



Daily Current Affairs

GEO IAS

SOURCES



Contents

GS I	14
ART & CULTURE	14
1. Archaeologists, Sanskrit scholars tie up to decipher Rigveda text- The Hindu.....	14
2. Puri Ratna Bhandar- INDIAN EXPRESS.....	15
POLITY & GOVERNANCE	15
3. PM inaugurates Nalanda University campus in Bihar- The Hindu	15
4. DAY-NRLM organized workshop on 'Making of Lakhpati Didi's' through Integrating Women SHGs into Service Sector Enterprises-PIB.....	16
GEOGRAPHY	16
5. Recycling to kick in as long-term solution to EU rare-earths challenge- THE HINDU	16
GS II	17
INTERNATIONAL RELATION	17
6. Netherlands emerges as India's 3rd largest export destination in 2023-24 - The Hindu	17
7. Australian army to allow recruits from foreign nations- BBC.....	17
8. Rights group accuses Israel of hitting residential buildings with white phosphorous in Lebanon- the week.....	18
9. ASEAN FTA: govt. seeks industry inputs to up demand pitch - The Hindu	18
10. 'Neighbourhood First' to be on show at swearing-in- The Hindu.....	19
11. India welcomes Egypt, Iran, UAE, Saudi Arabia and Ethiopia joining BRICS- The Hindu	20
12. 90 countries to attend Swiss-hosted Ukraine peace summit that Russia is snubbing- The Indian Express	20
13. Indian tripartite delegation at the 112th session of International Labour Conference (ILC)-PIB. 20	
14. UNSC endorses resolution to end war on Gaza- The Hindu	21
15. Relief for Goans with Portuguese citizenship seeking OCI cards - Indian Express.....	21
16. Horrified' by plight of Sri Lanka's plantation workers, says tribunal -THE HINDU.....	22
17. G7 summit: PM Modi leaves for Italy- INDIAN EXPRESS.....	22
18. Nepal seeks help from India to set up Jan Aushadhi Kendra - The Hindu	23
19. WHO Designates CCRAS-NIIMH, Hyderabad as Collaborating Centre for Traditional Medicine Research - PIB.....	23
20. China's 'grey-zone' warfare tactics against Taiwan Explained- THE HINDU	24
21. NSAs of India, U.S. review progress on iCET- The Hindu.....	24
22. Negotiating for peace : India's decision to attend but not vote at the Swiss conference was right- THE HINDU	25

23.	At 172, India now has more nuclear weapons than Pakistan; US, Russia possess 90% of global arsenal, says report- INDIAN EXPRESS	26
24.	Jaishankar reviews energy projects in Sri Lanka visit - The Hindu	26
25.	New Delhi, Dhaka to hold talks on comprehensive ties- The Hindu.....	26
26.	PM Modi likely to skip SCO summit in Kazakhstan; Xi, Putin, Sharif may attend- The Hindu	27
27.	India, Pak. delegations reach J&K to inspect power projects under Indus Water Treaty- The Hindu	28
28.	India achieves 'outstanding outcome' in FATF evaluation - The Hindu	28
29.	Jaishankar to lead Indian delegation to attend SCO summit in Astana - Indian Express.....	29
30.	Russia warns of 'response' against U.S. drones over Black Sea- THE HINDU	29
SCIENCE & TECH.....		30
31.	Health Ministry reworks protocol as country's TB elimination drive plateaus- The Hindu	30
32.	Ministry of Health & Family Welfare and Ministry of Defence set up dedicated Tele MANAS cell for armed forces- PIB	30
33.	States told to act on social media groups, sites trading organs - The Hindu.....	31
34.	What is the National Health Claim Exchange?- The Hindu	31
35.	Does H5N1 pose a threat for humans? - The Hindu	32
36.	Spread of deadly 'flesh-eating bacteria' in Japan raises global concerns- BUSINESS STANDARD	33
37.	India eyes breakthrough against sickle cell - The Hindu	33
38.	India, U.S. working to scale up partnership on critical minerals- The Hindu.....	34
39.	Prolonged exposure to coal mining causes respiratory, skin diseases in workers: study - The Hindu	34
40.	Screen all pregnant women for gestational diabetes with point-of-care test, say experts- The Hindu	35
POLITY & GOVERNANCE.....		35
41.	CIC can't comment on how MPs spend their funds, says Delhi HC - The Hindu.....	35
42.	NHRC seeks report on 'sale of underage girls' as part of 'Nata Pratha' - The Hindu.....	36
43.	Quality Council of India celebrates World Accreditation Day in more than 20 cities across India- PIB	36
44.	First decision of the new government shows commitment of government to farmer welfare ...	37
45.	A comprehensive immunisation schedule for women is ready - The Hindu	37
46.	Ex-AAP minister disqualified from assembly weeks after joining BSP- INDIAN EXPRESS	38
47.	Feasibility study on land connectivity with India in final stages, says Wickremesinghe- The Hindu	38
48.	Rising cases under PoSH Act point to better reporting	38
49.	'Drugs in parcel' ploy being used to dupe people: Centre- THE HINDU	40

50.	Criminalizing words : Speeches that do not instigate violence should not be deemed unlawful activity- THE HINDU	40
51.	Two steps back: India needs to close the gender gap in education and politics -THE HINDU.....	40
52.	Govt. sanction must to prosecute police personnel for 'illegal acts' on duty: HC - The Hindu	41
53.	PM addresses Kisan Samman Sammelan in Varanasi, Uttar Pradesh Releases 17th instalment of PM KISAN amounting to more than ₹20,000 crores-PIB	42
54.	Cabinet approves Central Sector Scheme "National Forensic Infrastructure Enhancement Scheme" (N.F.I.E.S.) - PIB	42
55.	Major Reforms made in Draft Mining Plan Guidelines 2024 issued by Ministry of Coal- PIB	43
56.	Act punishing organised cheating comes into effect-The Hindu	43
57.	Maternity leave for parents of child born through surrogacy - The Hindu	44
58.	Kerala House passes resolution to rename the State 'Keralam' - The Hindu	44
59.	Ahead of roll-out of the new criminal laws, Union Home Ministry tests eSakhsya App - The Hindu	45
60.	Urban Affairs Ministry to revamp affordable housing scheme - The Hindu.....	45
61.	With dummy FIRs, pocket guides, police get ready to switch to new criminal laws- The Hindu .	46
62.	India slams 'deeply biased' U.S. report on religious freedom- THE HINDU.....	46
ECONOMY		47
63.	Centre releases ₹1,39,750 crore to states towards tax devolution for June.....	47
64.	GST Council to meet for the first time this year on June 22- The Hindu	47
65.	'Digi Yatra could be expanded to hotels, rail travel, public places' - The Hindu.....	48
ART & CULTURE		48
66.	Srinagar's 'World Craft City' tag will promote global links- The Hindu.....	48
GS III		49
SCIENCE & TECH		49
67.	In fight against Nipah, scientists find new way to generate virus-like particles in lab - The Hindu	49
68.	China lands on moon's far side in historic sample retrieval mission- INDIAN EXPRESS	49
69.	ISRO develops new PraVaHa software for aerodynamic design- The Hindu.....	50
70.	Forest fire rages in Himachal; rain expected to bring relief - The Hindu	50
71.	ICMR seeks to provide oral formulation of hydroxyurea to treat sickle cell disease - The Hindu	51
72.	Remove claim of '100% fruit juice' from label and ads, FSSAI directs food businesses - The Hindu	51
73.	Green-beard' genes could explain how altruism arose in nature-THE HINDU	52
74.	AI Can Empower India's DPI by Enabling Diverse Apps-LIVEMINT	52

75.	SpaceX's Starship rocket completes test flight for the first time, successfully splashes down- INDIAN EXPRESS	53
76.	First human death from H5N2 bird flu: Why are the experts concerned?-INDIAN EXPRESS	53
77.	ISRO set for landing experiment of reusable vehicle- The Hindu	54
78.	'Global firms are adopting large AI models to cut costs'- The Hindu	54
79.	ISRO releases images of sun captured by Aditya-L1- The Hindu	55
80.	IISc develops method to remove heavy metal contaminants from groundwater - Times of India 55	
81.	India-made TB diagnostics tech wins acclaim at World Health Assembly - The Hindu	56
82.	NSSO survey finds COVID-19's second wave hit informal economy hard- The Hindu.....	56
83.	What is an electromagnet? – The Hindu.....	57
84.	200 times increase in Space StartUps in just two years- PIB	57
85.	IIIT-Delhi project on antimicrobial resistance wins joint second prize in global competition - The Hindu 58	
86.	ISRO data to help flood risk analysis on two Kerala dams- TIMES OF INDIA	58
87.	Stringent regulations could hinder growth of AI in India: experts- The Hindu	59
88.	Pushpak, ISRO's reusable launch vehicle, clears test- The Hindu	60
89.	Chinese probe returns to Earth with first samples from far side of the moon- The Hindu.....	60
90.	Chandrayaan-4 parts to be sent in 2 launches, assembled in space: ISRO chief	61
ENVIRONMENT		61
91.	'T.N. Forest Dept. has formed 20 village panels to protect mangrove cover' - The Hindu	61
92.	Global project 'paints' evidence of air pollution in India - The Hindu	62
93.	Climate conference in November to emphasize 'peace' and 'truce'- The Hindu	62
94.	'India must spend up to \$385 bn for RE goal'- The Hindu	63
95.	Study ranks India second in nitrous oxide emissions - The Hindu	63
96.	3 states seek shrinking of eco-sensitive areas in Western Ghats- The Indian Express	64
97.	MNRE and IREDA conference highlighting Odisha's Green Energy Potential- PIB	64
98.	India at 176 among 180 countries in Environment Performance Index 2024, high emissions flagged again- The Print	65
99.	Scientists from India, China, U.K. develop catalyst to produce cheaper biodiesel.....	66
100.	NHAI to Enhance Green Cover Along the National Highways with Miyawaki Plantations- PIB....	66
101.	Indian cities are 'heat traps' that make summers worse: official - The Hindu	67
102.	Limbless amphibian found in Kaziranga for first time	67
103.	How dangerous is methanol poisoning?- The Hindu	68

104. Nord Stream leaks: Thousands of tonnes of methane may have dissolved in Baltic seawater, marine life impacts unclear-DOWN TO EARTH	69
105. Uttar Pradesh leads in compressed biogas potential, but challenges persist: Experts discuss at symposium- DOWN TO EARTH.....	69
106. India's largest leopard safari opens at Bannerghatta- The Hindu	70
107. Researchers at IISER Tirupati developed an efficient method for moving towards 'Hydrogen economy- PIB	70
108. Uttarakhand govt. to study risk posed by 13 glacial lakes during monsoon- The Hindu.....	71
109. Antelope-like mammal from Bhutan recorded at lowest elevation in western Assam- THE HINDU	71
ECONOMY	72
110. More road projects, higher toll revenue boost the introduction of InvITs.....	72
111. Total foodgrain production is estimated at 3288.52 LMT, higher by 211.00 LMT from average foodgrain production of last 5 years - PIB.....	72
112. Second Advance Estimates of 2023-24 of Area and Production of Horticultural Crops- PIB	73
113. Greening the Mines: Coal and Lignite PSUs Lead the Way in Land Restoration and Sustainability - PIB	73
114. PMI signals Services growth receded to a 5-month low in May - The Hindu	74
115. RBI keeps repo rate unchanged, raises GDP forecast to 7.2% - The Hindu	74
116. Digital payments intelligence platform soon to curb fraud - The Hindu	75
117. RBI's agenda: capital account liberalisation, globalisation of rupee and digital payment system - Indian Express	75
118. 'Unusual surge': Govt restricts imports of gold jewellery and parts - Indian Express	76
119. World Bank says global growth stabilizing but below pre-COVID levels- BUSINESS STANDARD .	77
120. Raise capital expenditure by 25%; focus on education: CII- The Indian Express	77
121. Sensex, Nifty scale fresh peaks as inflation cools off - Indian Express.....	78
122. May WPI inflation spikes to 15-month high on food prices - The Hindu	78
123. Launch of Rs 2800 crore Digital Agri Mission part of govt's agenda for first 100 days - Indian Express	79
124. Is Fed FOMC outcome hawkish or dovish? Here's is what Street says- ECONOMIC TIME	79
125. Govt looks at income tax rate cut to boost demand, trigger private investment- The Indian Express	79
126. Kanchanjunga express accident: Railway Board reveals why anti-collision system 'Kavach' was not in place on mishap route- Economics times.....	80
127. Disinflation process facing resistance from stubborn food inflation: RBI Governor	80
128. Union Cabinet gives go-ahead to increase MSP of 14 kharif crops - The Hindu.....	81

129.	Food inflation behind grudgingly slow pace of disinflation: RBI Governor Das - Indian Express .	81
130.	Government of India approves new transmission schemes to evacuate power-PIB	82
131.	Current account logs \$5.7-bn surplus in Q4 after 10 quarters- The Hindu.....	82
132.	Rising water stress to hurt India's credit strength, Moody's says-THE PRINT	83
133.	Railways to bring down speed of select Vande Bharat, Gatiman Express trains- THE HINDU	83
134.	Union Minister announced grant of 'Mini RATNA' status (Category-1) for Central Electronics Limited (CEL)- PIB	84
135.	Economy robust despite global risks'-THE HINDU	84
136.	SEBI tightens norms on financial influencers, eases rules for delisting - The Hindu	85
137.	Govt to amend 2006 Act to streamline disputes over delayed payments to MSMEs - The Hindu	85
138.	Banks' gross NPA ratio moderates to 12-year low of 2.8% in March 2024: RBI report - Indian Express	86
139.	Interlinked drains to multiple agencies: What's behind Delhi's perennial problem	86
INTERNATIONAL RELATION		87
140.	Nepal's honey gatherers say fewer hives threaten tradition - Indian Express	87
141.	Wealth of HNWI's reached unprecedented levels in 2023: Capgemini study - The Hindu	88
142.	Amid strained ties, Maldives President Muizzu accepts invite to attend Modi's swearing-in tomorrow- INDIAN EXPRESS	88
143.	Pakistan confirms 5th polio case of year 17 days after victim's death - THE HINDU.....	88
144.	UN declares 2025 the Year of QuantumScience- The Hindu	89
145.	Nearly 60 times jump in silver imports from UAE unusual: GTRI	89
146.	Industry seeks rethink on Chinese FDI curbs and high import tariffs - The Hindu	90
147.	India, US discussing co-production of Javelin anti-tank missiles - THE PRINT	90
148.	LTTE asked to explain why it should not be declared unlawful-THE HINDU.....	91
149.	India and U.S. in talks for Stryker infantry vehicles- The Hindu.....	91
GEOGRAPHY		92
150.	Chile to install world's largest astronomy camera on the edge of Atacama desert- INDIAN EXPRESS.....	92
POLITY & GOVERNANCE		92
151.	CCI draft regulations attempt to tighten grip on Big Tech- The Hindu	92
152.	NITI Aayog unveils AIM – ICDK Water Challenge 4.0- PIB.....	93
153.	Who is the pro-tem Speaker of Lok Sabha and how is an MP chosen for the role?.....	93

DEFENCE	94
154. Indian Army unveils “Vidyut Rakshak” for enhanced generator monitoring and control- INDIAN EXPRESS.....	94
155. Army gets its first indigenous man-portable suicide drones- Economic Times.....	95
156. India ready to host its first multinational air exercise ‘Tarang Shakti’ in August	95
157. Cost of future wars is enormous, resources should be optimised: Chief of Defence Staff	96
Editorials, Gists and Explainers	97
158. Discussions on Loss & Damage Fund, setting up COP29 — what to expect at 60th Bonn Climate Conference- The Print	97
159. Explained: The Great Indian Tree Cover Loss- The Wire.....	97
160. Geographical location, deforestation, climate change: What led to the deadly landslide in Papua New Guinea-INDIAN EXPRESS.....	98
161. How Delhi gets its water- The Indian Express	99
162. Remoulding the Global Plastics Treaty - The Hindu.....	99
163. The message from the Andhra Pradesh bifurcation- The Hindu	100
164. No party wins majority: What does a coalition government mean for economic reforms in India?-INDIAN EXPRESS.....	101
165. Federalism in India: What you need to know- The Indian Express.....	101
166. Slight dip in number of women in LS, well under proposed 33% quota- The Indian Express	102
167. Special Category Status for AP: Chandrababu Naidu’s big demand- The Indian Express	103
168. Bihar, Andhra Pradesh’s demand for special category status Explained-INDIAN EXPRESS	103
169. The Centre is notional, the States the real entities - The Hindu	104
170. Tonga volcano could cause unusual weather for rest of decade: study - The Hindu	105
171. What grade of coal does India produce? - The Hindu.....	106
172. James Webb Space Telescope spots earliest-known galaxy: What a new study says - Indian Express	106
173. The delicate balancing of health-care costs- the hindu	107
174. The bacteria that write new genes to cope with infections- The Hindu.....	107
175. Health regulations need a base to top approach- The Hindu	108
176. Property is real, and so should the ‘compensation’- The Hindu.....	109
177. Challenge for farm sector: How to share growth gains- The Indian Express.....	110
178. Cooperative-based distribution model mooted for power supply to farmers in Rajasthan- THE HINDU	110
179. India’s GDP growth is impressive, but can it be sustained?- The Indian Express	111
180. Road mobility in India is both unsustainable and unjust - Mint	112

181. Global debt crisis: Nations spending more on interest payment than education & health- DOWN TO EARTH	112
182. Pakistan, Denmark, Greece, Panama and Somalia are set to get seats on the UN Security Council- LIVE MINT.....	113
183. Indian Navy gets its first woman helicopter pilot - THE HINDU.....	113
184. Is it time for proportional representation? - The Hindu	114
185. What are the powers of the Speaker - The Indian Express.....	115
186. Impact of Oriental despotism and the idea of otherness- The Hindu	116
187. Who are the Satnamis, the Dalit religious community with a history of protests - The Indian Express	117
188. Singular focus- The Hindu	118
189. Why Centre should not junk arbitration to settle disputes- The Indian Express.....	119
190. Red Fort case: What are the standards for awarding death sentence, the President's 'mercy' power- INDIAN EXPRESS	120
191. Recalcitrant jumbo – The Hindu.....	121
192. India's looming financial crisis- The Hindu.....	122
193. A push for more climate action- The Hindu	122
194. Understand the Indian Ocean and you'll understand much about earth- The Hindu	123
195. Why heatwaves have not been included as a notified disaster in the Disaster Management Act - INDIAN EXPRESS.....	124
196. No outcome in Bonn: why money is key to climate action - Indian Express	124
197. From warp speed to reset, the state of India-U.S. ties- The Hindu	126
198. China is wasting no time in the small reactor great game—India must act fast, work with US- THE PRINT.....	127
199. Death of workers in Kuwait underlines vulnerability of Indian migrants- INDIAN EXPRESS	127
200. Tackling the fatty liver disease epidemic- The Hindu	128
201. Four new studies report progress towards long-awaited HIV vaccine- The Hindu	128
202. What is SWM cess and why is it levied on waste generators?- The Hindu.....	129
203. Why direct seeding of rice (DSR) is yet to pick up in Punjab- The Indian Express	130
204. Strategic imperative and environment concern in Great Nicobar project- The Indian Express .	131
205. The last continent must remain a pristine wilderness- THE HINDU	132
206. How can Himachal Pradesh fight against forest fires? Explained- The Hindu	132
207. Should not EVs and Hybrids be treated equally for govt. Subsidies?- The Hindu.....	133
208. IRDAI improves health cover experience- The Hindu	134
209. Why new government should embrace global markets- The Indian Express.....	135

210.	West Bengal train accident highlights need for a thorough review of misplaced priorities of past two decades in Indian Railways- INDIAN EXPRESS	136
211.	How demand for cereals in India is changing- The Indian Express	137
212.	Can GM crops promise food security?- Indian Express.....	137
213.	The vulnerabilities of India's elderly - The Hindu.....	139
214.	New dynamics- The Hindu	140
215.	A story of displacement to one of empowerment- The Hindu	141
216.	What is the Resolve Tibet Act?-	142
217.	New Parliament should get rid of bad laws– INDIAN EXPRESS.....	143
218.	11 candidates apply to verify EVM burnt memory: what is this process? - Indian Express	144
219.	Bihar quota struck down: what is the 50% ceiling that court relied upon?- The Indian Express	145
220.	Explained: Bail in money laundering cases, and the 'twin test' under PMLA - Indian Express...	146
221.	Yoga based intervention can reduce opioid dependence-PIB	147
222.	What are the duties of a Speaker? - The Hindu	148
223.	Create the space for governance with a green heart- The Hindu.....	149
224.	18 th Lok Sabha session begins today: How do MPs take oath? What happens if an MP is in jail?- INDIAN EXPRESS	149
225.	How the PESA has boosted forest conservation in India- The Hindu	150
226.	What is Enemy Agents Ordinance, tough law applicable in Jammu and Kashmir?	152
227.	The Indian government plans to set up the Mediation Council of India (MCI) by the end of this year to improve out-of-court dispute resolution and enhance ease of doing business.- THE PRINT	153
228.	What is the role of a Lok Sabha's Leader of Opposition? - Indian Express.....	154
229.	A progressive Indian policy on Myanmar outlined-THE HINDU	154
230.	The Court spells the way in Himalaya's development - The Hindu	155
231.	Analyzing Maharashtra's water crisis - The Hindu	156
232.	How well is India tapping its rooftop solar potential? - The Hindu	157
233.	Why India needs to build disaster resilience in its critical infrastructure - Indian Express.....	157
234.	Capital changes, changing prices- THE HINDU	158
235.	Why govt must create a buffer stock of all main food items- The Indian Express	159
236.	With new budget, chance for new vision for India- The Indian Express.....	160
237.	Delhi Airport roof collapse: A reality check for the state of India's infrastructure- INDIAN EXPRESS.....	161
238.	Apple, Foxconn and married, working women — where's the imaginary support system? - Indian Express	161
239.	A fresh start : The GST Council must not lose sight of broader reforms- THE HINDU	162

240.	Half of Indians physically unfit, says Lancet study - Indian Express.....	162
241.	The myth of India's Muslim population 'explosion- INDIAN EXPRESS.....	163
Quick Look.....		164
1.	OPEC+.....	164
2.	Razia Sultan.....	164
3.	PPF.....	164
4.	H5N1.....	164
5.	Mutual Fund.....	164
6.	Swiss Peace Summit.....	164
7.	BSE PSU Index.....	165
8.	Preston curve.....	165
9.	PM- SHRI Schools.....	165
10.	National Accreditation Board for Hospitals & Healthcare Providers (NABH).....	165
11.	Canlaon Volcano.....	165
12.	Five Eyes.....	166
13.	NCLT.....	166
14.	Palm Oil.....	166
15.	Volatility Index.....	166
16.	Center for the Study of Developing Societies.....	166
17.	Cassini Spacecraft.....	167
18.	Chief Economic Advisor.....	167
19.	Commission for Air Quality Management.....	167
20.	Software Technology Parks of India (STPI).....	167
21.	International Energy Agency (IEA).....	167
22.	EFTA.....	168
23.	Directorate General of Foreign Trade.....	168
24.	National Statistical Office (NSO).....	168
25.	ICJ.....	168
26.	Quality Control Orders.....	169
27.	Central Hall.....	169
28.	SEBI.....	169
29.	IPEF.....	169
30.	CPI Industrial Workers.....	170
31.	IRDAI.....	170

