahead of the Forum's Annual Meeting in Davos, Switzerland.
- Based on the work of the Global Risk Network, the report de-

scribes changes occurring in the global risks landscape from year to year.

About WEF:

- It was established in 1971 as a not-for-profit foundation (HQ: Geneva, Switzerland).
- The World Economic Forum brings together decision-makers from across society to work on projects and initiatives that make a real difference.
- Some major reports published by WEF are:
 - Energy Transition Index.
 - Global Competitiveness Report.
 - Global IT Report
 - WEF along with INSEAD, and Cornell University publishes this report.
 - Global Gender Gap Report.
 - Global Risk Report.
 - Global Travel and Tourism Report.

UNDESA world social report 2023

Context:

- The United Nations Department of Economic and Social Affairs (UN DESA) published the World Social Report 2023, with the theme "Leaving No One Behind in an Aging World".

Background:

- Rooted in the UN Charter and

guided by the transformative 2030 SDGs, the UN DESA (New York City, 1948) upholds the development pillar of the UN.

- UN DESA helps countries make informed decisions by providing information through publications and databases and international deliberations at the UN General Assembly, ECOSOC, etc.
- The World Social Report (since 1997 and previously Report on the World Social Situation) has served as a background document for policy analysis of socio-economic trends.
- Since 2001, the periodicity of the report has been changed from a four-year cycle to a two-year cycle (biennial).
- In 2022, the world marked the twentieth anniversary of the adoption of the Madrid International Plan of Action on Ageing.
- To commemorate this, the 2023 Report explores the economic and social implications of the ageing of the human population.

Highlights of the 2023 Report:

- Population ageing is a defining global trend of the time, which has begun or is expected to begin soon in all countries and areas.
- People are living longer (an inevitable result of the demographic transition), and more are older than ever before.

- Spectacular improvements in health and survival and reductions in fertility have driven this momentous shift.

- This change brings both challenges and opportunities as countries strive to achieve the SDGs.

Strength	Weakness	Opportunities	Threats
Population ageing signals the extraordinary collective success of the world in improving living conditions for billions of people.	Decrease in the share of working-age people in the total population. Dependency, vast inequalities, diverse needs, the COVID-19 crisis, the war in Ukraine, and Climate change.	Demand for long term care is soaring in many countries	Impose significant social, economic, fiscal, and health-related costs on present & future generations.

Two policy actions suggested by the report:

- To promote labour market participation and increased productivity, uphold good health and prevent poverty.
- To reduce inequality and promote economic security at older ages in a fiscally sustainable manner, taking into account both pensions and health care.

Conclusion:

- The national policies aimed at creating equitable, inclusive societies for people of all ages, and prioritising the rights and well-being of older people are the need of the hour.

Bright Spots, Areas of

concern in Aser 2022

Context:

- Following two years of school closures caused by Covid-19, the recently released 17th Annual Status of Education Report (ASER) for 2022 contains both bright spots and areas of concern.

Background:

- Pratham, a non-governmental organisation (NGO), has been surveying children aged 6 to 14 and publishing ASER since 2005 to track trends in school enrolment, attendance, and reading and arithmetic abilities.
- This year's report (published after 2018) surveyed 7 lakh children in 19,060 villages across 616 districts across the country.