32.	Atal Incubation Centers.....	170
33.	Deeper Bool Wildlife Sanctuary	170
34.	Magnetic Resonance Imaging (MRI)	170
35.	Indo-Pacific Economic Framework (IPEF).....	171
36.	New Caledonia	171
37.	INS Vikramaditya	171
38.	Lokniti-CSDS	171
39.	International Labour Organisation.....	171
40.	Steppe Grasslands	172
41.	International Organisation for Migration (IOM)	172
42.	Alternative Dispute Resolution	172
43.	Nagarhole Tiger Reserve	172
44.	Competition Commission of India.....	173
45.	Council of Scientific and Industrial Research	173
46.	Microfinance Institutions	173
47.	Index of Industrial Production:	173
48.	European Parliament	174
49.	The Hala'ib Triangle.....	174
50.	The Global Carbon Project	174
51.	EPFO	174
52.	Grey zone warfare.....	174
53.	Defense Acquisition Council.....	174
54.	The Indira Gandhi National Centre for the Arts (IGNCA)	175
55.	Namami Gange Programme.....	175
56.	G7	175
57.	Gati Shakti	175
58.	Kavli Prize	175
59.	CIC	176
60.	NATO	176
61.	Narcotics Control Bureau	176
62.	Unique Identification Authority of India (UIDAI)	176
63.	National Medical Commission (NMC)	177
64.	Gandhi Sagar Wildlife Sanctuary:.....	177
65.	Mission LiFE.....	177

66.	NATO	177
67.	Kavach	177
68.	North Eastern Council	178
69.	World Inequality Lab	178
70.	International Organization for Migration (IOM)	178
71.	Kudankulam Nuclear Power Plant.....	178
72.	Scarborough Shoal	178
73.	National Commission of Women.....	179
74.	Confederation of Indian Industry (CII)	179
75.	National Centre for Disease Control (NCDC).....	179
76.	CERT-In	179
77.	United Nations High Commissioner for Refugees (UNHCR)	179
78.	e-Shram Portal	180
79.	India Post Payments Bank (IPPB)	180
80.	The Household Consumption Expenditure Survey (HCES).....	180
81.	GSAT-20.....	180
82.	India-EU Trade and Technology Council:	180
83.	National Dairy Development Board (NDDB)	181
84.	Directorate General of Foreign Trade(DGFT).....	181
85.	Diatoms	181
86.	INS SUNAYNA	181
87.	Claude 3.5 Sonnet	182
88.	Atal Setu	182
89.	Monetary Policy Committee	182
90.	NBFCs	182
91.	Rotavirus	182
92.	Central Consumer Protection Authority	183
93.	Satnami Sect.....	183
94.	Fast Breeder Reactor.....	183
95.	SAMEER	183
96.	Livestock Census	184
97.	Jal Shakti Abhiyan.....	184
98.	Telecom Regulatory Authority of India	184
99.	The Coffee Board of India	184

100.	SC, ST (Prevention of Atrocities) Act, 1989	184
101.	Inland Waterways Authority of India	185
102.	SBM-U 2.0.....	185
103.	The Federation of Indian Export Organisations (FIEO)	185
104.	All India Council for Technical Education (AICTE)	185
105.	Central Council for Research in Ayurvedic Sciences (CCRAS)	185
106.	Gulf of Aden	186
107.	Employees Provident Fund Organisation (EPFO).....	186
108.	The Biological Diversity Act, 2002	186
109.	Commission for Air Quality Management.....	186
110.	Official Creditor Committee (OCC).....	186
111.	International Criminal Court (ICC).....	187
112.	Financial Stability Report	187
113.	Sengol.....	187
114.	ABHYAS.....	187
115.	Indian Council of Medical Research (ICMR).....	187
116.	Ways and Means Advances (WMA)	188
117.	Shanghai Cooperation Organization	188
118.	Financial Action Task Force (FATF).....	188
119.	Index of Eight Core Industries (ICI).....	188
120.	Ingenuity Mars Helicopter	189

Important News Articles

GSI

ART & CULTURE

1. Archaeologists, Sanskrit scholars tie up to decipher Rigveda text- The Hindu

News:

- In the research to potentially establish a relationship between the Harappan civilisation and the people of the Vedic age, a group of archaeologists are now collaborating with Sanskrit scholars to decipher the text of the Rigveda.

Prelims Takeaway

- Harappan Civilization
- Rig Vedic Society

Highlights:

- A clear understanding of what is mentioned in the Rigveda text is important in order to correlate archaeological evidence in excavations of Harappan settlements
 - Haryana's Rakhigarhi and Banawali,
 - Kalibanga on the Haryana-Rajasthan boundary, and
 - Dholavira in Gujarat.
- The National Council of Educational Research and Training (NCERT) recently made a major addition to the Class 12 History textbook, under a chapter titled Bricks, Beads and Bones
 - The Harappan Civilisation, based on DNA evidence from the 4,600-year-old remains of a woman, indicating that the Harappans were an indigenous people.

More research needed

- Research is required to establish that Harappans and the Vedic people were the same.
 - While excavating the site of Rakhigarhi, we found evidence of ritual platforms and fire altars. Parallely, fire worship is mentioned in Rigvedic texts.
 - Need to get more understanding about what is mentioned in Rig Vedic text, and how much of that can be correlated with archaeological evidence.
- Currently, there is a debate about the period of origin of the Vedas, with one set of historians holding that the Vedas originated between 2,000 BC and 1,500 BC.
- However, another set of historians believe that the Vedas date farther back to 2,500 BC or 4,500 years ago. This would coincide with the age of the genetic evidence from the erstwhile Harappan woman's bone samples tested at the Rakhigarhi site.

A common thread

- Description in Rigvedic text of the Saraswati river. The mention of the river is recorded at least 71 times in the Rigvedic text.
- During archaeological excavations, we discovered a majority of Harappan settlements along the banks of the Saraswati.
- Of nearly 2,000 known Harappan settlements spread over the Indus basin and in Gujarat, almost two-thirds, at least 1,200, are located along the basin of the Saraswati.
- Another point of reference which may link the Harappans with Vedic times is a set of animal bones found

Genetic similarities

- DNA analysis from the blood samples of 3,000 modern South Asians from different linguistic and religious groups,
 - Found that from the Andaman and Nicobar islands to Ladakh and Kashmir, and from Afghanistan to Bengal carried genetic similarities to the Harappan woman's skeleton.

2. Puri Ratna Bhandar- INDIAN EXPRESS

News:

- Standing at a height of 11.78 metres and having a width of 8.79 metres x 6.74 metres, the Ratna Bhandar is located on the northern side of the Shri Jagannath temple's Jagamohana.

Prelims Takeaway

- Shree Jagannath Temple

Shree Jagannath Temple:

- The Shree Jagannath temple, also known as Srimandir, is located in Puri, Odisha.
- Built during the rule of Anantavarman Chodaganga Deva of the Ganga dynasty, it covers an area of 10.734 acres.
- The temple is enclosed by two walls: Meghanada Prachira (outer wall) and Kuruma Prachir (inner enclosure).

Four Gates of the Temple:

- Singha Dwara (Lion's Gate): Located in the east, it is the main entrance. Traditionally believed to grant 'mokshya' (liberation) to devotees.
- Vyaghra Dwara (Tiger Gate): Found in the west, symbolizes 'dharma' (duty and righteousness).
- Hasti Dwara (Elephant Gate): Positioned in the north, signifies prosperity.
- Aswa Dwara (Horse Gate): Situated in the south, represents 'kama' (desire), with entry requiring detachment from lustful feelings.

POLITY & GOVERNANCE

3. PM inaugurates Nalanda University campus in Bihar- The Hindu

News:

- The Indian Prime Minister inaugurated the new campus of Nalanda University, an international university, close to the site of the ancient ruins of Nalanda at Rajgir in Bihar.
- Asserting that Nalanda is a symbol of India's academic heritage and vibrant cultural exchange

Prelims Takeaway

- Nalanda
- Buddhism

Wide representation

- Representatives of many countries visited the inauguration.
- He said the new campus proved that Bihar was on the path of development.
- Parliament established Nalanda University through the Nalanda University Act, 2010.
- The Act formed the basis for implementing
 - The decisions arrived at the second East Asia Summit in the Philippines in 2007
 - for the establishment of the university as an "international institution for pursuit of intellectual, philosophical, historical and spiritual studies".
- The External Affairs Minister and 17 Ambassadors from participating countries attended the event, along with Bihar Governor & Chief Minister,
- Before inaugurating the campus, the PM visited the ancient ruins of Nalanda and planted a sapling of the Bodhi tree brought from Bodh Gaya.
- The renaissance of Nalanda University near its ancient ruins will introduce India's potential to the world.
- Nalanda is not just a renaissance of India's past, the heritage of many countries and Asia is linked to it.
- In days to come, Nalanda University will once again become a major centre for our cultural exchange."
- The ancient Nalanda University was established in the 5th century and attracted students from all over the world.
- The ancient university flourished for 800 years before it was burnt down by invaders in the 12th century.

4. DAY-NRLM organized workshop on 'Making of Lakhpati Didi's' through Integrating Women SHGs into Service Sector Enterprises-PIB

News:

- Stepping up its efforts further towards making of 3 Crore Lakhpati Didis in line with the Prime Minister's vision,
- The Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM), under the Ministry of Rural Development organized today a National Stakeholders Consultative Workshop on Integrating Women Self-Help Groups into Service Sector Enterprises: Making of Lakhpati Didis.

Prelims Takeaway

- SHG
- DAY-NRLM

Highlights:

- The mission is striving for Lakhpati Didis, as envisioned by the Prime Minister and making its forays into strengthening the Lakhpati Initiative while exploring and integrating possibilities of the service sector enterprises.
- Highlighted the fact that the services sector today contributes to about 50% of the GDP, 31 % of the jobs and hence it is of utmost importance to discuss it with an open mind that what kind of sub-scheme can be launched for wider engagement of the SHG community for their economic upliftment and enabling them to become Lakhpati Didis.
- The announcement of the making of Lakhpati Didis by the Prime Minister on 15th August 2023, the National Rural Livelihoods Mission and its State Rural Livelihoods Missions are inspired to make it a reality.
- Convergence is the key to realize the Prime Minister's ambitious dream of Lakhpati Didis and the Ministry with its partners will leverage every possible opportunity to help economic transformation of the SHG Didi's as Lakhpati Didi's.
- The workshop was organized with the objective of understanding the current landscape-opportunities, potential and challenges faced by women SHGs in the service sector, to identify best practices and successful models of integrating women SHGs into service enterprises and to develop a roadmap for way forward and strategies for successful integration of SHG women to service sector of the economy working in collaboration with the various stakeholders.
- The participants included representatives from eleven ministries, ten State Rural Livelihoods Missions and other Stakeholders, Sector Skill Council, National Resource Organizations and Technical Support Agencies.
- The workshop saw open discussion on various ideas and thoughts with the active engagement of the participants.

GEOGRAPHY

5. Recycling to kick in as long-term solution to EU rare-earths challenge- THE HINDU

News:

- EU firms are gearing up to take advantage of the huge potential for recycling to supply critical rare earths for the bloc's green transition, but it will take time before there is enough supply of old EVs and wind turbines to process.

Prelims Takeaway

- LITHIUM
- EU

Key highlights

- The EU will struggle to meet ambitious goals for rare earths in a new legislation designed to boost domestic output of critical minerals and reduce dependence on China.
- Under the Critical Raw Materials Act that entered into force last month, the bloc has set a target that recycling should meet 25% of EU demand for critical minerals by 2030, including rare earths.
- Today, less than 1% of rare earths consumed in EU are recycled.

- The 25% target is not due to be met according to a Reuters analysis, but in the longer term, the outlook is strong for the bloc to furnish a large portion of the rare earths needed for electric vehicles and wind turbines from salvaging and re-processing them.

GS II

INTERNATIONAL RELATION

6. Netherlands emerges as India's 3rd largest export destination in 2023-24 - The Hindu

News:

- The Netherlands has emerged as India's third largest export destination after the U.S. and UAE during 2023-24, even as the country's merchandise shipments dipped by over 3%, according to the Commerce Ministry data.

Highlights:

- The main commodities which registered healthy exports growth in the Netherlands include petroleum products (\$14.29 billion), electrical goods, chemicals, and pharmaceuticals.
- India's trade surplus with the Netherlands has increased to \$17.4 billion in the last fiscal from \$13 billion in 2022-23.
 - The Netherlands has taken over export destinations of the U.K., Hong Kong, Bangladesh and Germany.
 - India's exports to the Netherlands rose by about 3.5% in 2022-23.
- The Netherlands has emerged as a hub for Europe with efficient ports and connectivity with the EU through roads, railways and waterways.
- The Netherlands is a gateway to Europe as its ports are very efficient.
- India and the Netherlands established diplomatic relations in 1947.
 - Since then, the two countries have developed strong political, economic and commercial relations.
 - In 2023-24, the bilateral trade between the two countries marginally dipped to \$27.34 billion as against \$27.58 billion in 2022-23.
- It is also a major investor in India.
 - During the last fiscal, India received about \$5 billion in foreign direct investment from the Netherlands. It was \$2.6 billion in 2022-23.
 - There are over 200 Dutch companies present in India.
 - Similarly, There are more than 200 Indian companies operating in the Netherlands, including all the major IT firms as well Pharmaceuticals and Steel.

Prelims Takeaway

- Ministry of commerce
- India- EFTA relations

7. Australian army to allow recruits from foreign nations- BBC

News:

- Australia, the UK, US, Canada and New Zealand also work closely together in intelligence sharing under an alliance called the Five Eyes.
- There is a focus on recruiting people from these nations, any" eligible permanent resident can apply.

Key Highlights

- Australia is opening its military (ADF) to permanent residents from the Five Eyes countries (US, UK, Canada, New Zealand).
- This is to address a shortage of soldiers and build a stronger defense against potential threats, especially those that might disrupt trade routes.

Prelims Takeaway

- Five Eyes
- India- Australia

- Australia depends heavily on shipping and air travel for trade, and wants a larger military to protect its economic interests and freedom of action. The ADF is currently understaffed by 4,400 and aims to grow significantly in the next decade.
- The Five Eyes are intelligence-sharing allies. They share information like phone calls and emails to keep each other safe. They trust each other a lot because of their history and similar governments. They have strict rules to keep this shared information secret.

8. Rights group accuses Israel of hitting residential buildings with white phosphorous in Lebanon- the week

News:

- A global human rights group accused Israel of using white phosphorus incendiary shells on residential buildings in at least five towns and villages in conflict-hit southern Lebanon, possibly harming civilians and violating international law

Prelims Takeaway

- White Phosphorus
- RED Phosphorus

White Phosphorus

- White phosphorus is a solid waxy substance that looks yellowish or colorless.
- It has a distinct garlic-like smell.
- White phosphorus ignites instantly when it touches oxygen.
- Militaries use it for lighting up battlefields, creating smoke screens, and as an incendiary.
- Once ignited, it's hard to put out, and it sticks to surfaces like skin and clothes.
- White phosphorus is harmful to humans in all forms of contact.
- Its smoke contains phosphoric acids and phosphine, which can harm the eyes and respiratory system.
- Contact with white phosphorus can cause deep and severe burns, even penetrating through bone.
- The incendiary substance is not banned, but its use in densely populated areas has been widely condemned.

International Law and White Phosphorus:

- While international law doesn't outright ban incendiary weapons like white phosphorus, its use in densely populated areas has been widely condemned.
- When white phosphorus is used as an incendiary weapon (not for chemical warfare), it's regulated by Protocol III of the Convention on Certain Conventional Weapons.
- Violation of the convention happens only if it's deliberately used as an incendiary weapon against humans in civilian areas like cities or residential areas.
- In 1980, the Convention on Prohibitions or Restrictions on the use of certain conventional weapons was established.
- This convention aims to ban or restrict weapons causing undue suffering or indiscriminate harm.

9. ASEAN FTA: govt. seeks industry inputs to up demand pitch - The Hindu

News:

- Ahead of the next round of negotiations on the ASEAN-India FTA review Commerce department has sought inputs from various industry and export promotion bodies

Prelims Takeaway

- ASEAN
- ROO

Highlights:

- Commerce Ministry officials are meeting industry and export body representatives to get their views on the items to focus on for greater market access.
- Other inputs, include those related to non-tariff barriers, are also being solicited
- The **India-ASEAN FTA**, formally known as the ASEAN-India Trade in Goods Agreement (AITGA), has resulted in disproportionate gains for the ASEAN countries which India wants to correct through the review.

- The ten-member ASEAN includes Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia.
- In 2023-24, India's trade deficit with the bloc widened to \$38.46 billion from \$7.5 billion during the implementation of the agreement in 2010.
- New Delhi is seeking greater market access for its goods, more flexibility in determining **rules of origin (ROO)** for products through product specific rules, and redressal of non-tariff barriers, to address its growing trade deficit with the bloc

Review of AITGA

- India had been asking for a **review of the AITGA** for a long time as its trade deficit with the bloc widened significantly since the trade pact was implemented.
- In the earlier meetings, India sought product specific rules (PSRs) in ROO determination so that the requirements could be relaxed for high value items where the value addition is low.
- ROO are the criteria to determine the origin of a product and establish if it qualifies for duty cuts under a FTA.
- PSRs can be introduced in the ROO chapter for relaxing rules for certain items where meeting the prescribed ROO is difficult.
- In the **India-ASEAN FTA**, the ROO calls for value addition of 35 per cent whereas for certain industries, like gems and jewellery, the value addition that takes place is less than 10 per cent because the raw material is of high value.
- Under the AITGA, both sides agreed to progressively eliminate duties on about **75 per cent of goods** and **reduce tariffs on around 15 per cent of goods**.
- However, the commitments made by the ten ASEAN countries varied considerably.
- While an open economy like Singapore committed to almost 100 per cent elimination, countries like Indonesia and Vietnam offered much less.

10. 'Neighbourhood First' to be on show at swearing-in- The Hindu

News:

- Prime Minister designate Narendra Modi took oath on Sunday for a third straight term as the head of a coalition government after two full tenures.

Highlights:

- India announced that leaders of seven countries from its neighbourhood and the Indian Ocean region including Maldives will attend the swearing-in ceremony
 - Sri Lanka, Seychelles, Bangladesh, Mauritius, Nepal and Bhutan have also accepted invitations to the ceremony.
- This event will mark the pro-China President of Maldives, first official visit to India since assuming office.
 - Earlier he had voiced his desire to work with the Indian prime minister to advance the bilateral ties.
 - But last year, when he had demanded the removal of 88-odd Indian military personnel from his country, it started straining bilateral ties.
- "The visit of the leaders to attend the swearing-in ceremony of Prime Minister for his third consecutive term is in keeping with the priority accorded by India to its 'Neighbourhood First' policy and 'SAGAR' vision," Ministry of External Affairs said.
- India has been cooperating with the countries of the Indian Ocean region under the broader policy framework of SAGAR (Security and Growth for all in the Region).
 - The leaders of regional grouping SAARC (South Asian Association for Regional Cooperation) countries attended in 2014.
 - Leaders of the BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) countries attended in 2019
- 10 loco pilots of the Indian Railways who have also been invited to the 2024 ceremony.

Prelims Takeaway

- India- Maldives Relations
- SAGAR

11. India welcomes Egypt, Iran, UAE, Saudi Arabia and Ethiopia joining BRICS- The Hindu

News:

- India on Monday welcomed Egypt, Iran, UAE, Saudi Arabia and Ethiopia joining the BRICS as their representatives attended for the first time a key meeting of the grouping hosted by Russia.

Prelims Takeaway

- BRICS
- UNSC

Highlights:

- “A significant meeting for the extension of the BRICS family.
- India wholeheartedly welcomes the new membership,” the spokesperson of the Ministry of External Affairs said.
- The meeting was the first ministerial meeting following BRICS expansion in 2023 when Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE joined Brazil, Russia, India, China, and South Africa as full-fledged BRICS members.
- The ministers reiterated their commitment
 - to multilateralism and upholding international law.
 - They voiced their support for a comprehensive reform of the UN, including its Security Council, with a view to making it more democratic, representative, effective and efficient.

12. 90 countries to attend Swiss-hosted Ukraine peace summit that Russia is snubbing- The Indian Express

News:

- Nearly 90 countries and organizations, half from Europe, have confirmed attending the Swiss-hosted Ukraine peace summit.

Highlights:

- It will aim to chart a path toward possible peace nearly 28 months after Russian forces invaded Ukraine and the war grinding on.
- This is about the basis of humanitarian aid provided by Switzerland and to initiate a dialogue.
 - About half of which will be represented by head of state or governments
 - but “a handful” are from organizations like the United Nations.
- Key developing countries like Turkey, South Africa and Brazil haven't indicated whether they would attend. India, they said, will take part but it isn't clear at which level.
- Brazil and China said they wouldn't take part unless both sides – including Russia – were at the table
- Switzerland has acknowledged that there cannot be a peace process without Russia.
- Switzerland is in frequent contact with authorities in Moscow about the conference.
- Ukraine has helped coordinate the summit, and will attend the Conference.
- Swiss officials had to balance considerations that Ukraine might not have attended if Russia was represented.

Prelims Takeaway

- Russia-Ukraine Conflict
- India-Relations Russia

13. Indian tripartite delegation at the 112th session of International Labour Conference (ILC)-PIB

News:

- Indian tripartite delegation of representatives from workers, employers and the Government is participating in the ongoing 112th session of International Labour Conference (ILC) of ILO.

Prelims Takeaway

- ILO
- E-Shram Portal

Highlights:

- The opportunity was used by India to highlight Government of India's labor reforms, social security provisions and other new initiatives on the anvil.
- Bilateral meetings were held on focus areas such as global skills' gap mapping, international migration of workers, future of work etc.

- India will continue to strengthen its work with ILO in view of emerging technologies and digitalization in the future of work.
- Recognizing the importance of the care sector, which is highly labor-intensive in nature, the India highlighted
 - the Government's initiatives taken in the care sector, in the form of access to clean cooking fuel under 'Pradhan Mantri Ujjwala Yojana (PMUY)' to reduce the daily care burden of women,
 - maternity benefits, health care including geriatric care, skilling programs and initiatives in care-work, social security benefits etc.
- India's commitment towards ensuring social well-being of its citizens and providing them with essential safety nets:
 - A diverse range of in-kind social protection measures such as free housing, food security, subsidized cooking gas, cash transfers through 'Jan Dhan Yojana', agricultural crop insurance scheme etc. were also highlighted.
- The Ministry of Labour and Employment showcased the success of 'e-shram portal as a one-stop solution for all the needs of the informal workers.
- The portal's link with the 'National Career Service (NCS)' portal, providing job-matching to workers in the country.

14. UNSC endorses resolution to end war on Gaza- The Hindu

News:

- The UN Security Council approved its first resolution endorsing a ceasefire plan aimed at ending the eight-month war between Israel and Hamas in Gaza.

Prelims Takeaway

- UNSC
- Israel- Palestine

Highlights:

- The resolution was approved with **14 of the 15 Security Council members** voting in favor and Russia abstaining.
- Whether Israel and Hamas agree to go forward with the plan remains in question, but the resolution's strong support in the U.N.'s most powerful body puts added pressure on both parties to approve the proposal.
- Hamas said it welcomed the adoption of the resolution and was ready to work with mediators in indirect negotiations with Israel to implement it.
- The war was sparked by **Hamas' surprise Oct. 7 attack** in southern Israel.
- This resolution underscores the importance of the ongoing diplomatic efforts by **Egypt, Qatar and the United States** aimed at reaching a comprehensive cease-fire deal, consisting of three phases and says the three countries are ready to work to ensure negotiations keep going until all the agreements are reached.
- The resolution reiterates the Security Council's unwavering commitment to achieving the vision of a negotiated **two-state solution** where two democratic states, Israel and Palestine, live side by side in peace within secure and recognized borders.
- It also stresses the importance of unifying the **Gaza Strip with the West Bank** under the Palestinian Authority.

15. Relief for Goans with Portuguese citizenship seeking OCI cards - Indian Express

NEWS:

- In a big relief for Goans with Portuguese citizenship seeking Overseas Citizenship India (OCI) cards, the Union government has decided to consider a passport 'revocation order'
 - as an alternative document in lieu of a 'surrender certificate', "provided the person concerned certifies that they have not obtained the Portuguese passport fraudulently".

Prelims Takeaway

- OCI
- NRI

KEY HIGHLIGHTS

- The decision is likely to bring relief to numerous Goans who previously faced denial of their OCI card due to the revocation of their Indian passport.
- “The problems faced by Indian nationals hailing from Goa, Daman, and Diu who have acquired Portuguese nationality as per Portuguese nationality law, for obtaining Indian visa/exit permission or OCI card, have been considered by the MHA
- Chief Minister Pramod Sawant had appealed to the Union government to provide amnesty to Goans seeking to relinquish their Portuguese identity cards in order to maintain their Indian citizenship.
- Highlighting that over 40,000 Goans had registered their births in Lisbon, Sawant emphasized the significance of the issue.
- The sole intention of these people was to secure a chance of getting their children Portuguese passports and the benefits that come with it

16. Horrified' by plight of Sri Lanka's plantation workers, says tribunal - THE HINDU

News:

- An international tribunal of former judges from the region said it was “horrified by the stark realities” of the lives of Sri Lanka’s tea and rubber plantation workers, after hearing testimonies from workers and trade unions.

Prelims Takeaway

- Malaiyaha Tamils
- MAP BASED QUESTION

Malaiyaha Tamil community:

- **Brought to Work the Land:** Over 200 years ago, people from India were brought to Sri Lanka to work on the island's tea plantations, high up in the mountains.
- **A Unique Group:** The Malaiyaha Tamils are a distinct ethnicity, the fourth largest group in Sri Lanka after the Sinhalese, Sri Lankan Tamils, and Muslims.
- **Facing Hardship:** Despite their long history in Sri Lanka, the Malaiyaha Tamils are one of the poorest communities. They are often underpaid and overworked.
- **Underappreciated Contribution:** Even though their work is essential to Sri Lanka's tea industry, which brings in over \$1.3 billion a year from exports, they barely make enough to survive.

Struggles of the Malaiyaha Tamils:

- **Discrimination:** They continue to face prejudice because of their ethnicity.
- **No Land Ownership:** They are denied the right to own land, making it even harder for them to improve their lives and escape poverty.
- **Exploitation:** Many workers, especially women, are forced to work in harsh conditions for low wages. They must meet daily quotas for picking tea leaves, regardless of the weather or safety risks.
- **Poor Living Conditions:** The plantation workers live in crowded and unhealthy housing built during colonial times

17. G7 summit: PM Modi leaves for Italy- INDIAN EXPRESS

News:

- Prime Minister will leave for Italy to attend the 50th G7 leaders' summit.
- It will be his first trip abroad after assuming charge as the Prime Minister for the third term.

Prelims Takeaway

- G7
- BRICS

The Group of Seven (G7):

- **Founded in 1975,** the G7 is a club of major industrialized democracies that discuss and try to solve global problems.
- **Members:** The G7 includes the United States, United Kingdom, France, Italy, Germany, Canada, and Japan. The European Union also participates.

- **Informal Structure:** Unlike some organizations, the G7 doesn't have a permanent headquarters or leader.
- Instead, a different member country takes charge each year (currently Italy).

Objective :

- The G7 focuses on tackling big issues like the war in Ukraine and the ongoing crisis in the Middle East, aiming to uphold a fair and stable world order.

Alternatives to the G7:

- **BRICS:** This group, originally formed by Brazil, Russia, India, China, and South Africa, has recently expanded to include several other countries.
- While BRICS has a smaller share of global GDP than the G7, it's still a significant player, especially with China's economic power.
- **G20:** This larger group, including major economies like the US and China, is seen by some as more influential than the G7.
- It represents a larger portion of global trade and economic activity.

18. Nepal seeks help from India to set up Jan Aushadhi Kendra - The Hindu

News: Nepal has approached India to set up Jan Aushadhi Kendras

Highlights:

- This would allow citizens of Nepal to benefit from low cost '**Made in India**' generic medicines.
- Earlier, **Mauritius** became the first country to adopt the 'Jan Aushadhi Scheme', enabling it to source about 250 high quality medicines from the Pharmaceuticals and Medical Devices Bureau of India.

Prelims Takeaway
<ul style="list-style-type: none"> • PMBJP • India-Nepal relations

PMBJP

- The **Pradhan Mantri Bharatiya Janaushadhi Pariyojana (PMBJP)** is a flagship Central government scheme under which quality generic medicines are made available at affordable prices via dedicated outlets called **Pradhan Mantri Bharatiya Janaushadhi Kendras (PMBJK)**.
- India currently has over **10,000 PMBJKs** across the country.
- Centre aims to open 10,000 new Janaushadhi Kendras across India by end of 2023
- The scheme is being implemented by the **Pharmaceuticals and Medical Devices Bureau of India**, an autonomous society under the Department of Pharmaceuticals.
- This scheme aims to make available **quality medicines and surgical items** at affordable prices for all and thereby reduce out-of-pocket expenditure of consumers/patients and popularise generic medicines among the masses
- The press release added that, in 2022-23, the Pharmaceuticals and Medical Devices Bureau of India registered sales of ₹1,235.95 crore, which led to savings of approximately ₹7,416 crore to citizens.

19. WHO Designates CCRAS-NIIMH, Hyderabad as Collaborating Centre for Traditional Medicine Research - PIB

News:

- The World Health Organization has designated the National Institute of Indian Medical Heritage (NIIMH), Hyderabad, as a WHO Collaborating Centre.

Prelims Takeaway
<ul style="list-style-type: none"> • WHO • NIIMH

Highlights:

- This prestigious recognition is granted for a period of four years.
- This designation by WHO is a significant milestone, reflecting relentless efforts in the field of traditional medicine and historical research.
- In India, there are approximately 58 WHO Collaborating Centers spanning various disciplines of biomedicine and allied sciences.
- Notably, CCRAS-NIIMH, Hyderabad, joins the ranks as the third WHO Collaborating Centre in the domain of Traditional Medicine.

NIIMH, Hyderabad

- **Established in 1956**, NIIMH, Hyderabad, is a unique institution dedicated to documenting and showcasing medico-historical research in Ayurveda, Yoga Naturopathy, Unani, Siddha, Sowa-Rigpa, Homoeopathy, Biomedicine, and other related healthcare disciplines in India.
- The Institute has been a pioneer in various digital initiatives of Ayush, including the **AMAR Portal**, which catalogues 16,000 Ayush manuscripts. The **SAHI Portal** which showcases 793 medico-historical artefacts, while the **e-Books** of Ayush project provides digital versions of classical textbooks.
- The **NAMASTE Portal** collects cumulative morbidity statistics from 168 hospitals, and the Ayush Research Portal indexes 42,818 published Ayush research articles.
- NIIMH houses more than 500 physical manuscripts, alongside the Medical Heritage Museum and Library, featuring rare books and manuscripts dating back to the 15th century AD.
- The Institute also publishes the **Journal of Indian Medical Heritage**.

20. China's 'grey-zone' warfare tactics against Taiwan | Explained- THE HINDU

News:

- Since the new Taiwanese president has assumed office, all eyes have been on the rocky start to his tenure.
- While China's belligerent response to Mr. Lai's "pro-independence" and "secessionist" statements was striking, it has now resorted to a sophisticated ploy to respond to Mr. Lai's Democratic Progressive Party (DPP).
- This is often referred to as 'grey-zone' warfare, which comprises elements that frustrate Taiwan in a sustained manner.

Prelims Takeaway

- Map based question

Grey zone warfare

- Grey zone warfare generally means a middle, unclear space that exists between direct conflict and peace in international relations.
- Multitude of activities fall into this zone — from nefarious economic activities, influence operations, and cyberattacks to mercenary operations, assassinations, and disinformation campaigns.
- Other experts include economic actions too, such as debt traps and economic sanctions.
- Activities in the grey zone have always been a feature of great-power competition.
- Proxy wars, destabilizing insurgencies, legal warfare (lawfare), and information warfare—by adversaries and allies alike—have been a feature of this conflict.
- Experts claim that such methods are often employed by parties who have not had access to massive resources or power, traditionally.
- Therefore, such tactics can help gain an advantage over a more technically well-equipped adversary that is more used to conventional warfare.

21. NSAs of India, U.S. review progress on iCET- The Hindu

News:

- India's National Security Adviser (NSA) and his U.S. counterpart, who is on a two-day visit to India, resolved to prevent the "leakage" of sensitive and dual-use technologies to countries of "concern" during the meeting of the initiative on Critical and Emerging Technology (iCET).

Prelims Takeaway

- India- US Relations
- Quad

Highlights:

- The two NSAs set the vision for the next chapter of the strategic technology partnership, according to a joint fact sheet issued after the dialogue.
- They underscored their commitment to orienting our cooperation around breakthrough achievements in priority critical and emerging-technology areas,
- The India-U.S. iCET roundtable is scheduled with industry heads, organized by the Confederation of Indian Industry (CII).
- The India visit was canceled twice earlier due to geopolitical developments.

- India and the U.S. are currently in advanced stages for
 - the purchase of 31 unmanned aerial vehicles and
 - Manufacturing of General Electric jet engines as well as infantry vehicles,
 - in the India-U.S. Roadmap for Defense Industrial Cooperation.
- On semiconductors, a priority area for both countries,
 - Announced the launch of a new strategic semiconductor partnership between General Atomics and Indian firm 3rdiTech
 - The Co-development of semiconductor design and manufacture of precision-guided ammunition and other national security-focused electronics platforms.
- Also outlined several steps both countries would take in new and emerging areas which in a large way would also address dependency on China.
- On rare-earth minerals, “Promoting India’s vital role in the Mineral Security Partnership, including through co-investing in a lithium resource project in South America and a rare earths deposit in Africa, to diversify critical mineral supply chains.
- The ambitious iCET was announced by India’s PM and U.S. President on the sidelines of the Quad Summit in Tokyo in 2022 and was launched by the NSAs in 2023 comprising key technology sectors including space, semiconductors, advanced telecommunications, artificial intelligence, quantum science, biotechnology, and clean energy.
- Subsequently, new areas were included including biotechnology, critical minerals and rare earths processing technologies, digital connectivity, digital public infrastructure and advanced materials.

22. Negotiating for peace : India’s decision to attend but not vote at the Swiss conference was right-THE HINDU

News:

- The two-day “Summit on Peace”, in Burgenstock , met with mixed outcomes.
- Switzerland was able to bring together more than 90 countries, at least 56 were represented by leaders
 - and the final joint communiqué was signed by about 82 countries and organisations, with the exception of a few including India.

Prelims Takeaway

- Map based questions

Key Highlights:

- The document made a strong call for an end to the “ongoing war of the Russian Federation against Ukraine” and a pitch for sovereignty, territorial integrity and adherence to international law.
- It cited three areas of broad understanding: nuclear safety, food security and the exchange of all prisoners of war, displaced and detained Ukrainians.
- However, despite all these areas where Ukrainian President Zelenskyy hailed a “historic victory”, there were shortcomings.
- Switzerland’s decision not to invite Russia, and to build their negotiations on the basis of the Ukraine Peace Formula along with UN resolutions, made the event appear one-sided.
- The failure in convincing China, which arguably holds the most sway over Moscow, to even send a delegation was another blow.
- That no BRICS member, current and future, signed on to the statement indicates that it was a non-starter among the emerging economies.
- As a close partner of Russia, a key Global South player, and a country that has kept a balance in the conflict, India’s presence would have been a major win for the organisers.
- While India may share concerns over much of the text released at the conference, it could not have gone ahead with its overtly anti-Russian slant.
- In its presence, however, New Delhi showed that it is willing to be part of the process,

- especially if it leads to a more inclusive future conference, with Russia and Ukraine at the table.
- As a result, India's decision to attend the conference, but not endorse its outcome, was probably a foregone conclusion.

23. At 172, India now has more nuclear weapons than Pakistan; US, Russia possess 90% of global arsenal, says report- INDIAN EXPRESS

News:

- With 172 nuclear weapons, India is now ahead of Pakistan in the ranking of nuclear-armed countries across the world, the Stockholm International Peace Research Institute (SIPRI) has found.

Prelims Takeaway

- Nuclear Weapon

Key Findings of SIPRI Yearbook 2024

- Nuclear Arsenals: Russia and the US possess the majority of the world's nuclear weapons, accounting for 90% of the total.
- China's nuclear arsenal has seen a significant increase, growing from 410 warheads in January 2023 to 500 in January 2024.
- India possesses 172 "stored" nuclear warheads as of January 2024, slightly more than Pakistan.
- **Modernization:** Nine nuclear-armed nations, including India, Pakistan, and China, are actively modernizing their nuclear arsenals. This includes developing new nuclear delivery systems.
- **Operational Alert:** Around 2,100 nuclear warheads, primarily from the US and Russia, are kept in a state of high operational alert on ballistic missiles. China also reportedly placed some warheads on high alert for the first time.
- **World's nuclear-armed states:** United States, Russia, the United Kingdom, France, China, India, Pakistan, the Democratic People's Republic of Korea (North Korea) and Israel.

24. Jaishankar reviews energy projects in Sri Lanka visit - The Hindu

News:

- External Affairs Minister S. Jaishankar recently undertook a day-long visit to Colombo and discussed progress on key energy sector initiatives that India and Sri Lanka have agreed to jointly undertake.

Prelims Takeaway

- India - Sri Lanka
- Colombo Security Conclave

Highlights:

- Participating in a ceremony with President Ranil Wickremesinghe, he commissioned a **Maritime Rescue Coordination Centre (MRCC)** and handed over new homes built with Indian assistance.
 - This initiative underscores the deepening maritime security cooperation between India and Sri Lanka
- Maritime security has been a recurring theme in India's engagement with neighboring countries and is also a stated priority for the **Colombo Security Conclave**, an initiative that brings together India, Sri Lanka, Maldives, and Mauritius, along with Bangladesh and the Seychelles as observers.
- Significant attention was given to plans for an LNG supply, a proposed petroleum pipeline linking the two countries, and advancing oil and gas exploration projects.
- Additionally, it was announced that construction of the **Sampur Solar Power Plant** is set to commence in July 2024.
- The move for the Coordination Centre coincides with Sri Lanka's ongoing moratorium on **foreign research vessels**, after India raised concern over the docking of Chinese research vessels at Sri Lankan ports.

25. New Delhi, Dhaka to hold talks on comprehensive ties- The Hindu

News:

- India and Bangladesh agreed to begin a dialogue on a comprehensive economic partnership agreement (CEPA) paving the way for broader economic ties between the two neighboring economies.

Prelims Takeaway

- India's Neighbourhood
- North-East

Highlights:

- The Prime Minister of India said the two sides will intensify connectivity and energy collaboration, and announced that trade between the two countries is being conducted in the Indian currency.
- Between Akhaura and Agartala, the sixth India-Bangladesh cross-border rail link has been started.
- Cargo facility for India's northeastern States has been started through the **Khulna-Mongla Port**.
- Both units of the 1,320-MW **Maitree Thermal Power Plant** have started generating electricity.
- Trade in Indian rupee has started between the two countries.

Focus on connectivity

- The two sides signed multiple MoUs covering maritime cooperation and economy, rail connectivity, oceanography, health and disaster management among others.
- Elaborating on the MoU on railway connectivity apart from the six existing cross-border railway links between the countries, the document focuses on "transit that they afford between different parts of India through the territory of Bangladesh."
- The connectivity essentially strengthens a very large part of economic infrastructure within Bangladesh.
- It is understood that India will attempt to run a train service in the near future that will connect north-eastern States like Tripura with West Bengal through the territory of Bangladesh.
- Rangpur, which is strategically located between West Bengal and Assam, is also important as it is nurtured by the waters of the Teesta, which is a matter of protracted negotiation between the countries.
- The prime minister announced that a technical team from India will soon visit Bangladesh to discuss conservation and management of the Teesta.
- He also announced that India will start issuing e-medical visas to deal with the surging demand for medical visas from Bangladesh.

26. PM Modi likely to skip SCO summit in Kazakhstan; Xi, Putin, Sharif may attend- The Hindu

News:

- The Prime Minister of India is likely to skip the Summit of the Shanghai Cooperation Organisation (SCO) to be held in Kazakhstan next month, and External Affairs Minister is expected to officiate in his place.

Prelims Takeaway

- SCO
- BRICS

Highlights:

- The summit hosted by the Kazakh President is expected to include Russia, China, Central Asian leaders and Pakistan.
- PM's decision to miss the Astana meet could also have a bearing on India's participation in the SCO Heads of Government conference, in 'Autumn 2024', which Pakistan would host.
- The probable reason could be the coming Parliament session, which will run from June 24 to July 3.
- The SCO, originally a Eurasian security and economic grouping promoted by Russia and China in 2001, includes Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, India, and Pakistan as full members. Iran and Belarus will be inducted this year.
- PM's absence at the SCO, despite the presence of other international leaders, is likely to raise questions over India's commitment to the grouping that it joined just seven years ago as a full member.
- Since the military standoff at the Line of Actual Control (LAC) and the deadly Galwan clashes of 2020, and the breakdown in ties, the Indian PM has not met the Chinese President for a bilateral meeting anywhere.

Moscow ties

- Since 2022, Russia's invasion of Ukraine has also made the discourse with Moscow more difficult.
- Although Indian PM met with Russian President at the SCO summit in Uzbekistan in 2022
 - The conversation was overshadowed by the conflict, and the Indian PM's statement that "this era is not of war."
- Russian foreign policy aide and senior diplomat had told that the Russian President was looking forward to meeting Indian PM at the conference,
 - which was especially important "in the light of the elections in India."
- If the Indian PM misses the SCO summit in July, it will be seen in sharp contrast to his attendance at the G-7 Summit in Italy,
 - where India is not a member, but was invited to the 'Outreach' along with nine other countries.
- All eyes will be on whether the Indian PM will attend the BRICS summit, hosted by President Putin this year.
 - The grouping that India is a founding member of, will welcome five new members, the UAE, Saudi Arabia, Iran, Egypt and Ethiopia, this year.

27. India, Pak. delegations reach J&K to inspect power projects under Indus Water Treaty- The Hindu

News:

- Delegations from India and Pakistan flew to Kishtwar district of Jammu and Kashmir with neutral experts and began inspection of two power projects under the Indus Water Treaty (IWT).

Prelims Takeaway

- IWT
- Indus and Chenab

Highlights:

- A team of 40 people reached Jammu for inspection of various under-construction power projects in the Chenab valley region.
- This is the first visit by a Pakistani delegation to Jammu and Kashmir in more than five years under the dispute settlement mechanism of the 1960 treaty.
- India and Pakistan signed the IWT after nine years of negotiations, with the World Bank being a signatory of the pact which sets out a mechanism for cooperation and information exchange between the two sides on the use of waters of a number of cross-border rivers.
- A three-member Pakistan delegation inspected the **Pakal Dul** and **Lower Kalnai** hydroelectric power projects under the provisions of the IWT
- The delegation visited the National Hydroelectric Power Corporation (NHPC) headquarters, then left for the 85-MW **Ratle hydroelectric power** project site at Drabshalla for dam inspection.
- They will also visit the 1,000-MW Pakal Dul hydroelectric project on the **Marusudar**, a tributary of the Chenab, and other power projects in Kishtwar.

28. India achieves 'outstanding outcome' in FATF evaluation - The Hindu

News:

- India has achieved an outstanding outcome in the mutual evaluation conducted during 2023-24 by the Financial Action Task Force (FATF)

Prelims Takeaway

- FATF

Highlights:

- The Mutual Evaluation Report of India, which was adopted at the FATF plenary held in Singapore, places India in the "regular follow-up" category, a distinction shared by only four other G-20 countries.
- This marks a significant milestone in the nation's efforts to combat money laundering (ML) and terrorist financing (TF)

- In a statement, the FATF said the plenary concluded that India had reached a high level of technical compliance with its requirements.
- The country's anti-money laundering (AML), countering the financing of terrorism (CFT), and counter-proliferation financing (CPF) regime was achieving good results, including international cooperation, access to basic and beneficial ownership information, use of financial intelligence, and depriving criminals of their assets.
- However, the FATF observed that improvements were needed to strengthen the supervision and implementation of preventive measures in some non-financial sectors.
- Among other things, the FATF has recognised the efforts made by India on the issue of mitigating the risks arising from ML/TF, including the laundering of proceeds from corruption, fraud, and organised crime, and the effective measures implemented by India to transition from a cash-based to a digital economy to reduce ML/TF risks.

29. Jaishankar to lead Indian delegation to attend SCO summit in Astana - Indian Express

News:

- Prime Minister Narendra Modi will not attend the Shanghai Cooperation Organisation (SCO) summit this year.

Prelims Takeaway

- SCO)

Highlights:

- External Affairs Minister S Jaishankar is set to lead the Indian delegation to Kazakhstan capital Astana
- The summit will take place from July 3-4 in Astana. Kazakhstan took over the SCO presidency from India, which was the president last year.
 - India hosted the SCO summit virtually in July 2023.
- Last year, during the virtual Summit, Jaishankar had expressed concerns over terrorism in the presence of then-Pakistan Foreign Minister Bilawal Bhutto.
- During his last 10 years as the Prime Minister, Modi has attended five subsequent SCO summits that were held before the Covid-19 pandemic.
- The SCO, comprising India, China, Russia, Pakistan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, is considered an influential economic and security bloc.
- The summit hosted by Kazakhstan is expected to see participation by Putin, Chinese President Xi Jinping and Pakistan PM Shehbaz Sharif.

30. Russia warns of 'response' against U.S. drones over Black Sea- THE HINDU

News:

- Russia's Defence Minister ordered officials to prepare a "response" to U.S. drone flights over the Black Sea
- It gave an apparent warning that Moscow may take forceful action to ward off the American reconnaissance aircraft.