ASER 2022	
Bright spots	Areas of concern
<ul style="list-style-type: none"> • School enrolment touched a record high (98.4% in 2022, 97.2% in 2018) • The proportion of girls (aged 11-14) not enrolled has reduced (10.3% in 2006, 4.1% in 2018, 2% in 2022) • The percentage of children (aged 11 - 14) enrolled in government schools has risen from 65% in 2018 to 71.7% in 2022 • A small, steady increase in the children availing private tuitions (from 26.4% to 30.5% between 2018-22) • Improvement in the AVAILABILITY OF SMARTPHONES <ul style="list-style-type: none"> ○ In 2022, the availability of smartphones in the homes of enrolled students has nearly doubled from • % of CHILDREN NOT GOING TO SCHOOL: <ul style="list-style-type: none"> ○ It has dropped to 2% or below for the first time in 2022 ○ Even after prolonged school closures during the pandemic period, the proportion of children not enrolled in school continued to decline between 2018 and 2022. 	<ul style="list-style-type: none"> • Drop in learning levels of foundational literacy and numeracy (FLN) • For example, in 2022, the basic reading ability of children in Class 3 dipped by 6.8% points from 27.2% in 2018 and the proportion of children in Class 3 who could do at least subtraction fell to 25.9% (from 28.2%)

What can be deduced from the ASER 2022 findings?

Why has enrolment in government schools increased?

- Improvements in infrastructure; distribution of textbooks, mid-day meals during lockdown; job losses, and the closure of budget private schools in rural areas.

Why did private tuition increase?

- More flexible to adapt (If a person is unable to pay, they can pay later) and provided extra assistance to children when schools were closed.

Govt scheme to promote FLN

- The National Education Policy 2020
- The National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat
- Foundational Literacy and Numeracy mission

Way ahead

- Integration between the Anganwadi and school systems is critical.
- Particularly the education component of the Anganwadi system must be adequately funded.

Conclusion:

- FLN is critical for increasing the country's productivity in terms of human capital.
- As a result, the government's priority should be to raise learning and teaching standards.

Nature Risk Profile (NRP)

Context:

- The UN Environment Programme (UNEP) and S&P Global launched 'Nature Risk Profile', a new methodology for analyzing companies' impacts and dependencies on nature
 - It was released at Davos World Economic Forum Summit

- Its methodology is based on Kunming-Montreal Global Biodiversity Framework (GBF)

Aim of NRP:

- The Nature Risk Profile is aimed at enabling the financial sector to measure and address nature-related risk by providing scientifically robust and actionable analytics on nature impacts and dependencies.

Importance:

- With half of the world's GDP highly dependent on nature, biodiversity loss is a growing concern for global business leaders.
- According to the World Economic Forum's 2023 Global Risks Report

About UNEP

- The United Nations Environment Programme (HQ: Nairobi, Kenya) is responsible for coordinating responses to environmental issues within the United Nations system.
- It was established by Maurice Strong, its first director, after the United Nations Conference on the Human Environment in Stockholm in June 1972.

About S&P:

- S&P Global Inc. is an American publicly traded corporation headquartered in Manhattan, New York City.
- Its primary areas of business are financial information and analytics.

About Kunming-Montreal Global Biodiversity Framework:

- It was adopted last year (December 2022) and includes several targets for countries, businesses and other stakeholders for saving biodiversity including 30x30 Deal, Money for Nature (ensure USD200 billion per year) etc.

News Related to ongoing WEF

- The World Economic Forum (WEF) has chosen Hyderabad City (Telangana) to set up its Centre for the Fourth Industrial Revolution (C4IR) focused on healthcare and life sciences.
- It will be the 18th centre in WEF's network of Fourth IR centres.

3. Committee

3 New Cooperative bodies	Significance
<p>National Multi- State Co-operative Export Society</p>	<ul style="list-style-type: none"> • Act as umbrella organization for exports of surplus goods/service. • Primary to national level cooperatives societies including primary societies, district, state and national level federations and MSCS can become its member. • Higher exports will increase production of goods and services and increase employment opportunities. • Increased export will promote "Make in India" thus leading to Atmanirbhar Bharat. • Help cooperatives in getting benefits of export related government schemes/policies.

<p>National Multi- State Co-operative Organic Society</p>	<ul style="list-style-type: none"> • Unlock demand and consumption of organic products in domestic and global markets. • Help farmers to get high price of organic product through aggregation, marketing and branding. • Provide institutional support for aggregation, certification, storage, processing etc. • Better management of entire supply chain of products.
<p>National Multi- State Cooperative Seed Society</p>	<ul style="list-style-type: none"> • Act as an apex organization for production, procurement, processing, branding, labelling, packaging, storage, marketing and distribution of quality seeds. • Develop system for preservation and promotion of indigenous natural seeds. • Increase seed replacement rate, varietal replacement rate, ensuring role of farmers in quality seed cultivation. • Quality seeds production reduces dependence on imported seeds, boost rural economy, strengthen food security
<p>Village Defence Committees (VDCs)</p>	<ul style="list-style-type: none"> • Recently, Lt Governor of Jammu and Kashmir agreed to set up VDCs. • First formed in the mid 1990s in Doda district, VDCs are a force multiplier against militant attacks. • It involves residents of remote hilly villages who are trained and given weapons to defend themselves. • They function under the direction of the SP/SSP of the district concerned with ex-servicemen, ex-policemen and able-bodied youth as members on a voluntary basis. • VDCs are renamed as Village Defence Guards (VDGs) with increased payment

4. Minutes : (News in Shorts)

Union Min Anurag Thakur launches theme of Y20 summit

- Anurag Singh Thakur (Minister of Youth Affairs) has launched

the themes, logo, and website of Y20 summit India in Curtain raiser event in New Delhi

Themes:

1. Future of Work: Industry 4.0,

Innovation & 21st Century skills

2. Climate Change and Disaster Risk Reduction: Making Sustainability a way of life

3. Peacebuilding and Reconciliation: Ushering in an era of No War
4. Shared Future: Youth in Democracy and Governance and Health, Wellbeing & Sports: Agenda for Youth.

President of India conferred 2022 Digital India Awards

- The President of India, Droupadi Murmu has conferred the Digital India Awards 2022 to the winners on 7th January 2023.
- The e-NAM (Ministry of Agriculture and Farmers Welfare) was awarded the platinum award in Digital Empowerment of Citizens category.
- The e-Vivechna App (Madhya Pradesh) was awarded the platinum award in Digital Initiatives at Grassroots Level.
- The Mine Mitra (Uttar Pradesh) was awarded in Digital Initiatives for Ease of Doing Business category.

RBI to issue green bonds in two tranches of Rs 8,000 crore each

- The Reserve Bank of India has announced that first Sovereign Green Bonds (SGrBs) would be issued in two tranches for an aggregate amount of Rs 16,000 crore.

- The proceeds will be utilised for funding public sector projects seeking to reduce carbon emissions.
- The first auction would be done on January 25, 2023 while the second on February 9, 2023
- SGrBs will be issued through uniform price auction and 5% of the notified amount of sale will be reserved for retail investors

NABARD and 'Hockey Wali Sarpanch' links pact to strengthen farmers

- Neeru Yadav, who is fondly known as 'Hockey Wali Sarpanch' has signed an agreement with NABARD to start the Farmers Producers Organisation (FPO) with the assistance of SIIRD (Society of Indian Institute of Rural Development).
- This initiative will strengthen farmers of Lambi Ahir Village, Rajasthan.

FPO:

- It is a legal entity formed by primary producers.
- Producers such as farmers, milk producers, fishermen, etc, can form a company basis equity share.

BIS launches portal for mapping of industrial units and laboratories

- Minister for Commerce and Industry, Piyush Goyal has

launched Bureau of Indian Standards (BIS) portal for mapping of Industrial Units and Laboratories.

- It is a centralised platform.

Aim:

- To provide information on industrial units and laboratories across the country.
- It will enable analysis of test facilities in the country and help entrepreneurs in accessing information about testing facilities.
- He has also launched Standards National Action Plan (SNAP) 2022- 27.