Prelims Takeaway

- NTO
- Black sea

Key highlights

- The Russian Defence Ministry noted a recent "increased intensity" of U.S. drones over the Black Sea
 - shows an increased involvement of the U.S. and other NATO countries in the conflict in Ukraine on the side of the Kyiv regime," the Ministry said in a statement.
- Washington and Moscow have clashed before over U.S. drones in the Black Sea.
- In a 2023 incident, a Russian fighter jet damaged an American drone there, causing it to crash.
- A repeat of such a confrontation could further fuel tensions

SCIENCE & TECH

31. Health Ministry reworks protocol as country's TB elimination drive plateaus- The Hindu

News:

- India's goal to achieve rapid decline in the burden of tuberculosis (TB) morbidity and mortality, while working towards the elimination of TB in the country by 2025

Prelims Takeaway

- ICMR
- TB

Highlights:

- The Indian Council of Medical Research (ICMR) is looking at reworking the protocol, **specifically TB medication and its duration**, to reboot the **TB-free initiative** for eliminating deaths, disease, and poverty resulting from the infection.
- According to the Health Ministry, India has been engaged in TB control activities for more than 50 years, yet the disease continues to be the country's severest health crisis.
- TB kills an estimated 4,80,000 Indians every year or over 1,400 patients every day.
- Additionally, the country also has more than a million 'missing' TB cases annually.
- Most remain either undiagnosed, or inadequately diagnosed and treated in the private sector.
- There are several new technologies which help in early detection and we are also better prepared to address TB.
- We now have advanced and effective interventions and technologies for diagnosis, treatment and care of TB.
- The Ministry, however, maintains there is a need to recognise that more needs to be done to drastically reduce the incidence of TB in India.

32. Ministry of Health & Family Welfare and Ministry of Defence set up dedicated Tele MANAS cell for armed forces- PIB

News:

- A Memorandum of Understanding (MoU) was signed between the Ministry of Health and Family Welfare (MoHFW) and the Ministry of Defence (MoD) in operating a special cell of **Tele MANAS**, the National Telemental Health Helpline of MoHFW.

Prelims Takeaway

- Mental Health Act 2017
- Tele Manas

Highlights:

- Recognizing the unique stressors faced by the Indian military, the need for tele-mental health services in the Armed Forces has become evident.
- The operational environment, cultural challenges, and factors related to regional conflicts necessitate a specialized approach to mental health care in the Armed Forces.
- With the dedicated Tele MANAS cell, armed forces personnel and their families will receive crucial mental health assistance 24x7, addressing their mental health concerns
- Tele MANAS is the digital extension of the District Mental Health Programme (DMHP), offering comprehensive, integrated, and inclusive 24/7 tele-mental health services.
- Currently, there are 51 operational Tele MANAS cells functioning across all 36 States and UTs, offering services in 20 different languages.
- The data indicate a significant demand for mental health services and underscores the importance of addressing mental health issues comprehensively and inclusively, particularly in specialized contexts like the Armed Forces.

33. States told to act on social media groups, sites trading organs - The Hindu

News:

- The Union government has sent out alerts to all States/Union Territories on websites and social media groups engaged in illegal trading of human organs.

Prelims Takeaway

- THOTA
- NOTTO

Highlights:

- The Ministry of Health & Family Welfare has made specific references to certain websites/social media groups offering huge money for kidneys and other organs.
- In a communication, the Directorate General of Health Services said it had come to know that certain websites and social media posts were promoting and offering organ trading in violation of the provisions of **Transplantation of Human Organ & Tissue Act (THOTA) 1994**.
- The Centre said such activities were punishable offences under section 18 of the Act with fine ranging from **₹20 lakh to ₹1 crore** and imprisonment ranging from **5 years to 10 years**.
- This kind of illegal activities were a major hindrance to the **national organ transplantation programme**.
- Since **Health and Law & Order** were State subjects and therefore the States had the power to appoint an appropriate authority under THOTA to deal with commercial activities/organ trafficking

Creating Awareness

- Several steps were being taken to create awareness among the people about the illegalities of obtaining organs through agents.
- In a bid to sensitize school students, a **separate chapter on organ transplants** was being included in the CBSE curriculum.
- NOTTO**, a national level organization set up under **Directorate General of Health Services**, Ministry of Health and Family Welfare, had been set up in pursuance to mandate given to Central government for establishing a network for organ procurement, distribution and to maintain a national registry for the purpose of surveillance of organ donation and transplantation in the country.

34. What is the National Health Claim Exchange?- The Hindu

News:

- The Health Ministry along with the Insurance Regulatory and Development Authority of India (IRDAI) are working on measures aimed at allowing patients to access quality healthcare swiftly and with reduced out-of-pocket expenditure.

Prelims Takeaway

- NHCX
- IRDAI

Highlights:

- The Ministry and IRDAI are launching the National Health Claim Exchange (NHCX), a digital platform which will bring together insurance companies, healthcare sector service providers and government insurance scheme administrators.
- The NHCX will serve as a gateway for exchanging claims-related information among various stakeholders in the healthcare and health insurance ecosystem.
- Twelve insurance companies and one TPA (Third Party Administrator) have completed the NHCX integration.
- A timeline has been fixed for insurance claims of cashless claims. The insurance authority has said that all cashless claims have to be processed within three hours of the receipt of discharge authorisation from the hospital.
- To encourage adoption of digital health transactions and digitisation of patient health records in the country, the National Health Authority had announced financial incentives under the Digital Health Incentive Scheme (DHIS) from January 2023.
- Under the DHIS, there is a provision that for every insurance claim transaction through NHCX, financial incentives of ₹500 per claim or 10% of the claim amount, whichever is lower, would be given to hospitals.

Why is NHCX being brought in?

- Health insurance is an important policy strategy to provide health care services as well as reduce high out-of-pocket expenditure which burden individuals.
- Health insurance contributes to approximately 29% of the total general insurance premium income in India.
- The primary hurdle in health insurance today lies in improving the relationship between hospitals and insurance companies.
- Building trust among policyholders hinges on delivering efficient services.
- While challenges like data breaches are being effectively tackled, the NHCX stands as an ongoing benefit for all involved, facilitating smoother operations within the healthcare space.

35. Does H5N1 pose a threat for humans? - The Hindu**Highlights:**

- The highly pathogenic avian influenza (HPAI) H5N1 strain has been affecting cattle across several States in the U.S., and for the first time, three cases of human infection in dairy farm workers were also reported.
- The districts of Alappuzha, Kottayam and Pathanamthitta in Kerala, where water bodies, migratory birds, fowls and integrated farms form part of the ecosystem, have reported H5N1 outbreaks in 19 places since April.
- However, the death of crows in large numbers in Alappuzha, and subsequent confirmation of the H5N1 virus in their carcasses have given rise to concerns that the virus could spread far and wide.

Prelims Takeaway

- Bird Flu

How dangerous is H5N1?

- Ever since it emerged in 1996, H5N1 has resulted in the mass killing of billions of wild birds as well as fowls.
- The virus's jump to some 26 mammalian species, especially cattle and the now emerging proof that it can infect humans, has heightened the threat perception that H5N1 could lead to the next global pandemic.
- Of particular concern are the facts that **herd-to-herd transmission** of H5N1 is now taking place in the U.S.

Risk to humans

- According to scientists, the virus lacks changes that would make it better adapted to transmit between people and therefore, the risk to human health remains low.
 - However, the potential for influenza viruses to rapidly evolve and the wide geographic spread of H5N1 signals that more human infections should be expected.
- The virus seems to spread from birds/animals to humans who may be closely interacting with these, without adequate personal protection.
- According to the WHO, between 2003 and April 1, 2024, close to **900 human infections** of H5N1 have been reported from 23 countries, of which, more than half were fatal.
- Even though the risk of human infections from H5N1 is still perceived to be low, this can change rapidly as the virus spreads to more animals, especially cows or domestic mice, which have closer contact with humans.

Symptoms of H5N1

- The common symptoms of H5N1 are similar to those of **influenza-A illnesses**, including respiratory difficulties, fever, cough, sore throat and pneumonia, all of which can potentially worsen, especially in those who are immunocompromised or have underlying conditions.
 - In the U.S., **conjunctivitis or pink eye** was the only symptom that was reported in one of the farm workers who was infected.

Precautions

- People should avoid unprotected exposure to infected birds or animals or their contaminated environments.
- If at all one has been exposed to a possible H5N1-contaminated environment, they should monitor themselves for new respiratory illness symptoms, including conjunctivitis for 10 days and seek proper medical advice.

- It would be better to ensure that people use only pasteurised milk and poultry meat and eggs should be well-cooked to prevent any possible food-borne transmission of H5N1.
- People who have livestock and birds at home are being advised to wear masks, and the antiviral **Tamiflu** is being prescribed as prophylaxis to people wherever H5N1 positive cases are found.

Suggestive measures

- Continuous surveillance by testing environmental samples water, faecal matter of birds as well as Influenza-like illness human samples would be necessary in designated surveillance zones.
- **One Health** concept must be prioritized and operationalised.

36. Spread of deadly 'flesh-eating bacteria' in Japan raises global concerns- BUSINESS STANDARD

News:

- In the wake of the Covid-19 pandemic, humanity now faces a new threat: a flesh-eating bacterial infection known as Streptococcal Toxic Shock Syndrome (STSS).
- This virulent infection can prove fatal within 48 hours.
- Recent data from Japan's National Institute of Infectious Diseases indicates a troubling surge in STSS cases, with nearly 1,000 reported infections this year, surpassing last year's total.

Prelims Takeaway

- Streptococcal Toxic Shock Syndrome

Streptococcal Toxic Shock Syndrome (STSS):

- STSS, is caused by a type of bacteria called group A Streptococcus.
- These bacteria release harmful toxins that spread deep within your body, causing a severe reaction.
- **symptoms:** STSS begins with symptoms such as fever, chills, muscle aches, nausea, and vomiting.
- Within 24 to 48 hours, it can progress to low blood pressure, organ failure, rapid heart rate, and fast breathing.
- **Risk Factors and Severity:** Group A Streptococcus usually causes strep throat in children but can lead to serious symptoms in adults, including limb pain, swelling, and low blood pressure.
- This can escalate quickly to tissue death, breathing difficulties, and organ failure, especially in individuals over 50.
- **Prevention:** Preventing STSS involves practicing good hygiene, such as regular handwashing and covering the mouth when coughing or sneezing. Proper wound care and prompt medical attention for infections can prevent complications that may lead to STSS.
- **Diagnosis:** Blood tests to detect group A strep bacteria and assess organ function.
- STSS is confirmed when a person has a group A strep infection alongside low blood pressure and signs of two or more organ failures.
- **Treatment:** Administering strong antibiotics intravenously to eliminate the bacteria. Patients also receive fluids to stabilize blood pressure and support organ function.

37. India eyes breakthrough against sickle cell - The Hindu

News: India is getting closer to developing a gene therapy for sickle cell disease

Highlights:

- Sickle cell disease is a **genetic blood disorder** with a high prevalence rate among the Scheduled Tribes
- Researchers were working to develop a gene therapy using **CRISPR-Cas9**
- This comes months after the U.S. Food and Drug Administration approved the **CRISPR-Cas9 technology** for a cell-based gene therapy to treat sickle cell disease in December 2023.
- Ministry officials said one of the main challenges for India was to find a way to make this therapy cost-effective.
- Developing a gene therapy using **CRISPR** has been part of India's mission to **eradicate sickle cell disease by 2047**.

Prelims Takeaway

- CRISPR-Cas9
- Sickle cell disease

- Part of this mission is to also conduct over seven crore screenings among **vulnerable tribal populations** across 17 States and Union Territories, of which three crore screenings have been achieved so far

CRISPR-Cas9

- The CRISPR-Cas9 system consists of an enzyme that behaves like **molecular scissors**, which can be directed to cut a piece of DNA at a precise location.
- This will then allow a guide RNA to insert a changed genetic code at the sites of the incision.
- While there are a few ways to effect such changes, the CRISPR system is believed to be fast and the most versatile of all.

38. India, U.S. working to scale up partnership on critical minerals- The Hindu

News:

- India and the U.S. are looking to “quickly” conclude a bilateral agreement on furthering cooperation on critical minerals
- The U.S. Department of Commerce, the Indian Ministry of Commerce and Industry and the Ministry of Mines, are to drive a partnership in supply chains for **graphite, gallium, and germanium**.

Prelims Takeaway

- India- USA
- iCET

Highlights:

- One of the aims will be to promote
 - “India’s vital role in the mineral security partnership, including through co-investing in a lithium resource project in South America and
 - A rare earths deposit in Africa, to responsibly and sustainably diversify critical mineral supply chains,”
- India released a list of **30 minerals** critical for the country and has been looking to acquire mines abroad in addition to expanding exploration within the country.
- To enable this, the Mines and Minerals (Development and Regulation) Act, 1957 was amended through the MMDR Amendment Act, 2023.
- India has incorporated a joint venture company Khanij Bidesh India Ltd. (KABIL) with contribution from three Central Public Sector Enterprises –
 - National Aluminium Company Ltd,
 - Hindustan Copper Ltd and
 - Mineral Exploration and Consultancy Ltd with
- The objective of acquiring critical mineral assets abroad to ensure consistent supply of critical minerals to the Indian domestic market.
- KABIL is presently exploring opportunities for acquisition of critical minerals assets like lithium and cobalt in Australia, Argentina and Chile.

39. Prolonged exposure to coal mining causes respiratory, skin diseases in workers: study - The Hindu

News: A survey published by the National Foundation for India stated prolonged exposure to coal mining pollutants has resulted in widespread respiratory and skin diseases

Prelims Takeaway

- Effects of coal mining

Highlights:

- At least 65% of participants interviewed reported issues such as chronic bronchitis, asthma, and skin ailments such as eczema, dermatitis and fungal infections.
- People living closer to the mines were relatively more vulnerable.
- Dhanbad and Ramgarh, which had more people living in such zones, had higher incidence of lung and breathing-related diseases as well as skin infections.
- The world’s shift away from coal is expected to result in significant job losses and economic downturns in coal-dependent regions.
- This will not only impact the coal miners and workers directly but also the broader local economy.

- The broader thrust of the study was to investigate 'just transition' or how those who are directly dependent on coal mining may be effectively and sensitively transitioned away from these jobs.

India & Renewable Energy

- While India has committed to source nearly 500 GW of electricity or nearly half its projected installed capacity for 2030 from renewable energy sources, coal is expected to be the mainstay of power generation in India for decades.
- Nearly half of India's installed power generation capacity, or about 205 GW, are coal-powered thermal plants.
- Change however is in the air as for the first time this year, renewable energy accounted for 71.5% of the record 13.6 (GW) power generation capacity added by India in the first quarter (January-March) of this year
- While coal's share (including lignite) of the total power capacity dropped below 50% for the first time since the 1960s.

40. Screen all pregnant women for gestational diabetes with point-of-care test, say experts- The Hindu

News:

- Researchers from India, London, and Africa have proposed that the oral glucose tolerance test (OGTT) be replaced by an HbA1c test

Prelims Takeaway

- HbA1c
- Gestational Diabetes

Highlights:

- They have recommended that this be administered in early pregnancy, during the first trimester itself.
- In a paper published in The Lancet Diabetes and Endocrinology, authors argued that **HbA1c** offers a simple screening test for gestational diabetes, allowing those at highest risk to receive early intervention and greatly reduces the need for OGTTs.
- The proposal is significant for India. As more than 90% of gestational diabetes cases are estimated to occur in low-income and middle-income countries.
- Currently, guidelines recommend that mothers take an OGTT, which is a concentrated 75 g oral solution at fasting, and then wait two to three hours to do a follow-up, at the 24 to 28-week stage.
- This throws up a lot of challenges, particularly in screening women who are in far-flung rural areas and in hard-to-reach areas.
- The study concluded that in India, an HbA1c result of 4.9 rules out diabetes, while women who have a score of 5.4 or above can be 'ruled in' for gestational diabetes.
- If the risk score classifies them in the lowest risk group, they would not have to take an OGTT; only those in the intermediate group between these two values would have to do the more complicated test.
- Advantages of HbA1c test: it confers the ability to identify a high-risk group earlier on in pregnancy, and an opportunity to intervene with diet and exercise.
 - There is data that early intervention helps prevent development of gestational diabetes.

POLITY & GOVERNANCE

41. CIC can't comment on how MPs spend their funds, says Delhi HC - The Hindu

News: The Delhi High Court has held that the Chief Information Commissioner has no jurisdiction to comment on the utilization of MPLADS Scheme funds by MPs.

Prelims Takeaway

- MPLADS
- CIC

Highlights:

- The court expunged certain remarks made by the CIC while dealing with an RTI application seeking information relating to the utilisation of MPLADS funds.

- In its October 2018 order, the CIC had observed that some MPs were **deliberately accumulating** their MPLADS funds for the last year of their term to gain an advantage during elections.
- It had suggested to the **Ministry of Statistics and Programme Implementation** that this abuse of the funds be prevented and guidelines be implemented for distributing the money equally for each year of the five-year term.
 - The court expunged these observations by the CIC.
- The court's order came after the Centre's Ministry of Statistics and Programme Implementation challenged the CIC order.
- The Ministry contended that the CIC exceeded its jurisdiction by commenting on the action taken by MPs in spending their MPLADS funds.
- The court noted that as per **Section 18 of the RTI Act**, the CIC can only deal with issues relating to the information being sought or any other issue related to the dissemination of information.
- The court, however, retained the CIC's direction for the disclosure of constituency-wise and work-wise details of the funds under the RTI Act.

42. NHRC seeks report on 'sale of underage girls' as part of 'Nata Pratha' - The Hindu

News:

- The National Human Rights Commission (NHRC) issued notices to the Union Ministry of Women and Child Development and various States over a practice known as 'Nata Pratha'.

Prelims Takeaway

- Nata Pratha
- POCSO Act

Highlights:

- **Nata Pratha** involves selling on a stamp paper or marrying off underage girls from some communities.
 - These sales and marriages are usually conducted by their own families.
- Given the immoral consequences of 'Nata Pratha' on women and minor girls, the Commission has called for its eradication and abolition
- The States have been directed to submit a report on measures taken or proposed to be taken in this regard within eight weeks.
- The commission's research wing observed that the '**Nata Pratha**' is comparable to modern forms of prostitution.
- Among various measures, it suggested that besides enacting a law, individuals involved in forcing women into 'Nata Pratha' **must be prosecuted under laws** relating to human trafficking.
- The sale of minor girls should be prosecuted under the **POCSO Act**.
- It also suggested setting up a group at the village level to register cases of 'Nata Pratha' in addition to building awareness and providing education and employment to improve the economic and social status of girls and women.

43. Quality Council of India celebrates World Accreditation Day in more than 20 cities across India- PIB

News:

- Quality Council of India (QCI) celebrated World Accreditation Day across more than 20 cities in India, with The theme "Accreditation: Empowering Tomorrow and Shaping the Future,"

Prelims Takeaway

- QCI
- MSME

Highlights:

- Several industry leaders, government officials, and company heads, discussed the role of accreditation in shaping the quality of life in all spheres.
- strengthening the accreditation body and the entire quality system is not just a necessity but a strategic move towards excellence.
- Both NABL (National Accreditation Board for Testing and Calibration Laboratories) and NABCB (National Accreditation Board for Certification Bodies) constitute the accreditation infrastructure in India and

- are signatories to the Multilateral Recognition Arrangements.
- NABL has over 8000 accredited labs and NABCB has over 260 accredited CABs (Conformity Assessment Bodies).'
- The **Quality Council of India**, established in 1997 by the Government of India and the Indian industry,
 - is the apex organization in India responsible for establishing and operating the third-party national accreditation system,
 - improving quality across sectors and advising the government and other stakeholders on all matters concerning quality.

44. First decision of the new government shows commitment of government to farmer welfare

News:

- After being sworn in as Prime Minister for the 3rd time, PM Narendra Modi signs his first file authorizing release of the 17th installment of PM Kisan Nidhi. This will benefit 9.3 crore farmers and distribute around Rs 20,000 crores.

Prelims Takeaway

- Central Sector Scheme

Overview of PM-KISAN Scheme:

- Started in: 2019
- Objective: to provide income support to all landholder farmer families across India.
- Under Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) Scheme, eligible farmer families receive a financial benefit of Rs. 6,000 per year, provided in three installments of Rs. 2,000 each.
- Implemented as a Central Sector Scheme, PM-KISAN receives 100% financial support from the Central government.
- The financial assistance is directly transferred to the beneficiaries' bank accounts.
- Implemented by: Ministry of Agriculture and Farmers Welfare
- PM-KISAN Mobile App: Developed and designed by the National Informatics Centre in collaboration with the Ministry of Electronics and Information Technology

45. A comprehensive immunisation schedule for women is ready - The Hindu

News:

- The Federation of Obstetric and Gynaecological Societies of India (FOGSI) recently unveiled a comprehensive immunisation schedule for women

Prelims Takeaway

- HPV vaccine
- Immunisation

Highlights:

- This schedule provides a list of **essential vaccines** that adult women should receive, and the recommended frequency of each vaccine.
- A recent report highlighted that women spend **25% more time in poor health** compared to men.
- Vaccination can help change this and safeguard women from **vaccine-preventable diseases**, contributing to an improved quality of life.
- 31% of women are at a high-risk of an HPV infection after birth. Thus, vaccination plays a crucial role in a new mother's health.
- The report, '**Closing the Women's Health Gap: A \$1 Trillion Opportunity to Improve Lives and Economies**', showcases how the narrowing of the women's health gap would allow 3.9 billion women to live healthier, higher-quality lives.

Adult Vaccination

- Adult vaccine coverage in India is almost negligible and this needed to change.
- There is an urgent need to **sensitize people** and health care providers on adult vaccination as it can help save millions of lives in India.
- Initiatives like the **revised immunization schedule** can go a long way in changing the situation and protecting more people in future.

46. Ex-AAP minister disqualified from assembly weeks after joining BSP- INDIAN EXPRESS

News:

- The Delhi Assembly disqualified former Delhi minister and Aam Aadmi Party (AAP) MLA from the assembly.
- The anti-defection laws apply to him because he joined BSP without resigning as an AAP MLA.

Prelims Takeaway

- The anti-defection law

Key highlights

- During the Lok Sabha elections, Anand rebelled against the AAP and resigned as minister on April 10 but did not resign from his membership of the Delhi assembly. He joined the BSP on May 5 and filed his nomination as BSP candidate from New Delhi Lok Sabha seat a day later.
- Under the 10th schedule of the Constitution, “the anti-defection law deals with situations of defection in Parliament or state legislatures by members of a political party.
- when a member of a political party leaves and joins hands with other parties.
- A member could be disqualified if he or she voluntarily gives up the membership of a political party or joins any other political party after the election.

47. Feasibility study on land connectivity with India in final stages, says Wickremesinghe- The Hindu

News:

- Sri Lankan President said that the feasibility study on a proposal to establish land connectivity with India is in its final stages.

Prelims Takeaway

- India-Sri Lanka
- EEZ

Highlights:

- Sri Lankan President, who was traveling to inspect the development work in the region, said that the preliminary work of the feasibility study was over and the final phase would be completed soon.
- This proposal and the prospect of a power grid connection between the two nations are likely to be discussed during the visit of India's External Affairs Minister to Sri Lanka
- A commercial venture to sell the excess renewable energy to India would also be discussed during the Minister's visit.
- However, Fishing has been a bone of contention between the nations since decades
- Sri Lanka would raise the contentious issue of illegal fishing in Sri Lankan waters by Indian fishermen.
- The Palk Strait, a narrow strip of water separating Tamil Nadu from Sri Lanka
- Fishermen from both countries are arrested frequently for inadvertently trespassing.

48. Rising cases under PoSH Act point to better reporting

News:

- more and more women are getting into STEM — Science, Technology, Engineering and Maths — courses in India, resulting in them landing jobs in corporate houses, especially in the IT sector.
- Hence, the proportion of women in leading corporate firms has increased considerably over time.

Prelims Takeaway

- POSH act

Key highlights

- Yet, attrition rate — the percentage of employees who leave an organisation — is also, in general, higher among women than men. Women leave organisations for many reasons
 - Including societal pressure after marriage, pregnancy, and post-pregnancy work-life balance, reasons that rarely apply to men.
- Adding to the list, workplace harassment — verbal, sexual or otherwise — may also play a role in such exits.
- If the number of cases reported under the PoSH Act is anything to go by, a look at just the figures from the top four IT firms shows that instances are rising again after a brief pause during the pandemic.

- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (PoSH Act) was introduced over a decade ago to protect women against workplace sexual harassment.
- While the numbers have increased over time, only a few such cases get reported officially.
- women, in general, especially those who are married, avoid raising such complaints, it is important to study the environment around them.
- many firms have not even constituted Internal Complaints Committees and in places which have one, members were inadequate or lacked representatives from outside the company.

Skeletons tumbling out of closet

The data for the charts were sourced from companies' annual reports and National Family Health Survey-5 (charts 2 and 3)

Chart 1: Number of PoSH complaints filed in select IT companies and the number of complaints upheld

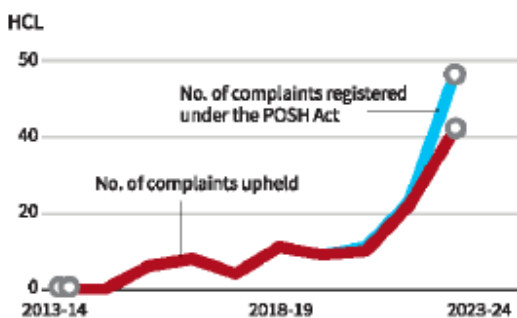
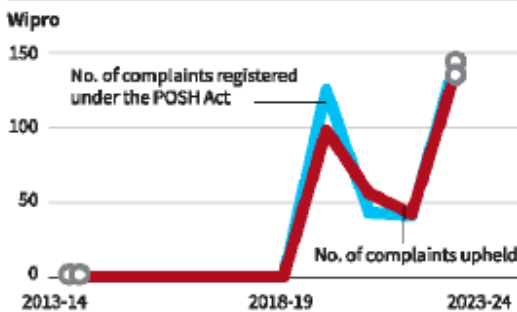
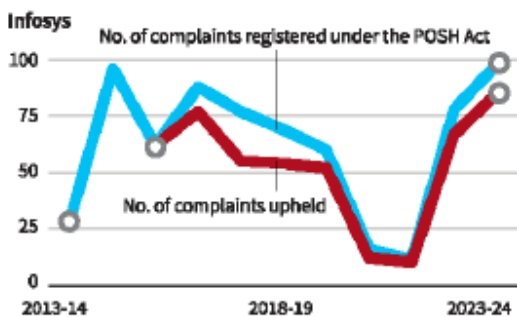
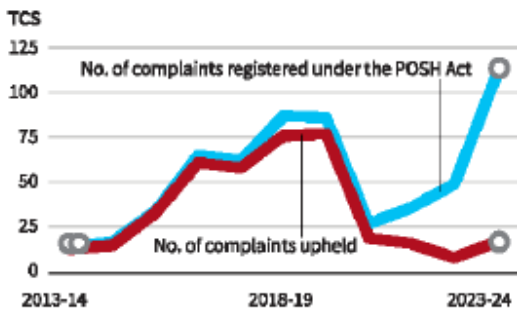


Chart 2: The chart shows the share of men who think a wife should have an equal or greater say than her husband on specific decisions such as ...

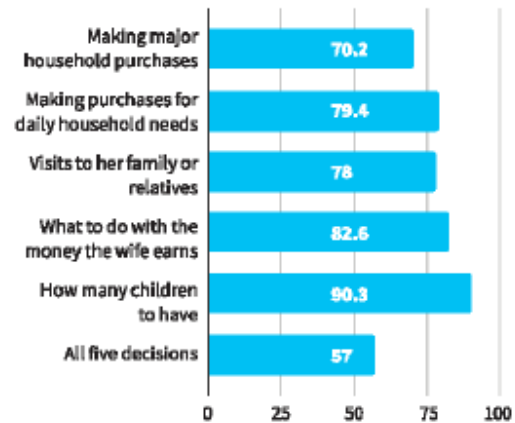
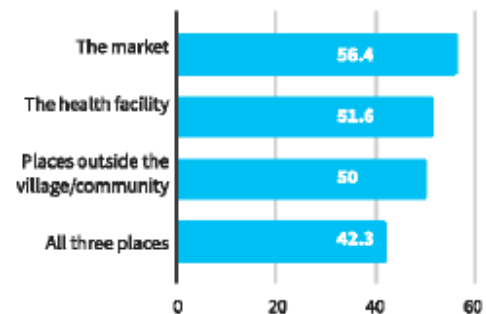


Chart 3: The chart shows the percentage of women who are allowed to go alone to...



Khadija H. Colombowala is interning with The Hindu Data Team

49. 'Drugs in parcel' ploy being used to dupe people: Centre- THE HINDU

News:

- Stepping in to act against the rampant “narcotics drugs in parcel” extortion scam, the Revenue Department of the Union Finance Ministry advised the public to stay vigilant
 - stressed that Customs officials never contact individuals over phone or by email to remit Customs duties in private accounts.

Prelims Takeaway

- Central Board of Indirect Taxes and Customs (CBIC)

Key highlights

- “Various incidents have come to light through news portals/social media platforms of fraudulent persons posing as Indian Customs officers cheating the public of their hard-earned money across the country.
- These frauds are primarily done using digital means like phone calls or SMS, and are focused on extracting money through the purported fear of immediate penal action,” the Central Board of Indirect Taxes and Customs (CBIC) said.
- The CBIC has launched a multi-modal campaign to spread awareness of such fraudsters’ modus operandi and urged people to immediately report such cases on www.cybercrime.gov.in or its helpline number 1930.

50. Criminalizing words : Speeches that do not instigate violence should not be deemed unlawful activity- THE HINDU

News:

- The grant of sanction to prosecute writer-activist Arundhati Roy and academician Sheikh Showkat Hussain for alleged “unlawful activity” in a case dating back to 2010 is unwarranted.

Prelims Takeaway

- UAPA

Key highlights

- Delhi Lieutenant Governor, who had accorded sanction in October 2023 to prosecute the Booker Prize-winning writer and the former Kashmir University professor,
 - respectively, for allegedly divisive speeches and imputations against national unity, has now given his nod for invoking Section 13 of the Unlawful Activities (Prevention) Act (UAPA) for the same set of speeches.
- The earlier sanction order was in his capacity as the appropriate authority on behalf of the Delhi government under Section 196 of the Code of Criminal Procedure.
- The recent one is, presumably, on behalf of the Central government, the appropriate authority to sanction prosecution for offences under Chapter III of the UAPA, under which Section 13 falls.
- The resurrection of this old case is an unfortunate instance of ill-motivated prosecution.
- The only possible explanation for the revival of this case, registered on a magistrate court’s order in 2010, is that the present regime has found it expedient only now to do so, as part of its continuing crackdown on dissenters and outspoken critics.

51. Two steps back: India needs to close the gender gap in education and politics -THE HINDU

News:

- Gender parity may be climbing upwards worldwide with the global gender gap standing at 68.5% closed in 2024, but the glacial pace of change — it was 68.4% in 2023 — is a grim statistic.

Prelims Takeaway

- World Economic Forum (WEF)

Key highlights

- At this rate, it will take 134 years to reach full parity, the Global Gender Gap report released by the World Economic Forum (WEF) last week pointed out, “roughly five generations beyond the 2030 Sustainable Development Goal (SDG) target”.

- Iceland maintains its number 1 rank (93.5%), and is also the only economy to have closed over 90% of its gender gap.
- India has slipped two places to 129 out of 146 countries. Last year, it was ranked 127, after having jumped eight places from 135 in 2022.
- India has closed 64.1% of its gender gap in 2024, the report noted, leaving policy-makers with a huge window of opportunity to do better.
- The “slight regression,” according to the report, is mainly due to “small declines” in the spheres of education and political empowerment.
- With a population of over 140 crore, even two steps back mean staggering numbers.

Improvement in economic participation

- Though India, it pointed out, had shown a slight improvement in economic participation and opportunity for the last few years, it would need 6.2 percentage points more to match its 2012 score of 46%.
- One way of achieving the objective will be through bridging gender gaps in, say, the labour force participation rate (45.9%).
- To do that, a slew of measures must be in place, from ensuring that girls do not drop out of higher education, providing them job skills, ensuring safety at the workplace, and helping them keep a job after marriage by sharing responsibility for chores at home.
- In education, the gap between men and women’s literacy rate is 17.2 percentage points wide, leaving India ranked 124th on this indicator.
- India has fared better in the political empowerment index, but women’s representation in Parliament continues to be low.
- Close to 800 women contestants were in the fray, but the number of women Members of Parliament has dipped to 74 from 78 (2019) of 543 members, which is 13.6% of the total.
- These numbers are not a good sign in the backdrop of the Women’s Reservation Bill, 2023, yet to come into effect, which aims to reserve one-third of the seats in the Lok Sabha and State legislative Assemblies for women.

52. Govt. sanction must to prosecute police personnel for ‘illegal acts’ on duty: HC - The Hindu

News:

- The Kerala High Court has held that Section 197 of the CrPC is required to prosecute police personnel for any alleged illegal act done as part of their official duty.

Prelims Takeaway

- Section 197
- CrPc

Highlights:

- The court observed that even in a case where a person is taken into custody as part of duty and strictly in accordance with law, the police have no authority to manhandle or detain him illegally.
- If **manhandled or detained illegally**, the erring policemen are liable for prosecution.
- That does not mean that if such an act is done as part of official duty, no sanction is required to prosecute them.
- The court added that every offence committed by the police does not require sanction if such an act is entirely outside the scope of his duty.
- If the alleged act, however illegal it may be, was reasonably connected or has a reasonable nexus to the discharge of his official duty, then sanction is required for prosecution under **Section 197**.
- The court endorsed the view of the sessions court that it could not be held that the alleged conduct of the police officers was alien to their official act so as to deprive him of the protection under Section 197 of the Code.

53. PM addresses Kisan Samman Sammelan in Varanasi, Uttar Pradesh Releases 17th instalment of PM KISAN amounting to more than ₹20,000 crores-PIB

NEWS:

- The Prime Minister, addressed the Kisan Samman Sammelan in Varanasi, Uttar Pradesh today and released the 17th instalment of Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) through Direct Benefit Transfer amounting to more than Rs 20,000 crores to around 9.26 crore beneficiary farmers.

Prelims Takeaway

- 'Lakhpati Didi' Programme

About the Krishi Sakhi Convergence Programme (KSCP):

- The Krishi Sakhi Convergence Programme (KSCP) is a joint initiative led by the Ministry of Agriculture and Ministry of Rural Development.
- It aims to enhance the skills and contributions of rural women in agricultural activities and related businesses.
- Training and Certification: KSCP focuses on training rural women, termed Krishi Sakhis, as Para-extension Workers. These women undergo comprehensive training for 56 days, covering various aspects such as soil health, integrated farming systems, livestock management, and agroecological practices.
- Extension of 'Lakhpati Didi' Programme: KSCP is an extension of the government's ambitious 'Lakhpati Didi' initiative, which aims to empower women by creating opportunities for economic self-sufficiency.
- The programme aligns with the goal of elevating rural women to the status of proficient para-extension workers.

54. Cabinet approves Central Sector Scheme “National Forensic Infrastructure Enhancement Scheme” (N.F.I.E.S.) - PIB

News:

- The Union Cabinet chaired by the Prime Minister today approved the Central Sector Scheme “National Forensic Infrastructure Enhancement Scheme” (NFIES) with financial outlay of Rs. 2254.43 crore during the period from 2024-25 to 2028-29.
- Financial outlay of the Central Sector Scheme will be provisioned by the Ministry of Home Affairs from its own budget.

Prelims Takeaway

- Forensics
- Bhartiya Nyaya Sanhita 2023

Highlights:

- The Cabinet has approved the following components under this Scheme:
 - Establishment of Campuses of the National Forensic Sciences University
 - Establishment of Central Forensic Science Laboratories in the country
 - Enhancement of existing infrastructure of Forensics.
- The Government of India is committed to put an effective and efficient criminal justice system, based on scientific and timely forensic examination of evidence.
- The scheme underscores the importance of high quality, trained forensic professionals in the timely and scientific examination of evidence for an efficient criminal justice process,
- With the enactment of the New Criminal Laws which mandates forensic investigation for offenses involving punishment of 7 years or more, a significant increase in the workload of forensic science laboratories is expected.
- Further, there is a significant shortage of trained forensic manpower in the Forensic Science Laboratories (FSL) in the country.
- To meet this heightened demand, significant investment and enhancement in national forensic infrastructure is imperative.

55. Major Reforms made in Draft Mining Plan Guidelines 2024 issued by Ministry of Coal- PIB

News:

- Coal mining in India has witnessed transformative changes in recent years, ushering in a new era marked by significant industry developments.
- The commencement of commercial coal mining has spurred unprecedented growth, with captive and commercial mines collectively surpassing 100 million tons in coal production during FY23 and likely to cross 200 million tonnes by FY26.
- In response to these developments, the Ministry of Coal (MoC) has revised the framework of preparation of the Mining Plan.
- The primary objective is to optimize coal resource extraction through sustainable practices that minimize waste and enhance operational efficiency.
- This strategic approach includes advanced technological integration to streamline operations, thereby achieving environmental and economic sustainability.

Prelims Takeaway

- Major Minerals
- Mines And Minerals Act 1957

Key reforms introduced

- Provision for calendar plan flexibility to accommodate increased annual coal production beyond scheduled targets.
- Mandatory reporting of other commercially valuable minerals found within leasehold areas to State Governments.
- Implementation of comprehensive Safety Management Plans as per Coal Mines Regulations, 2017, including mandatory safety audits.
- Integration of fly ash filling protocols to address related environmental concerns.
- Requirement for drone surveys and processed outputs for comprehensive five-year compliance reports of Mining Plans.
- Provision for extraction of barrier coal in adjacent mines to conserve coal reserves.
- Facilitation of mine amalgamation for safer and more efficient operations
- Mandatory preparation of Temporary and Final Mine Closure Plans for abandoned or discontinued mines post-2009.
- The Ministry of Coal remains committed to fostering sustainable development and environmental stewardship in India's coal mining sector.
- These comprehensive reforms underscore ministry's dedication to responsible resource management, community welfare, and environmental conservation.

56. Act punishing organised cheating comes into effect-The Hindu

News:

- The Public Examinations (Prevention of Unfair Means) Act, 2024 that has provision for up to five years' imprisonment and a fine of up to ₹1 crore for malpractices and organized cheating in government recruitment exams was notified by the Union government.

Prelims Takeaway

- DoPT
- Art 15,16

Highlights:

- The UGC-NET 2024 examination that was canceled on June 19 on grounds of being compromised and is being investigated by the Central Bureau of Investigation will however not be covered by the newly enacted law.
- A notification issued by the Department of Personnel and Training (DoPT) on Friday
 - "the Central government hereby appoints the 21st day of June, 2024 as the date on which the provisions of the said Act shall come into force."
- The Act mentions punishments for "leakage of question paper or answer key", "directly or indirectly assisting the candidate in any manner unauthorisedly in the public examination" and
- "tampering with the computer network or a computer resource or a computer system" as offenses done by a person, group of persons or institutions.

- Besides these, “creation of fake websites to cheat or for monetary gain”, “conduct of fake examination, issuance of fake admit cards or offer letters to cheat or for monetary gain” and “manipulation in seating arrangements” are also among the offences punishable under the law.
- “Any person or persons resorting to unfair means and offences under this Act shall be punished with imprisonment for a term not less than three years but which may extend to five years and with fine up to ₹10 lakh,” said the Act.
- A service provider, engaged by the public examination authority for conduct of examinations, shall also be liable to be punished with a fine up to ₹1 crore “and proportionate cost of examination shall also be recovered”.
- Such service providers shall also be barred from being assigned with any responsibility for the conduct of any public examination for a period of four years.

57. Maternity leave for parents of child born through surrogacy - The Hindu

News: The Centre has notified rules to allow women government employees to take 180 days of maternity leave in case they have children through surrogacy.

Prelims Takeaway

- Surrogacy
- Maternity

Highlights:

- According to the changes made in the Central Civil Services (Leave) Rules, 1972, the government has also allowed the "commissioning mother" (the intending mother of the child born through surrogacy) with child care leave besides paternity leave of 15 days to the "commissioning father"
- In case of surrogacy, the surrogate, as well as the commissioning mother with less than two surviving children, may be granted maternity leave of 180 days, in case either or both of them are government servants
- Till now, there were no rules to grant maternity leaves to women government employees in case a child was born through surrogacy.
- Existing rules allow "a female government servant and single male government servant" child care leave for a maximum period of 730 days during entire service "for taking care of two eldest surviving children, whether for rearing or for looking after any of their needs, such as education, sickness and the like".
- The "surrogate mother" shall mean the woman who bears the child on behalf of the commissioning mother and the expression "commissioning father" would mean the intended father of the child born through surrogacy

58. Kerala House passes resolution to rename the State 'Keralam' - The Hindu

News: The Kerala Legislative Assembly, recently passed a resolution proposing a Constitutional amendment to change the name of the State from 'Kerala' to 'Keralam'.

Prelims Takeaway

- Article 3
- Schedule 1

Highlights:

- The resolution called for invoking Article 3 of the Indian Constitution to effectuate this change in the First Schedule.
- This resolution mirrors a previous attempt from last year, which was sent back by the Central government due to procedural issues.
- Originally, the State sought to amend the names across all languages listed in the Eighth Schedule of the Constitution to 'Keralam'.
- However, following advice from the Union Home Ministry, the focus shifted to amending only the First Schedule
- Despite 'Keralam' being the Malayalam name of the State, it continues to be officially recorded as 'Kerala'.
 - The resolution aims to align the official name with the Malayalam pronunciation.

59. Ahead of roll-out of the new criminal laws, Union Home Ministry tests eSakhsya App - The Hindu

News:

- The Union Ministry of Home Affairs (MHA) is testing eSakhsya (e-evidence), a mobile-phone application to help police record scenes of crime, search and seizure in a criminal case and upload the file on the cloud-based platform.

Prelims Takeaway

- BNS, 2023
- NCRB

Highlights:

- The police official will have to upload a selfie after the procedure is complete.
- Each recording could be a maximum four minutes long and several such files could be uploaded for each First Information Report (FIR), according to the details shared with State police departments.
- The Bharatiya Nyay Sanhita (BNS) that replaces the Indian Penal Code, 1860; the Bharatiya Sakhsya (BS) which replaces the Indian Evidence Act, 1872; and the Bharatiya Nagarik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure, 1898 are all set to come into force from July.

Conviction rate

- The BNSS mandates compulsory audiovisual recording of search and seizure in each criminal case and mandatory forensic examination in all cases where an offense attracts punishment of seven years or more.
- Procuring hardware and cloud space is an expensive affair and many States do not have enough resources, adding that it will also help uniformity in investigations, thereby increasing the conviction rate.
- The mobile application developed by the National Informatics Centre (NIC) will be available to all police stations which register and download the app.
- A senior government official said the app was under final stages of trial and the police were given two options.
- If there is a connectivity issue, the police can record the crime scene on their own device such as personal mobile phones and generate a hash value, come back to the police station and upload the file.
- The other method is they can directly upload through eSakhsya for which good Internet speed is required.
- Another police officer cautioned that the sanctity of the chain of evidence submission will have to be adhered to, else, it could benefit an accused.
- Many accused escape the clutches of law due to procedural infirmities.
- The new laws make everything digital; if there is slightest issue in procuring digital evidence, it could lead to criminals walking free.
- Forensic evidence is not always challenged on the grounds of quality but on the chain of command.

60. Urban Affairs Ministry to revamp affordable housing scheme - The Hindu

News: The Pradhan Mantri Awas Yojana (Urban) would be revamped with new features

Highlights:

- The **PMAY (Urban)**, launched in 2015, has been given an extension till December 2024.
- The mission aims to address **urban housing shortage** among the poor and middle-income groups, including slum dwellers, by ensuring a pucca house to all eligible urban households.
- the revamp would focus on ensuring that there are no delays on reaching out to beneficiaries who have signed up for the scheme.
- The Ministry had also announced a scheme for **Special Assistance to States for Capital Investment 2023-24 and 2022-23** and for improving and speeding up basic urban planning ecosystems in the cities by incentivising the States.
- Both the schemes among other things also incentivised States for creating an enabling ecosystem for affordable housing for built up area up to 66 sq m through favourable bye-laws and adoption of enabling policy by the States.

Prelims Takeaway

- PMAY
- Special Assistance to States for Capital Investment

- Under the scheme, the States have reported that through the enabling provisions under their affordable housing policy, approximately 5,00,000 dwelling units have been constructed in the last four to five years
- Further, under urban planning reforms, projects for in-situ slum rehabilitation have also been incentivised.

61. With dummy FIRs, pocket guides, police get ready to switch to new criminal laws- The Hindu

News:

- Ahead of the implementation of the new criminal laws from July 1, at least 23 modifications have been made to the Crime and Criminal Tracking Network Systems (CCTNS), an online platform used by more than 16,000 police stations across the country to register first information reports.

Prelims Takeaway

- CCTNS
- BNS, 2023

Highlights:

- With the new laws coming into force, the FIRs will be registered under Section 173 of the Bharatiya Nagrik Suraksha Sanhita (BNSS), instead of Section 154 of the Code of Criminal Procedure (CrPC).
- All the States were on board and prepared to switch to the new system from July 1.
- The Bharatiya Nyaya Sanhita (BNS) replaces the Indian Penal Code, 1860; the Bharatiya Sakshya (BS) replaces the Indian Evidence Act, 1872; and the Bharatiya Nagarik Suraksha Sanhita (BNSS) replaces the Code of Criminal Procedure, 1898.
- The Delhi Police, which was one of the first police forces across the country to roll out training and educational modules for the new laws, aims to sensitise all the 90,000 police personnel by August.
- "Dummy FIRs are being filed to accustom the police officials to the new format.
- We have given pocket-sized books compressing the three laws to all ranks as a ready reckoner.
- The sections of laws being used for years are being changed, the books will come in handy while registering a case
- Another police official said the old laws such as the IPC and CrPC will still be in use. "If a case is registered after July 1 but the crime occurred before the date, it will be registered under the BNSS and relevant sections of the IPC.
- The existing cases in court, where chargesheets are yet to be filed or the trial is still on, will be held under the old system.
- The CCTNS will have both the old and new provisions
- A total of 20 new crimes have been added, and the period of imprisonment has been increased for 33 offences.
- The penalty of community service has been introduced for six crimes and a mandatory minimum punishment has been introduced in 23 crimes.

62. India slams 'deeply biased' U.S. report on religious freedom- THE HINDU

News:

- India recently slammed the U.S. State Department's report on International Religious Freedom for 2023 as "deeply biased" and said it reflected "one-sided projection of issues".