India's First Festival of Inclusion, Purple Fest kicks off

- The India's first-of-its-kind inclusivity, 'Purple Fest: Celebrating Diversity' has been started in Panjim, Goa from January 6–8, 2023.
- The event was attended by Union Minister of Social Justice and Empowerment, Dr. Virendra Kumar; Goa CM, Dr Pramod Sawant; and Minister for Social Welfare, Goa government Subhash PhalDessai.

Aim:

- To showcase how we can come together to create a welcoming & inclusive world for everyone.

முதன்மைத் தேர்வுக்கான உத்தி

1. முதன்மைத் தேர்வுக்குப் படிப்பதற்கு முறையானத் திட்டத்தை வகுத்து அதை முழுமையாகப் பின்பற்ற வேண்டும்.
2. நாட்டு நடப்புகள் குறித்த விவரங்களை தினமும் தயார் செய்ய வேண்டும். புதிய தகவல்களைத் தொடர்ந்து தெரிந்து கொள்ள வேண்டும்.
3. தேர்வுக்குத் தயாராவதில் உறுதியாக இருக்க வேண்டும்.
4. ஒவ்வொரு பாடத்திற்கும் ஒதுக்கப்பட்டுள்ள மதிப்பெண்களைக் கருத்தில் கொண்டு அனைத்துப் பாடங்களுக்கும் தயாராவதற்கு போதிய நேரத்தை ஒதுக்க வேண்டும்.
5. தேர்வுக்குத் தயாராவது அலுப்பூட்டும் வகையில் இல்லாமல் இருப்பதை உறுதி செய்யும் வகையில் கால அட்டவணை தயாரிக்கப்பட வேண்டும்.
6. திருப்புதலின் போது நேரத்தை மிச்சப்படுத்துவதற்காக, முதல் முறை அல்லது இரண்டாவது முறை பயிலும் போது முக்கிய அம்சங்களை அடிக்கோடிட்டு வைத்திருக்க வேண்டும் / முன்னிலைப்படுத்த வேண்டும். நாம் முதன்முறை படிப்பதன் நோக்கம் தேவையற்ற விசயங்களை விலக்கி, நாம் படிக்க வேண்டிய பாடங்களின் அளவைப் பாதியாகக் குறைப்பதுதான். இரண்டாவது முறை பயிலும் போது, நாம் படிக்க வேண்டிய பகுதிகளை, தேர்வுக்கு முன் உள்ள இரண்டு நாட்களில் திருப்புதல் செய்யும் வகையில், மேலும் குறைக்க வேண்டும்.
7. முந்தைய ஆண்டு வினாத்தாள்களின் அடிப்படையில் விடைகளை எழுதிப் பயிற்சி செய்ய வேண்டும்.
8. தேர்வை எதிர்கொள்வதற்கு ஒரு விண்ணப்பதாரர் எந்த அளவுக்குத் தயாராகியிருக்கிறார் என்பதைப் புரிந்துகொள்வதற்காக அடிக்கடி மாதிரித் தேர்வுகளை எதிர்கொள்ள வேண்டும்.
9. பயிற்சியே ஒருவனை முழுமையாக்குகிறது என்பதே முதன்மைத் தேர்வுக்கான மந்திரமாக இருக்க வேண்டும்.
10. எந்தவொரு பாடத்திற்குமான பயிற்சியில் சேரும் தேர்வர்கள், அதற்கான மாதிரித் தேர்வுகளில் முழு ஈடுபாட்டுடன் பங்கேற்க வேண்டும். முதன்மைத் தேர்வுக்கும், முதல்நிலைத் தேர்வுகளுக்கும் இடையிலான முக்கியமான வேறுபாடு என்னவென்றால், முதல்நிலை தேர்வுக்கான மாதிரித் தேர்வுகளை மூன்றாவது நபரின் துணை இல்லாமல் ஆன்லைனிலோ, ஆஃப்லைனிலோ தனித்தே எழுதலாம். ஆனால் முதன்மைத் தேர்வைப் பொறுத்தவரை மூன்றாவது நபரைக் கொண்டு மதிப்பீடு செய்வது மிகவும் அவசியமாகும். மதிப்பீடு செய்யும் மூன்றாவது நபர் ஒரு வல்லுநராகவோ, அல்லது சிறந்த ஒரு பயிற்சி நிறுவனமாகவோ இருக்கலாம்.
11. முதன்மைத் தேர்வு என்பது தேர்வர் அறிந்துள்ள தகவல்களையும் அவரது நினைவுத் திறனையும் மட்டுமே சோதிப்பதாக இல்லாமல், அவர்களின் புரிதலின் ஆழம், அறிவுசார் திறன்கள் ஆகியவற்றை மதிப்பிடுவதை நோக்கமாகக் கொண்டது ஆகும். பொதுபாடத் தாள்களில் அனைத்து வினாக்களுக்கும் விடை அளிக்க வேண்டும். வினாக்களின் தன்மை ஒவ்வொரு தாளுக்கும் மாறுபடும். ஆனால், அதிக வினாக்கள் இருக்கும் என்பதால் தேர்வர் விடைகளை வேகமாக எழுத வேண்டும். விடையளிக்க வேண்டிய வார்த்தைகளின் வரம்பும் அதிகமாக இருக்கக் கூடும்.
12. முதன்மைத் தேர்வைப் பொறுத்தவரை, வார்த்தைகளின் எண்ணிக்கையை கவனத்தில் கொள்ளப்பட வேண்டிய மிக முக்கியமான அம்சமாகும்.
13. முதன்மைத் தேர்வுகளை எழுதுவதற்கான அணுகுமுறையில் தேர்வர்கள் மிகவும் தெளிவாக இருக்க வேண்டும். தேர்வு அறையில், வினாத்தாளைப் பெற்ற பிறகு, விடைகளை வேகமாக எழுத வேண்டி இருக்கும் என்பதால், சிந்திப்பதற்கு நேரம் இருக்காது. எனவே, வினாக்களை புத்திசாலித்தனமாகத் தேர்வு செய்து விடை அளிக்க வேண்டும்.
14. வினாக்களில் தரப்பட்டுள்ள கருத்துரை கொடு, கருத்து தெரிவி, விரிவாகச் சொல், காட்சிப்படுத்து, தெளிவுப்படுத்து போன்ற வார்த்தைகளின் பொருளைப் புரிந்துகொண்டு, அதற்கேற்ற வகையில் உங்கள் எழுத்துத் திறனை வெளிப்படுத்த வேண்டும்.