Prelims Takeaway

- Uniform Civil Code

Excerpts of the report

- In India, we see a concerning increase in anti-conversion laws, hate speech, demolitions of homes and places of worship for members of minority faith communities.
- At the same time, people around the world are also working hard to protect religious freedom."
- In nearly 69 pages dedicated to the state of religious freedom in India, the report elaborated on apparent complicity between the law enforcement agencies and the majoritarian groups and flagged a number of factors like the campaign for Uniform Civil Code (UCC) as well as the campaign for creating a "Hindu Rashtra" in India.

- Responding to the criticism, India raised the law and order situation in the U.S. and highlighted the crimes committed by racially motivated individuals against Indians and other coloured communities.
- “In 2023, India has officially taken up numerous cases in the U.S. of hate crimes, racial attacks on Indian nationals and other minorities, vandalism and targeting of places of worship
- In India, for example, Christian communities reported that local police aided mobs that disrupted worship services over accusations of conversion activities or stood by while mobs attacked them and then arrested the victims on conversion charges.”

ECONOMY

63. Centre releases ₹1,39,750 crore to states towards tax devolution for June

News:

- In a move to spur economic development in states, **Finance Ministry has released an additional installment of tax devolution to states for June 2024.**
- The total amount released to states for June now stands at Rs 1,39,750 crore.

Prelims Takeaway

- Finance commission

Sharing Tax Revenue in India

- The divisible pool of taxes refers to the portion of tax revenue collected by the Union government that is shared between the Centre and the States.
- It encompasses various taxes such as corporation tax, personal income tax, Central GST, and the Centre's share of the Integrated Goods and Services Tax (IGST).
- Notably, cess and surcharge imposed by the Centre are excluded from this pool.

Finance commission

- The Finance Commission is set up every five years to decide how much each state gets.
- This commission can also recommend giving extra money to states that need it.

64. GST Council to meet for the first time this year on June 22- The Hindu

News:

- The Centre has decided to convene a meeting of the Goods and Services Tax (GST) Council, eight-and-a-half months after its last meeting

Prelims Takeaway

- GST Council
- Finance Commission

Highlights:

- “The 53rd meeting of the GST Council will be held at New Delhi.
- The Council that is generally expected to meet every quarter, has met just six times since 2022.
- The agenda for the upcoming meeting is not known yet but State Finance Ministers can be expected to flag suggestions for the indirect tax regime that can be incorporated in the Union Budget likely to be presented next month.
- Industry will also be keen for signals on the revival of a plan
 - to restructure the complex multiple-rate tax structure,
 - along with a promised review of the 28% levy on bets made in online gaming, casinos, and horse racing.
- At its last meeting the Council, headed by the Finance Minister, had initiated discussions on a “perspective plan” to impose a cess or surcharge on top of GST levies after March 2026, when the GST Compensation Cess is due to expire.

65. 'Digi Yatra could be expanded to hotels, rail travel, public places' - The Hindu

News:

- Digi Yatra may be implemented at hotels and public places such as historical monuments

Prelims Takeaway

- Digi Yatra Initiative
- Data Leakage

Highlights:

- A prototype for this use-case has been developed and discussions are ongoing with government agencies such as the Tourism Ministry.
- The vision is to create a travel stack for **seamless movement** across India.
- This would enhance travel experience for a tourist who has to produce a passport for check-in at a hotel or at police stations for verification.
 - Digi Yatra could also be used for rail travel
- Nationals of certain countries such as Pakistan are required to report their arrival and intended departure at each place of stay within 24 hours at the nearest police station.
- Tourists of other nationalities who hold a visa for a period of more than 180 days, are also required to register at the Foreign Regional Registration Office (FRRO).
- Extending Digi Yatra to hotels and public places would **prevent data leakage** as people often tend to share unencrypted forms of identity documents through photocopies and screenshots, whereas Digi Yatra ID does not carry any personally identifiable information.
- The **Digi Yatra Central Ecosystem** only saves a hash value or a numerical value that identifies the content of the file so that none of the data items shared by passengers at the time of registering on the app can be leaked anywhere.

Digi Yatra initiative

- The Digi Yatra initiative is **digital processing of air travelers** which uses their biometrics such as a facial scan instead of a boarding pass to enable paperless movement through various checkpoints at an airport.
- The initiative was rolled out at airports in **December 2022**, and today covers 14 airports while 15 more airports will be included by the end of 2024.
- The primary aim of the initiative at the time its policy document was launched in 2017 was to improve passenger throughput (or number of passengers passing through various checkpoints) at airports.
- This would achieve the objective of enhancing airport infrastructure needed to cater to increasing passenger volumes by ensuring more efficient airport operations, alongside physical expansion of airports in the country.
- But the proposed use-case for hotels and other public places implies that the role for Digi Yatra could extend beyond air travel.
- The Digi Yatra Foundation itself is a not-for-profit private company which is a consortium of five private airports that have a combined shareholding of 74%, and the Airports Authority of India which holds the remaining 26% share.

ART & CULTURE

66. Srinagar's 'World Craft City' tag will promote global links- The Hindu

News:

- Srinagar has earned the **World Craft City tag** from the World Crafts Council, a non-government organization working to empower artisans and safeguard craft heritage globally.

Prelims Takeaway

- World Crafts Council
- Indian Handicrafts

Highlights:

- The Indian National Trust for Art and Cultural Heritage-Kashmir, described the honor as the "latest recognition of the skill base of Kashmir".
- "This will provide a boost to Kashmir's traditional linkages with Central Asia and Iran.

- There are 14 Iranian cities listed as craft cities by the Council and,
 - The honor for Srinagar will lead to knowledge exchange.
 - This is likely to re-open Kashmir's centuries-old linkages with craft centers in Central Asia and Iran.
- The Council is the modern-day means and medium to put the focus on places that have been engaged in creativity and aesthetics for centuries.
- The last century saw Kashmir's traditional routes slowly closing down,
 - The WCC has provided a new highway for artisans to achieve a new trajectory.

GS III

SCIENCE & TECH

67. In fight against Nipah, scientists find new way to generate virus-like particles in lab - The Hindu

News: Scientists at the Institute of Advanced Virology, have developed a novel way of generating non-infectious Nipah virus-like particles in the laboratory

Highlights:

- This new method offers an alternate, safe and effective platform for developing neutralizing antibodies against NiV in a **biosafety level-2 (BSL)** laboratory.

Prelims Takeaway

- Nipah Virus
- Virus like Particles

Nipah Virus

- The zoonotic virus Nipah is a highly pathogenic **paramyxovirus**, with a fatality rate of up to 80% in affected humans.
- The genome of the NiV encodes **six major proteins**: glycoprotein (G), fusion protein (F), matrix (M), nucleocapsid (N), long polymerase (L) and phosphoprotein (P).
- However, research studies, especially virus neutralization assays to develop specific antivirals or therapeutics against NiV, have been limited because of the extreme level of biosafety precautions required for handling this BSL-4 pathogen.

Virus-like particles

- **Virus-like particles (VLPs)** are molecules that closely resemble viruses, but are non-infectious because they contain no viral genetic material.
- VLPs carry most of the characteristics of the virus, **except their ability to replicate** (because it lacks the viral genome).
- VLPs have long been recognised as effective quantitative platforms for studying viral binding and entry kinetics of the virus.
- The inclusion of a highly sensitive **HiBiT tag** on these VLPs accelerates their potential in antiviral drug screening and vaccine development.
- The concept of generating VLPs or tagged VLPs (eg: HiBiT) is applicable to several other virulent pathogens but it is particularly advantageous to apply this methodology to **BSL-3/BSL-4 level viruses**, to enable studies in lower biocontainment levels.
- However, extensive and rigorous studies using multiple neutralizing antibodies and antivirals that block entry of the virus are needed to conclusively show the efficacy of these VLPs.

68. China lands on moon's far side in historic sample retrieval mission- INDIAN EXPRESS

News:

- **China landed an uncrewed spacecraft on the far side of the moon**, a landmark mission aiming to retrieve the world's first rock and soil samples from the dark lunar hemisphere

Prelims Takeaway

- Artemis mission
- Chang'e-6
- SMART-1

Key Highlights

- The landing elevates China's space power status in a global rush to the moon, where countries, including the United States, are hoping to exploit lunar minerals to sustain long-term astronaut missions and moon bases within the next decade.
- The Chang'e-6 craft, equipped with an array of tools and its own launcher, touched down in a gigantic impact crater called the South Pole-Aitken Basin on the moon's space-facing side
- The successful mission is China's second on the far side of the moon, a region no other country has reached.
- The back of the moon perpetually faces away from the Earth and is dotted with deep and dark craters, making communications and robotic landing operations more challenging.
- Using a scoop and drill, the lander will aim to collect 2 kg of lunar material and bring it back to Earth.
- It will provide new clues on the solar system's formation.
- It will also allow for an unprecedented comparison between the dark, unexplored region with the moon's better understood Earth-facing side.
- The U.S., with its Artemis program, also envisions a crewed moon landing by late 2026 or later. NASA has partnered with several space agencies including Canada's, Europe's and Japan's, whose astronauts will join U.S. crews on a future Artemis mission.

69. ISRO develops new PraVaHa software for aerodynamic design- The Hindu

News:

- The Indian Space Research Organisation (ISRO) has developed Computational Fluid Dynamics (CFD) software named, PraVaHa- Parallel RANS Solver for Aerospace Vehicle Aero-thermo-dynamic Analysis .

Prelims Takeaway

- ISRO
- Gaganyaan

Highlights:

- This software was developed in ISRO's Vikram Sarabhai Space Centre (VSSC).
- It can simulate external and internal flows on launch vehicles, winged and non winged re-entry vehicles.
- According to ISRO, initial aerodynamic design studies for launch vehicles demand evaluation of a large number of configurations.
 - Any aerospace vehicle while moving through the Earth's atmosphere during launch or reentry is subjected to severe aerodynamic and aerothermal loads in terms of external pressure and heat flux.
 - Understanding the airflow around aircraft, rocket bodies, or Crew Module (CM) during earth re-entry is essential to design the shape, structure, and Thermal Protection System (TPS) required for these bodies.
- Computational Fluid Dynamics (CFD) is one such tool to predict the aerodynamic and aerothermal loads which solve numerically the equations of conservation of mass, momentum, and energy along with the equation of state.
- PraVaHa has been used extensively in the Gaganyaan program for aerodynamic analysis of human-rated launch vehicles, viz, HLVM3, Crew Escape System (CES), and CM.

70. Forest fire rages in Himachal; rain expected to bring relief - The Hindu

News: Several wildfires in Himachal Pradesh due to prolonged dry spell and unusually high temperature in the past month

Highlights:

- Wildfires have destroyed several hectares of forest cover and damaged biodiversity and the forest ecosystem.
- Government data shows as many as 1,318 forest fire outbreaks have been reported across the State this year.
- The average maximum and minimum temperatures have been hovering appreciably above normal in Himachal Pradesh since May.
- The temperature coupled with dry spells poses a big challenge for the State Government authorities to control the forest fires.

Prelims Takeaway

- Western Disturbance
- Wildfires

- However, with dry weather conditions and warm temperatures expected to abate in the days to come, there's hope that incidents of outbreaks will abate.

Long term measures

- The Chief Minister directed the department to address the issue. He instructed them to initiate long term measures along with immediate initiatives to curb the problem.
- He added that the State government is contemplating forming a dedicated battalion of the National Disaster Response Force (NDRF) specially equipped and trained for firefighting to reduce losses in forest areas.
- He also directed the forest department to conduct a study to look into the causes of fires and recommend necessary action.
- There is also the need to diversify the conifer plant regions with specific plant species to help retain moisture and reduce the number of fire incidents.

Relief

- Both the maximum and minimum temperatures have been abnormally higher this year for over a month
- The weather was dry and warmer, and there was hardly any humidity, which increases the probability of forest fires.
- However, a fresh **western disturbance** is expected on June 4, which would provide respite from the heatwave conditions and high temperatures in most parts of the state.

71. ICMR seeks to provide oral formulation of hydroxyurea to treat sickle cell disease - The Hindu

News: ICMR has invited Expressions of Interest for the joint development of a low dose or pediatric oral formulation of hydroxyurea to treat sickle cell disease in India.

Prelims Takeaway

- Sickle Cell Disease
- Hydroxyurea

Highlights:

- Sickle cell disease is one of the most common monogenic disorders of haemoglobin.
- Hydroxyurea, a myelosuppressive agent, is an effective drug for treating patients of sickle cell disease, and thalassemia.
- India has the highest prevalence of sickle cell disease in South Asia.
 - Over 20 million people with the disease live in the country.
- While most pharmaceutical companies in India market 500-mg capsules or 200-mg tablets of hydroxyurea, the biggest challenge in treatment is that it is not available in the suspension form for effective use in the case of pediatric patients
- Thus, there is a need for pediatric formulation of HU (hydroxyurea), considering the number of SCD cases in India and in view of the launch of the National Mission to eliminate Sickle Cell Anaemia by 2047
- The ICMR, also said that in India, according to the National Health Mission's guidelines, healthcare providers initiate hydroxyurea therapy to only symptomatic sickle cell disease patients among children both because of the lack of availability of paediatric doses as well as the fear of toxicity.
- In children, the prescribed dose is 10 mg to 15 mg per kilogram of body weight after two years of age.
- This titration of dose is difficult, and currently, it is carried out by using a fraction of the broken capsules, which is not an appropriate method because it can lead to less accurate administration of the drug, which has five dose-related side-effects.

72. Remove claim of '100% fruit juice' from label and ads, FSSAI directs food businesses - The Hindu

News: Several FBOs have been inaccurately marketing various types of reconstituted fruit juices by claiming them to be 100 percent fruit juices

Prelims Takeaway

- FSSAI
- Calcium Carbide

Highlights:

- The Food Safety and Standards Authority of India (FSSAI) has issued a directive mandating all Food Business Operators (FBOs) to remove any claim of '100% fruit juice' from the labels and advertisements of reconstituted fruit juices with immediate effect.

- All the FBOs have also been instructed to exhaust all existing pre-printed packaging materials before September 1.
- Upon thorough examination, FSSAI has concluded that according to the Food Safety and Standards (Advertising and Claims) Regulations, 2018, there is no provision for making a '100%' claim.
- Such claims are misleading, particularly under conditions where the major ingredient of the fruit juice is water and the primary ingredient, for which the claim is made, is present only in limited concentrations, or when the fruit juice is reconstituted using water and fruit concentrates or pulp.
- FSSAI asks fruit traders, food biz not to use banned product 'calcium carbide' for fruit ripening
- Specifically, in the ingredient list, the word "reconstituted" must be mentioned against the name of the juice that is reconstituted from the concentrate.
- "Additionally, if added nutritive sweeteners exceed 15 gm/kg, the product must be labelled as 'Sweetened juice'.

73. Green-beard' genes could explain how altruism arose in nature-THE HINDU

News:

- Scientists have gained valuable new insights into natural altruism by studying the amoeba Dictyostelium discoideum

Prelims Takeaway

- DNA
- RNA

KEY HIGHLIGHTS

- Researchers have identified "green-beard" genes that enable individuals carrying the same gene variant to recognize and cooperate with each other preferentially.
- Furthermore, mechanisms such as gene expression and protein binding have been observed to facilitate cooperation and deter exploitation within social groups of amoebae.
- **Green-beard genes**, named for their hypothetical ability to "recognize" and cooperate with others bearing the same gene, play a crucial role in fostering altruistic behavior.
- Alternatively, these genes can induce harmful behavior towards those with different gene variants.
- **The Role of Tgr Genes:** Two genes, tgrB1 and tgrC1, have been identified in Dictyostelium discoideum, which regulate altruistic behavior. These genes facilitate cell recognition and cooperation, ensuring that altruistic amoebae recognize and cooperate with their kin.
- These findings not only shed light on the genetic mechanisms driving altruism but also offer broader insights into the evolution of cooperation and sociality across diverse species.

74. AI Can Empower India's DPI by Enabling Diverse Apps-LIVEMINT

News:

- The trouble with standardized solutions like DPI is that they're built for scale and not diversity.
- But AI technology can adjust to individual preferences and contexts, making the delivery of public services more responsive and user-centric

Prelims Takeaway

- AI
- DPI

AI: Powering Up Public Services

- **Distributed Power:** AI allows for smaller, interconnected data centers across the country, making computing power more accessible and efficient.
- **Ethical Innovation:** AI companies can commit to ethical guidelines, ensuring responsible development and deployment of AI technologies without waiting for new laws.
- **Tailored Services:** AI can personalize public services for individual users, adapting to their preferences, language, and cultural background.
- **Unleashing Potential:** Standardized DPI services reach many people, but AI allows private companies to build on this foundation, creating solutions for diverse needs.
- **User-Friendly Tech:** AI can simplify public services with conversational interfaces. Imagine interacting with technology like you chat with a friend!
- **Real-World Example:** Setu's PFM app, a financial advisor on WhatsApp, shows how AI can offer personalized advice on familiar platforms, making financial services easier to access and use.

Challenges to Consider:

- **Standardization vs. Choice:** Standardized services are great for many, but AI can add variety while maintaining core functionalities.
- **Integration Matters:** AI needs to work seamlessly with existing DPI systems, like the Account Aggregator.
- AI-powered DPI must be inclusive and scalable, adapting to individual needs while reaching a broad audience.

75. SpaceX's Starship rocket completes test flight for the first time, successfully splashes down- INDIAN EXPRESS

Context:

- SpaceX completed a test flight of its Starship rocket for the first time, as the company pushed development of the mammoth vehicle past new milestones.

Prelims Takeaway

- NASA's Artemis moon program

KEY HIGHLIGHTS

- The Starship system is designed to be fully reusable and aims to become a new method of flying cargo and people beyond Earth.
- The rocket is also critical to NASA's plan to return astronauts to the moon.
- SpaceX won a multibillion-dollar contract from the agency to use Starship as a crewed lunar lander as part of NASA's Artemis moon program.
- Shortly after the flight, NASA Administrator Bill Nelson congratulated SpaceX on its progress.
- SpaceX has flown the full Starship rocket system on three spaceflight tests previously, with launches in April 2023, November and March.
- Each of the test flights has achieved more milestones than the last, but in each result prior to Thursday the rocket was destroyed before the flight's end.
- During the company's third test flight SpaceX tested new capabilities including opening and closing the payload door once in space
 - which would be how the rocket deploys payloads such as satellites on future missions
 - and transferring fuel during the flight in a NASA demonstration.
- The Starship system is designed to be fully reusable and aims to become a new method of flying cargo and people beyond Earth.
- The rocket is also critical to NASA's plan to return astronauts to the moon.
- SpaceX won a multibillion-dollar contract from the agency to use Starship as a crewed lunar lander as part of NASA's Artemis moon program.

76. First human death from H5N2 bird flu: Why are the experts concerned?-INDIAN EXPRESS

News:

- The World Health Organization (WHO) confirmed the death of a 59-year-old man in Mexico caused by a strain of bird flu called H5N2, which was never recorded in humans before.

Prelims Takeaway

- Avian influenza

What is avian influenza?

- Avian influenza, commonly known as bird flu, is a viral infection that primarily affects birds.
- However, certain subtypes of the virus can infect humans, leading to severe respiratory illnesses.
- The most notable of these subtypes is H5N1, which has been responsible for numerous human infections and fatalities in the past.
- Symptoms of avian influenza in humans are similar to those of regular flu and can include:
 - Fever, cough, sore throat, muscle aches, and severe respiratory distress in advanced cases
- Avian influenza is a zoonotic disease, meaning it can spread from animals to humans.
- The global nature of the poultry industry and international travel means that outbreaks can quickly become international public health emergencies.
- While human cases of avian influenza are rare, the potential for the virus to adapt and spread among humans is a serious public health concern.

- It indicates a new level of transmission or virulence of the virus that was not previously observed in the region.

77. ISRO set for landing experiment of reusable vehicle- The Hindu

News:

- Indian Space Research Organisation (ISRO) is all set to carry out the third and final RLV landing experiment (RLV LEX).

Prelims Takeaway

- RLV-LEX
- Pushpak

Highlights:

- **RLV-LEX** missions involve taking an unmanned winged prototype, christened **Pushpak**, to a designated height and releasing it to land safely under varying conditions.
- In LEX-03, Pushpak will be carried to a height of 4.5 km and 500 metres to one side of the runway using an IAF Chinook helicopter and released.
- In **LEX-02**, the second mission, the altitude was the same but the lateral distance from the runway was 150 metres.
- It has to autonomously approach the runway, manoeuvre by making crossrange, downrange and altitude corrections to touch down on the runway.
- The **LEX-03 mission** will look at how the sink rate, or the rate of descent, can be cut down to reduce the impact load.
- It will also have on board a real-time kinematics (RTK) package.
 - Yet another challenge before the upcoming mission is handling tailwind conditions.
- The VSSC at Thumba was responsible for the design and development of Pushpak.
- In the next stage of tests under the RLV-TD, the ISRO will use an unmanned Orbital Re-entry Vehicle (ORV).
- The vehicle used will be 1.6 times the size of '**Pushpak**' used for LEX. It will be placed in a 400 km orbit around earth using a modified **Geosynchronous Satellite Launch Vehicle (GSLV)**.
- This mission is expected in two years time.
- The ISRO had successfully carried out the **LEX-01** mission on April 2, 2023 and the **LEX-02** on March 22, 2024.

78. 'Global firms are adopting large AI models to cut costs'- The Hindu

News:

- Enterprises globally are adopting Large Action Models (LAMs) that understand complex goals to cut costs.

Prelims Takeaway

- LAMs
- IoT

Highlights:

- LAMs are advanced AI models. They **go beyond generating and interpreting text** like ChatGPT, and can perform tasks **interacting with applications and devices** in the real world.
- They can autonomously **handle complex tasks** like end-to-end vacation planning, job application automation, investment portfolio optimisation, and personalised social media content creation, all while continuously learning and adapting to user preferences.
- This has helped cut significant labour costs at U.S. insurance firms by automating claims processing with LAMs.
- Also, extremely powerful language models can now deeply understand intent from multimodal (speech, video, text) inputs and neuro-symbolic AI to navigate user interfaces like a human would.
- Mix this with the proliferation of APIs (application programming interfaces) and IoT devices, demand for automation, increased computing power all of this makes for a perfect environment for this next generation of AI agents.

LAMs in future

- LAMs could become as integral and commonplace for businesses as SAAS applications or hyperscaler cloud enablement in the coming years.
- LAMs would likely automate many knowledge work tasks currently done by humans, so in that sense, they may displace some roles.
- However, like other things with AI, they are likely to create more jobs than they replace by enabling new capabilities and allowing humans to focus on higher-level, creative tasks.

- Emerging roles will support LAMs, including training, oversight, and explaining model actions.
- The development of LAMs must emphasize transparency, fairness, and security, with stringent testing for biases and misuse and clear accountability.
- The shift in work types would necessitate proactive reskilling and job transition planning, and government policies to ensure upskilling.

79. ISRO releases images of sun captured by Aditya-L1- The Hindu

News:

- Two of the Remote sensing payloads aboard India's maiden solar mission, Aditya-L1, have captured images of the sun and its dynamic activities during the solar storm, which occurred in May.

Prelims Takeaway

- ISRO
- Aditya L-1

Highlights:

- Several X-class and M-class flares erupted in the active region AR13664 on the sun.
- This was associated with coronal mass ejections (CMEs).
- Apart from capturing images, these payloads have made important observations.
- According to the ISRO, these images will help in
 - studying solar flares, energy distribution and sun spots, understanding and predicting space weather, and monitoring solar activity and
 - UV radiation over a wide wavelength range, and also aid in the study of long-term solar variations.
- Raster scans of the solar corona were carried out to capture the coronal activities in this particular spectral line.

80. IISc develops method to remove heavy metal contaminants from groundwater - Times of India

News:

- Indian Institute of Science (IISc) researchers have developed a novel remediation process for removing heavy metal contaminants from groundwater.

Prelims Takeaway

- Groundwater
- Arsenic Contamination

Highlights:

- According to IISc, the three-step method, which is patent-pending, also ensures that the removed heavy metals are disposed of in an environment-friendly and sustainable manner, instead of sending untreated heavy metal-rich sludge to landfills.
 - From where they can potentially re-enter groundwater.
- IISc said that according to reports, 113 districts in 21 States in India have **arsenic levels above 0.01 mg per litre**
- While 223 districts in 23 States have **fluoride levels above 1.5 mg per litre**, which are beyond the permissible limits set by the **Bureau of Indian Standards and the World Health Organization (WHO)**.
- These contaminants can significantly affect human and animal health, necessitating their efficient removal and safe disposal.
- On average, these organic species are approximately 50 times less toxic than the inorganic form present in groundwater.
- IISc said the system is easy to assemble and operate. Manufacturing the adsorbent material involves a simple recipe.
- In the lab, a small pilot-scale **adsorption column system** was able to generate safe drinking water (by WHO standards) for two people for three days.
- The researchers have been working with the INREM Foundation and Earthwatch, both NGOs, to deploy and test these systems in rural areas such as **Bhagalpur in Bihar and Chickballapur in Karnataka**.

81. India-made TB diagnostics tech wins acclaim at World Health Assembly - The Hindu

News:

- Truenat platform that was developed in India, has been hailed for its role in combating TB and as a possible component of global healthcare solutions.

Prelims Takeaway

- TrueNat
- WHA

Highlights:

- Truenat was first launched in 2017 and is a real-time quantitative **micro-PCR system**.
- It is a **portable, battery-operated machine** that can be deployed at labs, health centers, and in the field.
- Truenat delivers results from samples in less than an hour and can test for over 40 diseases.
- Countries that have begun to use Truenat have all reported significant improvements in case detection
- TrueNat is used at over 7,000 primary health centers and community health centers under the **National TB Elimination Programme** and is also being used at roughly 1,500 private labs in the country.
- At the **World Health Assembly** (the decision-making body of the WHO), The Global Fund, which collaborates, appreciated India's commitment to eliminating TB by creating **mass awareness, and intensive monitoring programmes** using digital technologies.
- Early diagnosis and treatment are crucial to combating TB, which kills an estimated 480,000 Indians every year, or over 1,400 patients every day.
- The WHO reports over 10 million new cases of TB every year, and India alone accounts for 27% of the global TB burden.

82. NSSO survey finds COVID-19's second wave hit informal economy hard- The Hindu

News:

- India's large informal non-agricultural sector was badly hit by the second wave of the COVID-19 pandemic, but has recovered gradually since then.

Prelims Takeaway

- Informal sector
- NSSO

Highlights:

- It appears that the unincorporated manufacturing, trade and other service activities were **hit badly by the second wave of the pandemic**; however, the situation improved gradually from July 2021 onwards
- During April-June 2021, at the peak of the most fatal COVID wave, the number of estimated informal enterprises were pegged lower.
- By contrast, surveys carried out between January and March 2022 painted a different picture.
- The NSSO said the **lower reporting** in the first quarter affected the overall annual estimates for 2021-22 of 5.97 crore firms with almost 9.8 crore workers, to a great extent.
- Between October 2022 and March 2023, the number of estimated informal firms had risen.
- This 7.84% annual growth in jobs demonstrates the sector's capacity to generate employment
- The maximum growth in employment during the period was observed in other services (13.42%) followed by manufacturing (6.34%).
- The survey data, released by the Statistics Ministry, is used in compiling national account statistics as the country's unincorporated non-farm sector plays a key role in generating jobs, creating economic value and the overall socio-economic landscape.

83. What is an electromagnet? – The Hindu

News:

- Invented in 1824 by the British physicist William Sturgeon, electromagnets are a fixture of modern life, appearing in loudspeakers, motors, magnetic resonance imaging (MRI) machines, maglev trains, and particle accelerators.
- When an electric current flows through a wire, it create

Prelims Takeaway

- Right Hand Thumb Rule

Electromagnets

- These are devices that produce a magnetic field when an electric current flows through a coil of wire.
- The magnetic field is concentrated in the hole of the coil.
- The strength of the magnetic field can be controlled by adjusting the electric current. When the current is turned off, the magnetic field disappears.
- **Construction and Materials:** Electromagnets typically consist of a coil of wire wrapped around a magnetic core made of ferromagnetic materials like iron. The magnetic core enhances the strength of the magnetic field by aligning the magnetic domains within the core.

Applications:

- Electromagnets are used in various industries for tasks like lifting and moving heavy metal objects, sorting materials, and generating motion.
- They are also used in medical settings for imaging and in consumer devices like electric doorbells and card readers.

84. 200 times increase in Space StartUps in just two years- PIB

News:

- There has been around 200 times increase in Space StartUps in just two years,
- This quantum jump has been possible because of a major policy decision taken by the Prime Minister to open up the Space sector to the private sector and allow public-private participation in a big way, said the Minister.

Prelims Takeaway

- ISRO
- NSIL

Highlights:

- Space StartUps have increased from 1 in 2022 to nearly 200 in 2024, witnessing an unprecedented rise of 200 times in these years.
- In the year 2023 alone, nearly INR 1000 crore was invested in the space sector of India.
- Further, the industry caters to nearly 450 MSMEs affirming the PM's vision of "Sabka Prayas" during the Amrit kaal period.
- The share of India in the global space economy by 2030 is going to rise 4 times in comparison to 2021.
- In 2021, the Indian space industry contributed 2% to global share. This is expected to rise to 8% by 2030 and further to 15% by the year 2047.
- Presently India allows 100% FDI in the space sector thereby unleashing new horizons of innovation and growth to the sector.
- The private sector can offer new solutions to development of advanced small satellites, geospatial technologies, orbital transfer vehicles and so forth.
- About the Transfer of Technology (ToT) by ISRO to the private players. So far, there are 403 such transfers and additional 50 by NSIL/INSPACE till 2023.
- The next 100 days plans of ISRO and its scheduled launches, includes the NISAR programme which is a joint Earth-observing mission between NASA and the ISRO.
- Other programs in the list contain GSAT-20, Landing exercise of reusable launch vehicle, Space docking experiment etc.
- The science and technology minister also recognized the role that private players will play in the R&D part of the space sector.

85. IIT-Delhi project on antimicrobial resistance wins joint second prize in global competition - The Hindu

News:

- A project by the Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi), has won the joint second prize in Trinity Challenge

Prelims Takeaway

- AMR
- AMRSense & OASIS

Highlights:

- The project was based on tackling the escalating threat of **antimicrobial resistance (AMR)**
- The **Trinity Challenge** is a charity supporting the creation of data-driven solutions to help protect against global health threats.
- **AMRSense** addresses the challenges of engaging, motivating, and training community health workers (CHWs) in AMR surveillance and management, compounded by the lack of a comprehensive data ecosystem and analytics capabilities.
- In India, where over 9,00,000 ASHA workers face limited awareness, insufficient training, and low motivation, there is a **significant gap in community-level AMR data collection and evidence-based management.**
- AMRSense tackles these issues through **four major components:**
- community engagement by empowering CHWs with AI-assisted data recording tools for accurate and simplified data collection
- data integration by creating a unified AMR data ecosystem through the integration of antibiotic sales, consumption
- WHONet-compliant surveillance data using open-source tools and APIs;
- predictive analytics by using federated analytics across the OneHealth ecosystem for integrative insights on AMR; and the AMRaura Scorecard for monitoring and evaluating
- The IIIT-Delhi project shared the second prize with another project, also from India, titled '**OASIS: OneHealth Antimicrobial Stewardship for Informal Health Systems.**'

86. ISRO data to help flood risk analysis on two Kerala dams- TIMES OF INDIA

News:

- The Indian Space Research Organisation (ISRO) has extended support to mitigate flood risks associated with the Mullaperiyar and Idukki dams in Kerala.

Prelims Takeaway

- ISRO

Key Highlights

- India's varied landscape, seasonal downpours, and unpredictable climate make it highly susceptible to floods.
- More than 40 million hectares of land are flood-prone, particularly in states like Assam, Bihar, and Uttar Pradesh.
- Several factors worsen flooding in some regions.
- These include decreasing forests, rapid urban growth without proper planning, and unsustainable farming practices.
- Floods bring a wave of devastation, taking lives, displacing people, destroying crops, and damaging infrastructure.

Role of ISRO in disaster management

- The Indian Space Research Organisation (ISRO) utilizes satellites for various disaster management applications, including floods.
- They provide real-time flood maps to government bodies, enabling faster evacuation and relief efforts.
- ISRO also keeps a watchful eye on glacial lakes in the Himalayas, a potential source of sudden and catastrophic floods.
- Additionally, high-resolution satellite data helps create flood models and identify vulnerable areas near dams and other critical infrastructure.

- To effectively communicate during disasters, ISRO leverages platforms like Bhuvan and NDEM to share crucial information with authorities.
- This data includes flood maps, weather forecasts, and assessments of the damage caused.
- Beyond flood management, ISRO's satellites support telemedicine projects that connect remote areas to medical specialists in urban centers.
- Similarly, educational resources are delivered to rural communities through tele-education initiatives.

87. Stringent regulations could hinder growth of AI in India: experts- The Hindu

News:

- As India grapples with the regulatory landscape for artificial intelligence (AI), a sector which has seen rapid development in recent years, experts opine that strict regulations could stifle the country's burgeoning AI-driven economy.

Prelims Takeaway

- AI & Deepfake
- IT Rules, 2021

Highlights:

- Currently, India does not have specific laws directly addressing generative AI, such as deep fakes.
 - It has instead introduced a series of advisories and guidelines to encourage the responsible development and implementation of AI technologies.
- After several "deepfake" video clips went viral on social media platforms,
 - The Ministry of Electronics and Information Technology (MeitY) asked social media intermediaries to take such content down within 36 hours, a requirement outlined in the IT Rules, 2021.

Plea in court

- The Delhi High Court asked the Centre to respond to a public interest litigation (PIL) plea against the unregulated use of AI and deep fakes.
- Deepfake videos utilize AI to swap the likeness of a person in an existing video with someone else's.
- Recently, concerns have grown around deepfake technology, as it can produce highly realistic fake videos that may be misused for spreading misinformation, creating fake news, or generating false narratives.
- The petition said while technological development was happening by leaps and bounds, the law was moving at a snail's pace.
- the MeitY on March 1 issued an advisory saying that all generative AI products, such as large language models on the lines of ChatGPT and Google's Gemini, would have to be made available "with explicit permission of the Government of India" if they are "under-testing/ unreliable".
- However, after the advisory came under criticism from experts for being ambiguous,
 - MeitY issued a fresh advisory, dropping the requirement of obtaining "explicit permission" from the government.
- The latest advisory said under-tested or unreliable AI products should be labeled with a disclaimer indicating that outputs generated by such products may be unreliable.
- Center for Digital Economy Policy Research (C-DEP), said the advisory is,
 - An additional qualifier that all AI-generated content that can potentially cause disinformation should be clearly labeled as AI generated.
 - This advisory does not really hinder the industry,
- Software Freedom Law Center (SFLC), suggested the government "should be ready to update existing laws to protect public interest and guard against future harm associated with the technology.

88. Pushpak, ISRO's reusable launch vehicle, clears test- The Hindu

News: The Indian Space Research Organisation successfully completed the third reusable launch vehicle landing experiment (RLV LEX)

Prelims Takeaway

- RLV LEX
- ISRO

Highlights:

- This experiment was successfully completed at the Aeronautical Test Range in Chitradurga, Karnataka.
- Following the success of RLV LEX-01 and LEX-02 missions, RLV LEX-03 re-demonstrated the autonomous landing capability of the RLV under more challenging release conditions and more severe wind conditions.
- Pushpak, the space agency's winged vehicle, was released from an Indian Air Force Chinook helicopter at an altitude of 4.5 km.
- The ISRO said that from the release point 4.5 km away, Pushpak autonomously executed cross-range correction manoeuvres, approached the runway, and performed a precise horizontal landing at the runway centre line.
- The space agency said this mission simulated the approach and landing interface and high-speed landing conditions for a vehicle returning from space, reaffirming its expertise in acquiring the most critical technologies required for the development of an RLV.
- The ISRO said that the LEX used sensors such as an inertial sensor, radar altimeter, flush air data system and NavIC.
- Notably, the LEX-03 mission reused the winged body and flight systems from the LEX-02 mission without any modification, demonstrating the robustness of the ISRO's capability of design to reuse flight systems.

89. Chinese probe returns to Earth with first samples from far side of the moon- The Hindu

News:

- China's Chang'e 6 probe returned to earth with rock and soil samples from the little-explored far side of the moon in a global first.

Prelims Takeaway

- Artemis Accords
- Moon Missions

Highlights:

- Chinese scientists anticipate the returned samples will include 2.5 million-year-old volcanic rock and other material
 - That scientists hope will answer questions about geographic differences on the moon's two sides.
- The near side is what is seen from Earth, and the far side faces outer space. The far side is also known to have mountains and impact craters, contrasting with the relatively flat expanses visible on the near side of the moon.

High hopes

- The probe had landed in the moon's **South Pole-Aitken Basin**,
 - an impact crater created more than 4 billion years ago.
- The samples scientists are expecting will likely come from different layers of the basin, which will bear traces of the different geological events.
- While past U.S. and Soviet missions have collected samples from the moon's near side, the Chinese mission was the first that has collected samples from the far side.

90. Chandrayaan-4 parts to be sent in 2 launches, assembled in space: ISRO chief

News:

- Chandrayaan-4, which is supposed to bring back samples from the Moon, would not be launched at one go and instead, different parts of the spacecraft would be sent into orbit through two launches, and the spacecraft would be assembled in space before proceeding to the Moon, ISRO Chairman.

Prelims Takeaway

- ISRO
- NGLV

Highlights:

- Chandrayaan-4 is expected to be beyond the carrying capacity of even the most powerful rocket that ISRO currently has.
- The International Space Station and all previous similar facilities were built by assembling different parts in space.
- However, this would be probably the first time in the world that a spacecraft would be launched in parts and then assembled in space.
- Need for docking capability (joining of different parts of a spacecraft) in space — both in Earth space as well as in Moon space, is what ISRO is working on
- Docking of spacecraft modules on the return journey from the Moon is a fairly routine maneuver.
- A part of the spacecraft detaches from the main spacecraft and makes a landing while the other part remains in the Moon orbit. When the landing part leaves the Moon's surface, it docks and links up with the orbiting part, becoming one unit again.
- A detailed study, internal review, and cost for the Chandrayaan-4 mission have been worked out which will soon be sent to the government for approval.
- This is one of the four project proposals that the space agency plans seek approval for in line with its Vision 2047, which has envisioned India building its own space station by 2035 and sending humans to the Moon by 2040.
- India's space station, named Bhartiya Antriksh Station (BAS), would also be set up by carrying different parts of the infrastructure in multiple launches.
- "The first segment of the BAS can be launched using the LVM3 rocket because it is the only rocket available today and we have decided that by 2028 we should have the first launch of the BAS.
- ISRO chief said the subsequent modules of BAS would be lifted either by an upgraded version of LVM3 or the Next Generation Launch Vehicle (NGLV), a heavy rocket that is currently under development. He said the full design and production plan for NGLV had been prepared.
- ISRO is also creating a new launch complex for the bigger and heavier NGLV. He said the current launch complex would not be adequate for the 4,000 ton rocket. "It requires a huge facility and processing capability.

ENVIRONMENT

91. 'T.N. Forest Dept. has formed 20 village panels to protect mangrove cover'- The Hindu

News:

- The International Union for Conservation of Nature (IUCN) has listed mangroves in coastal regions spanning Tamil Nadu, Sri Lanka and the Maldives, as 'critically endangered' in its first global assessment of mangrove ecosystems.

Prelims Takeaway

- IUCN
- Mangroves

Highlights:

- To protect mangrove cover, the Tamil Nadu Forest Department has constituted 20 village mangrove committees.
- According to the IUCN assessment, of the 36 geographical areas spanning tropical, sub-tropical and warm temperate coasts across the world, only south India, Sri Lanka and the Maldives, and the north-western Atlantic region that has a warm temperature have the critically endangered tag.

- In the south Indian ecoregion, mangroves were considered for the study.
- Mangrove ecosystems are important for biodiversity conservation, provision of essential goods and services to local communities, and reducing the impact of climate change.
- According to the IUCN, threats to mangroves were rapidly evolving.
 - due to wood exploitation, deforestation owing to agriculture, and shrimp farming, and impacts due to dam construction altering freshwater and sediment fluxes.
 - mangroves face additional challenges due to climate change, including sea-level rise and an increased frequency and severity of cyclonic storms.
- In Tamil Nadu, according to the Indian State of Forest Report, the extent of mangroves had doubled from 2001 to 2021(45 sq.km).
- Mangrove restoration has been completed in Tamil Nadu districts under the World Bank-funded Tamil Nadu Coastal Restoration Mission.
- The State government was also recognising the role of local communities in protecting mangroves.
- For this, 20 village panels had been constituted for locals to take ownership of mangrove ecosystems and benefit from it.

92. Global project 'paints' evidence of air pollution in India - The Hindu

News:

- Researchers and artists joined forces for painting with light international project to make invisible air pollution in India visible.

Prelims Takeaway

- Particulate Matter
- Light painting approach

Highlights:

- Combining digital light painting and low-cost air pollution sensors, the scientific team produced photographic evidence of pollution levels in cities across three countries India, Ethiopia and the UK.
- Particulate Matter, or PM, is the air pollutant most responsible for human morbidity and mortality. It has multiple impacts on physical health and is responsible for diseases, including heart disease, stroke, and cancers.
- The painting with light team used **low-cost air pollution sensors** to measure PM mass concentrations. It took the sensor's real-time signal to control a moving LED array programmed to flash more rapidly as PM concentration increased.
- By providing a visual understanding of air pollution that is accessible to people who don't necessarily have a scientific background
- The light painting approach can demonstrate that managing air pollution levels can have a significant impact on people's day-to-day lives

Air Pollution

- Air pollution is considered one of the main threats to both the **environment and human health** and a leading cause of death globally.
- The **World Health Organisation (WHO)** estimates 99% of the global population breathe polluted air, causing approximately **7 million premature deaths** worldwide each year.
- The situation is **particularly challenging in Asia**, where air pollution remains a major problem in countries like India and China, despite several air quality policies and actions.

93. Climate conference in November to emphasize 'peace' and 'truce'- The Hindu

News:

- The annual climate conference to be held in Azerbaijan will lay particular stress on "peace" and "truce" to enable countries to focus on climate solutions amid ongoing conflicts.

Prelims Takeaway

- COP
- Azerbaijan

Highlights

- The 29th edition of the Conference of Parties (COP) as the climate conference is called is set to further agenda points decided in the 28th edition in Dubai such as
 - A firm commitment to "transition away from the use of fossil fuels.
 - in a just, orderly and equitable manner, to achieve net zero by 2050.

- Azerbaijan will preside over COP-29 proceedings and try to steer countries into achieving consensus on addressing the climate crisis.
- Most countries have agreed on the urgency of the problem and the need to keep temperatures from rising 1.5C above pre-industrial levels by the end of the century.
- A deep division between developed and developing countries is that a 2009 commitment by developed countries to mobilize \$100 billion a year between 2020 and 2025 for developing countries has only been partially realized.
- 2024 is to decide a new annual target above \$100 billion and an agreement on whether it will be in the form of grants or loans.
- The world is divided but Azerbaijan's position is that the climate issue is something different.
- Countries can be on different sides on geopolitical matters but climate affects everybody and needs an inclusive process.
- COP-truce is being proposed. During the COP, all war should stop.

94. 'India must spend up to \$385 bn for RE goal' - The Hindu

News:

- India will have to invest as much as **\$385 billion** to meet its target of 500 gigawatts (GW) of renewable energy (RE) by 2030, but coal will remain a key source of electricity generation for the next decade

Prelims Takeaway

- Renewable Energy
- Carbon Net zero

Highlights:

- India, a major greenhouse gas emitter,
 - Aims to ramp up non-fossil fuel capacity by 50 GW each year to help meet the 500 GW target.
 - It missed its target of 175 GW by 2022.
- India will have to spend
 - \$190 billion to \$215 billion on capacity over the next six to seven years and
 - another \$150 billion to \$170 billion for transmission and distribution,
- India's strong policy support boosted the RE share to about 43% in its power capacity mix in fiscal 2023-24, attracting private investments.

Creating a Sustainable World

- India is the 3rd largest energy consuming country in the world.
- India stands 4th globally in Renewable Energy Installed Capacity
- The country has set an enhanced target at the COP26 of 500 GW of non-fossil fuel-based energy by 2030.
- This has been a key pledge under the **Panchamrit**. This is the world's largest expansion plan in renewable energy.

95. Study ranks India second in nitrous oxide emissions - The Hindu

News: India is the world's second largest source of nitrous oxide (N₂O) emissions.

Highlights:

- **Nitrous oxide (N₂O)**, a greenhouse gas that heats up the atmosphere far more than carbon dioxide.
- Nearly 11% of such global **man-made emissions** in 2020 were from **India**, topped only by **China** at 16%.
- The **major source** of these emissions comes from **fertiliser usage**, according to a global assessment of N₂O emissions published in the journal Earth System Science Data
- The concentration of atmospheric N₂O reached 336 parts per billion in 2022, the study notes, or about 25% above the levels seen before the industrial age.
- In comparison, the concentration of carbon dioxide the predominant greenhouse gas after water vapour was 417 parts per million in 2022.

Prelims Takeaway

- N₂O emission
- Paris Agreement

- This means that the **current level of carbon dioxide in the atmosphere is a thousand times more than that of nitrous oxide**, making carbon dioxide reduction the bigger priority among countries trying to contain climate change.
- However, because **nitrous oxide stays longer in the atmosphere** and is rising rapidly, scientists in recent years have been warning that it must also be tackled with a greater sense of urgency.

Sources of N₂O emission

- The growing demand for meat and dairy products has also contributed to an increase in emissions through the increase in manure production, which also causes N₂O emissions.
- Agricultural production using nitrogen fertilizers, such as ammonia, and animal manure contributed 74% of the total anthropogenic N₂O emissions in the last decade.
 - Increased nitrogen fertilizers used in the production of animal feed have also contributed to the increase.
- N₂O emissions from human activities are responsible for 6.4% of the effective radiative forcing of greenhouse gases, and have added about 0.1°C to current global warming.
- The top five country emitters by volume of anthropogenic N₂O emissions in 2020 were China (16.7%), India (10.9%), the United States (5.7%), Brazil (5.3%), and Russia (4.6%).