Online Learning Platform



Play Store App



On Going Classes

TNPSC GROUP-I
PRELIMS CUM MAINS

GR-II/IIA MAIN
Written Exam

TNPSC FIELD,
SURVEYOR

TNUSRB - POLICE

Program Highlights

Answer
Writing

Answer
Evaluation

One to
One
Feed
back

Questions
with
Answers

Paada
Saalai
Class

34
Test
Series

90 444 61 061, 90 444 62 062

www.sureshpaadasaalai.com
sureshpaadasaalai@gmail.com



வெற்றியின் முகவரி

SINCE 2006

SURESH'
IAS ACADEMY

BANK | TNPSC | SSC | RAILWAY | POLICE | TET

தூத்துக்குடி

162-A, டீல்டையதம் ரோடு
தூத்துக்குடி
99445 11344
99941 70110

திருநெல்வேலி

8A/1, திண்டிவனம் ரோடு,
பாண்டையங்கோட்டை.
98942 41422
99948 14400

இராமநாதபுரம்

82, புனிவரத் தெரு,
கண்ணன் கோவில் அருகில்
75503 52916
75503 52917

மதுரை

மாஸ்டர் மதுரை பின்புறம்,
குடக்குச்சாலை, வானவால்
98431 10566
98431 15233

சென்னை

4, சிவனா ஆர். ரெட்லிங்,
Skywalk அருகில்.
044 47665919
97555 52003