Way Forward

- Once emitted, N₂O stays in the atmosphere for longer than the average human lifespan (117 years), and therefore its climate and ozone impacts are long-lived.
- For net-zero emission pathways consistent with the Paris Agreement, anthropogenic N₂O emissions must decline by at least 20% relative to 2019 levels by 2050.

96. 3 states seek shrinking of eco-sensitive areas in Western Ghats- The Indian Express

News:

- Karnataka, Maharashtra and Goa, are states where the Centre has proposed eco-sensitive areas (ESA) to protect the Western Ghats,
 - But these states have sought a reduction in the extent of these ESAs to allow development works.

Prelims Takeaway

- Kasturirangan report
- Western Ghats

Highlights:

- While the panel will consider the states' demands, it will stick to the principles of ecological protection and follow a uniform approach.
- Karnataka, where an area of 20,668 sq km was proposed as ESA, maintained its opposition to the K Kasturirangan panel report, saying the livelihood of people in the region would be hit.
- Goa also demanded reduction of its area earmarked as ESAs in the state
- The Kasturirangan panel had identified 37 percent of the Ghats as ecologically sensitive and recommended prohibition or regulation of certain activities.

About Eco-Sensitive Areas:

- Eco-Sensitive Areas (ESAs) are located within 10 kms around Protected Areas, National Parks and Wildlife Sanctuaries.
- ESAs are notified by the Ministry of Environment, Forest and Climate Change (MoEFCC) under Environment Protection Act 1986.
- The basic aim is to regulate certain activities around National Parks and Wildlife Sanctuaries so as to minimize the negative impacts of such activities on the fragile ecosystem.

97. MNRE and IREDA conference highlighting Odisha's Green Energy Potential- PIB

News:

- Ministry of New & Renewable Energy (MNRE), in collaboration with the Indian Renewable Energy Development Agency Ltd. (IREDA), organized a pre-event conference for Global Wind Day in Bhubaneswar.

Prelims Takeaway

- MNRE
- Green Hydrogen

Highlights:

- It emphasized the rapid development of renewable energy across India and highlighted the measures taken by the Government of India including the state of Odisha.
- According to the **National Institute of Wind Energy (NIWE)**, India's onshore wind potential is estimated at 1,164 GW at 150 meters above ground level, with Odisha's potential of 12 GW.
- Odisha's significant green energy potential and the promising opportunities in the state.
- Also, Odisha's potential to lead in green hydrogen projects, is critical role in advancing sustainable energy initiatives.
- IREDA has disbursed cumulative loans of Rs. 1,25,917 crores in renewable energy, with Rs. 26,913 crores disbursed to wind power projects nationwide.
 - Specifically, Rs. 1,637 crores loan has been disbursed by IREDA towards renewable energy projects in Odisha.
- Odisha's Renewable Energy Policy 2022, which aims to drive investments in clean energy, with a special focus on RE manufacturing and emerging technologies such as green hydrogen, green ammonia, and floating solar.
- He reaffirmed the vital importance of harnessing renewable energy for sustainable national development and encouraged renewable energy developers to seize the expanding opportunities in Odisha and other states.

98. India at 176 among 180 countries in Environment Performance Index 2024, high emissions flagged again- The Print

News:

- India, the third largest emitter of greenhouse gases, was placed among the lowest-rung countries in air quality, projected emissions, and biodiversity and habitat in the 2024 Environment Performance Index (EPI).

Prelims Takeaway

- Environment Performance Index

KEY HIGHLIGHTS

- India ranked 176th among 180 countries, above Pakistan, Vietnam, Laos, and Myanmar only, in the overall index, released 5 June by the Yale Center for Environmental Law and Policy and the Columbia Center for International Earth Science Information Network.
- This is a mild improvement to the last EPI in which India came at the bottom.

EPI Report Highlights:

- **Top Performers:** Estonia takes the top spot, showing a major reduction in greenhouse gas emissions since 1990.
- Countries in Western Europe and Eastern Europe do well overall, reflecting strong environmental efforts.
- **India's Low Ranking:** India sits near the bottom (176th) with only a few countries scoring worse. Air quality, emissions, and biodiversity are especially concerning areas.
- **Coal Dependence Hurts:** India's heavy reliance on coal is a big factor in its low ranking. Coal use creates both air pollution and high greenhouse gas emissions.
- **Worst Air Quality in Region:** India has the worst air quality in South Asia, even surpassing neighbors like Pakistan and Bangladesh.
- **Transboundary Pollution:** India is the biggest source of air pollution affecting neighboring countries, harming public health in the region.
- **Climate Change Efforts Show Promise:** Despite the low overall score, India gets a better ranking (133rd) in climate change. Investments in renewable energy and a 2070 net-zero goal contribute to this.
- **Financial Needs:** To meet its climate goals, India will need an additional \$160 billion annually for mitigation efforts.
- **Mixed Performance by Category:** Waste management, forests, and agriculture boost India's score, while air quality, emissions, and biodiversity bring it down.

99. Scientists from India, China, U.K. develop catalyst to produce cheaper biodiesel

News:

- A team of scientists from India, China, and the U.K. has developed a water-repellent catalyst that can cut the cost of producing “environmentally benign” biodiesel.

Prelims Takeaway

- Superhydrophobic catalysts
- Biodiesel

Highlights:

- The process of arriving at the **spherical superhydrophobic activated carbon catalyst** to withstand water byproduct during the production of biodiesel has been published in the latest issue of the peer-reviewed *Advanced Functional Materials*
- **Superhydrophobic catalysts**, imitating the anti-wetting or water-repulsing properties of natural surfaces such as lotus leaves, are deemed crucial for their ability to prevent the poisoning of active sites by water, produced in situ or as a by-product.
- This means the catalyst remains highly effective and can be reused multiple times, making the catalytic process more efficient and cost-effective.
- The catalyst, derived from **biomass (cellulose)**, is ecologically benign, abundant, and highly affordable.
- This breakthrough has the potential to significantly reduce the cost of biodiesel production, making sustainable energy more accessible
- At present, the cost of biodiesel in India is about ₹100 or \$1.2 per litre.
- Using the superhydrophobic activated carbon catalyst can bring down the cost to about 37 cents per litre.
- Biodiesel is a key player in the quest for sustainable energy.
- This innovative catalyst could pave the way for broader adoption and a greener future because it makes the production process more **efficient, cost-effective, and environment friendly**.

100. NHA to Enhance Green Cover Along the National Highways with Miyawaki Plantations- PIB

News:

- To realize the vision of saturating National Highways with green cover, NHA will undertake a unique initiative to plant Miyawaki plantation on land parcels adjacent to National Highways at various locations.

Prelims Takeaway

- Miyawaki Technique
- Tree Cover

Highlights:

- Total land area of over 53 acres has been identified at different places in and around Delhi-NCR to establish the Miyawaki plantations.
- Miyawaki plantations, also known as Miyawaki method, is a unique Japanese approach to ecological restoration and afforestation development.
- This method aims to create dense, native, and biodiverse forests in the area.
- These forests retain ground water and help to recharge the groundwater table.
 - With this method, trees grow ten times faster and the plantations act as a sound and dust barrier.
 - Focus will be on planting indigenous species of plants that can survive in the local climate and soil conditions.
- Development of Miyawaki Forests will contribute towards the creation of a resilient ecosystem, offering a range of benefits to both the environment and local community.
 - It will also have multiple long-term benefits, which include improvement in micro-climatic conditions such as improvement in air & soil quality.
 - It will also help in biodiversity conservation, efficient carbon absorption, soil restoration and in habitat creation for local flora and fauna.
- Based on the success of Miyawaki plantation in Delhi/NCR, the similar pattern will be replicated across the country.

- Using the Miyawaki method, an increase in green cover will not only help to enhance the overall health and well-being of citizens living along the National Highways,
- It will also add to the aesthetics and pleasure of commuting on the National Highways in NCR.

101. Indian cities are 'heat traps' that make summers worse: official - The Hindu

News: Indian cities have become "heat traps" due to their unbalanced growth devouring water bodies and increasing greenhouse emissions

Highlights:

- The India Meteorological Department (IMD) has forecast above-normal temperatures for June in the northwest and central parts of the country including Delhi, making it one of the longest heatwave spells.
- The IMD's heatwave criteria start with **40 degrees in the plains and 30 degrees for hills** where it is generally cooler because of elevation.
- Unbalanced urban growth, which has **reduced wetlands and water bodies**, was another factor
- The emission of greenhouse gases has also gone up.
- The permeable spaces have gone down considerably. The cities actually have become heat traps.
 - As a result, nights are nearly as uncomfortable as days.
- According to a study by the **Centre for Science and Environment (CSE)** published last month, land surface temperatures during summers from 2001 to 2010 in cities such as Delhi, Hyderabad, Kolkata and Mumbai used to drop by up to 13.2 degrees C during the night from their day-time peak.
- Between 2014 and 2023 they were only cooling off by up to 11.5 degrees C.
- Delhi's long-term plan includes increasing heat insulation of buildings, developing shelters for urban poor and slum dwellers, and investing in cooling water bodies.
 - Such plans need to be backed financially
 - Because cities are struggling with their own finances and they don't have additional budgets to implement actions for heat

Prelims Takeaway

- Heatwaves
- Wetlands

102. Limbless amphibian found in Kaziranga for first time

News:

- A limbless amphibian has been added to the fauna of the Kaziranga National Park and Tiger Reserve.
- Assam's wildlife officials said a team of herpetologists recorded the striped Caecilian (*Ichthyophis* spp) in the tiger reserve for the first time during a rapid herpetofauna survey
- Reptiles and amphibians, collectively called **herpetofauna**, are the least studied but most vulnerable to climate change.
- "**Caecilians** are limbless amphibians that spend most of their lives burrowed under soil.
- They are, therefore, the least studied of the amphibian species.
- As they are an ancient species, their presence holds critical linkages to evolution and intercontinental speciation.
- The diverse ecosystem of Kaziranga, comprising flood plains, wetlands, grasslands, and hill tracts on the periphery, provides an ideal habitat for herpetofauna.
- The tiger reserve houses 24 species of amphibians and 74 species of reptiles. It is also home to 21 of the 29 species of tortoises and freshwater turtles found in India.
- A training and sensitisation programme was held to enhance the skills of forest personnel in herpetofauna identification and conservation for ensuring better management and protection of these vital species."

Prelims Takeaway

- Herpetofauna
- Caecilians

103. How dangerous is methanol poisoning?- The Hindu

Highlights:

- At least 38 people had died after consuming spurious liquor in the Kallakurichi district of Tamil Nadu while as many as 82 others were receiving treatment in hospitals.

Prelims Takeaway

- Methanol

Alcohol in liquor

- In the beverages consumed for recreational purposes, the alcohol in question is almost always ethanol.
- In this context, ethanol is technically a psychoactive drug that, in low doses, reduces the level of neurotransmission in the body, leading to its typical intoxicating effects.
- Contrary to popular belief, the **World Health Organisation** has found “no level of [its] consumption is safe for our health”.
- Long-term use leads to dependence, heightens the risk of some cancers and heart disease, and may eventually cause death.
- Ethanol (C₂H₅OH)** is one carbon atom bonded to three hydrogen atoms and one more carbon atom; the second carbon atom is also bonded to two hydrogen atoms and the hydroxyl group, also known as the ion OH.
- Inside the body, ethanol is metabolised in the liver and the stomach by alcohol dehydrogenase (ADH) enzymes to acetaldehyde.
- Then, acetaldehyde is transformed into acetate by aldehyde dehydrogenase (ALDH) enzymes.
- The adverse effects of alcohol consumption, from the hangover to a cancer, are due to acetaldehyde.

Spurious liquor

- Spurious liquor is characterised by the liquid mixture containing methanol as well.
- In many older cases, spurious liquor has typically been a homemade liquor to which methanol was added to strengthen the intoxicating effects
- The Food Safety and Standards (Alcoholic Beverages) Regulations 2018 stipulate the maximum permissible quantity of methanol in different liquors.

Methanol

- The methanol molecule (**CH₃OH**) consists of one carbon atom bonded with three hydrogen atoms and one hydroxyl group.
- Schedule I of the Manufacture, Storage and Import of **Hazardous Chemical Rules, 1989** includes methanol.
- The Indian Standard IS 517 applies to how the quality of methanol is to be ascertained and, together with the Tamil Nadu Denatured Spirit, Methyl Alcohol, and Varnish (French Polish) Rules 1959, what signage methanol packaging should carry.
- The most common way to produce methanol is to **combine carbon monoxide and hydrogen** in the presence of **copper and zinc oxides as catalysts** at 50-100 atm of pressure and 250° C.
- In the pre-industrial era, going back to ancient Egypt, people made methanol (together with several other byproducts) by heating wood to a very high temperature.
- Methanol has several industrial applications, including as a precursor to acetic acid, formaldehyde, and aromatic hydrocarbons. It is also used as a solvent and as antifreeze.
- In Tamil Nadu, the manufacture, trade, storage, and sale of methanol requires **licences under the 1959 Rules**.

How does spurious liquor kill

- Once ingested, ADH enzymes metabolise methanol in the liver to form formaldehyde (H-CHO).
- Then ALDH enzymes convert **formaldehyde to formic acid (HCOOH)**.
- The accumulation of formic acid over time leads to a condition called metabolic acidosis, which can lead to **acidaemia**: when the blood's pH drops below its normal value of 7.35, becoming increasingly acidic.
- The 'metabolic' in 'metabolic acidosis' means the concentration of the bicarbonate ion is dropping, leading to the acid gaining the upper hand.
- Formic acid also interferes with an enzyme called **cytochrome oxidase**, disrupting cells' ability to use oxygen and leading to the build-up of lactic acid and contributing to acidosis.

Treatment for methanol-poisoning

- Once methanol is ingested, the body takes some time to completely eliminate it.
- There are two immediate ways to treat methanol poisoning. One is to administer **pharmaceutical-grade ethanol**.
- The other option is to administer an antidote called **fomepizole**, which has a similar mechanism: it slows the action of the ADH enzymes, causing the body to produce formaldehyde at a rate the body can quickly excrete, preventing the deadlier effects from kicking in.
- Healthcare workers may also have the individual undergo a dialysis to remove methanol and formic acid salts from the blood, and mitigate damage to the kidneys and the retina
- They may also administer **folinic acid**, which encourages the **formic acid to break up into carbon dioxide and water**.
- Both fomepizole and folinic acid are in the WHO's list of essential medicines.

104. Nord Stream leaks: Thousands of tonnes of methane may have dissolved in Baltic seawater, marine life impacts unclear-DOWN TO EARTH

News:

- A new study has shed light on the fate of methane released from the September 2022 explosions damaging the Nord Stream pipelines in the Baltic sea.
- While a significant amount of methane escaped, 10,000 to 50,000 tonnes of it likely dissolved in the surrounding water after the blasts, the research suggested.

Prelims Takeaway

- MAP BASED QUESTION
- METHANE

Key Points

- The methane release from the Nord Stream explosions is among the largest documented from such events, underscoring its environmental significance.
- During the incident, methane emissions from the breaches reached 79 tonnes per hour into the atmosphere, totaling approximately 40,000 tonnes over seven days.
- Methane concentrations in seawater ranging from 10,000 to 55,000 metric tonnes.
- This poses potential risks to microbial ecosystems and could influence the growth of methane-consuming bacteria.

Nord Stream Pipeline

- Nord Stream 1 (NS1) and Nord Stream 2 (NS2), constructed by Russia's Gazprom, span 1,200 km across the Baltic Sea, each consisting of two large pipes.
- They were designed to transport 110 billion cubic meters of natural gas annually from Russia to Germany.
- In September 2022, explosions damaged both NS1 and NS2 at multiple points in Swedish and Danish waters, rendering them non-operational.
- This incident raised significant environmental concerns due to the release of methane.

105. Uttar Pradesh leads in compressed biogas potential, but challenges persist: Experts discuss at symposium- DOWN TO EARTH

News:

- Uttar Pradesh holds a remarkable position in India's renewable energy landscape, with the potential to generate 24 per cent of the nation's compressed biogas (CBG), according to a report by the Delhi-based think tank Centre for Science and Environment (CSE)

Prelims Takeaway

- Biogas

Key-highlights of the Symposium

- **CBG Potential:** Uttar Pradesh could potentially install 1,000 CBG projects from the 5,000 plants envisioned nationwide under the Sustainable Alternative Towards Affordable Transportation scheme.

- **Feedstock Availability:** Western UP, particularly Muzaffarnagar, Meerut, Saharanpur, Bijnor, Bulandshahar, and Aligarh, is rich in feedstock availability and houses the majority of the state's functional and upcoming CBG plants.
- **Supportive Policies:** Uttar Pradesh has an ambitious bioenergy policy, allocating Rs 750 crore (2022-27) for CBG, while providing subsidies, land for lease, and other incentives.

106. India's largest leopard safari opens at Bannerghatta- The Hindu

News:

- South India's first and the country's largest leopard safari was inaugurated by Karnataka at the Bannerghatta Biological Park.
- As per Central Zoo Authority guidelines for safaris, an area of 20 hectares has been demarcated and fenced for the safari.

Prelims Takeaway

- Big Cats
- Bannerghatta

Highlights:

- Eight leopards have been released for the safari in the open forest area.
- Bannerghatta is home to a good population of free ranging leopards (*Panthera pardus*), and highlighting these predators is vital.
- The leopard safari area is made up of undulating terrain with natural rocky outcrops and semi-deciduous forest.
- The officials added that owing to increasing human-animal conflict in recent times, the park receives many leopard cubs rescued across Karnataka.
- These cubs will be raised and shifted to the leopard safari to help visitors learn about these big cats, the reasons for the growing human-animal conflicts, and the ways to protect the animals.
- The officials added that four acres within the safari area have been separated, using a solar fence, to help the animals acclimatize to their new environment.

Other initiatives

- A number of new initiatives, which included a renovated elephant weaning center, a baby care room at the butterfly park, a children's play area, an entrance arch, and he also flagged off electric buggies and zoo installations.
- A male elephant calf "Swaraj" and six hamadryas baboons are also for public display.
- Skywalks are also being developed to establish connectivity between the zoo and the butterfly park.

107. Researchers at IISER Tirupati developed an efficient method for moving towards 'Hydrogen economy- PIB

News:

- Researchers have developed an innovative synthetic method to produce hydrogen gas from a mixture of methanol and paraformaldehyde under mild conditions.
- This method has proven particularly effective for
 - hydrogenation of alkynes to alkenes and
 - The combination could be a promising hydrogen carrier, paving the way for advancements in chemical synthesis and sustainable energy solutions.
- The rapid depletion of fossil fuels has spurred the search for alternative energy sources, highlighting the need for sustainable and renewable resources.
- Hydrogen gas generation is particularly important due to its potential to replace fossil fuels in energy storage, transportation, and various chemical processes.
- Methanol and paraformaldehyde, both produced on a large scale, have emerged as viable candidates for hydrogen carriers.
- Their abundance and widespread manufacture make them valuable for the storage and transportation of hydrogen, offering significant advantages over free hydrogen itself.
- The research has utilized commercially available nickel catalysts to produce hydrogen from methanol and paraformaldehyde without the need for bases or activators.

Prelims Takeaway

- Hydrogen Economy
- Methanol

- This efficient catalytic system has demonstrated remarkable efficiency under mild conditions, and the generated hydrogen was successfully employed in chemo- and stereo-selective partial transfer hydrogenation of alkynes.
- This process enabled access to bioactive molecules with enhanced synthetic value.
- This research was supported by ANRF (erstwhile SERB, a statutory body of the Department of Science and Technology (DST)).
- This research, accepted for publication in the journal Catalysis Science & Technology, opens a new avenue for COx-free hydrogen generation, contributing to the advancement of a 'Hydrogen economy.'
- The ability to harness methanol and paraformaldehyde as hydrogen carriers offers significant potential to address the challenges posed by the increasing global energy demands.
- This development marks a significant step forward in the quest for sustainable energy solutions.

108. Uttarakhand govt. to study risk posed by 13 glacial lakes during monsoon- The Hindu

News:

- With the monsoon setting in, the Uttarakhand State Disaster Management Department (USDMA) will do a vulnerability study of 13 glacial lakes, five of them in "high-risk zone".

Prelims Takeaway

- Glacial Lake
- Ganga Drainage Basin

Highlights:

- The study aims to provide data to help avoid calamities such as lake outbursts.
- The Himalayan glaciers were in danger from climate change, and continued checks were required to ensure safety.
- The lakes in Darma, Lasaryanghati, and the Kutiyangti Valley
- The Vasudhara Tal lake of the Dhauliganga basin is posing a high risk.
- Teams will start a bathymetry study of the five potentially high-risk lakesy.
- The study will give us correct and accurate information regarding the size of the lakes, how the glaciers were formed, how they are melting, and more.
- The USDMA asked the Indo-Tibetan Border Police to share a report on the status of the five high risk glacial lakes.

Two expert teams

- The State government formed two expert teams to assess the risks associated with these glacial lakes.
- Two major glacial lake outburst floods took place in Uttarakhand in the past decade.
- The first was at the Kedarnath valley in June 2013 which led to 6,000 deaths.
- The other was at the Rishi Ganga Valley in Chamoli in February 2021, which claimed 72 lives.

109. Antelope-like mammal from Bhutan recorded at lowest elevation in western Assam- THE HINDU

News:

- The mainland serow, a mammal that looks like a cross between a goat and an antelope, has been recorded at the lowest elevation beyond Bhutan, its natural home, in Assam.

Prelims Takeaway

- Raimona National Park

KEY HIGHLIGHTS

- A team of scientists recorded a lone mainland serow (*Capricornis sumatraensis thar*) at 96 metres above the mean sea level at the Raimona National Park in western Assam.
- According to the International Union for Conservation of Nature, the mainland serow inhabits areas at altitudes of 200 metres to 3,000 metres.
- Its habitat is across the border in the Phibsoo Wildlife Sanctuary and the Royal Manas National Park in Bhutan.

ECONOMY

110. More road projects, higher toll revenue boost the introduction of InvITs

News:

- The faster pace of development of highways in FY25 alongside increased revenue from tolls and toll hikes are
 - attracting road developers,
 - private equity and pension funds to float road infrastructure investment trusts,
 - assets under which are expected to more than double in the next three years creating a ₹1 lakh crore incremental lending opportunity.
- **Infrastructure Investment Trusts (InvITs)** controlled more than 10,000 km of road length in 2024 and this is expected to cross 22,500 km by FY28.

Prelims Takeaway

- InvIT
- Fast Tag

Major buyers

- InvITs have emerged as one of the major buyers of operational road assets in India in recent years, and it has also facilitated the unlocking of capital for road developers once their road projects become operational.
- There are more than half a dozen road InvITs already in operation while more are in the pipeline.
- The awarding of road projects by the Ministry of Road Transport and Highways is expected to be better than last year, and is expected to be 5-8% higher at 12,500-13,000 km.
- Fastag revenue is expected to reach ₹77,000 crore in the current fiscal year and to surpass ₹1 lakh crore annually by FY28.
- National Highways Authority of India announced a 5% raise in toll rates, giving further boost to revenue visibility.

Patient capital

- The road sector requires patient capital with a long-term investment horizon.
- Key investors in InvITs were pension funds and sovereign funds who invested for the long term.
- More InvITs were in the pipeline, especially with a new monetisation programme of NHAI's assets.
- It is estimated that NHAI's asset monetisation in FY25 could fetch it up to ₹60,000 crore from the sale of 33 road assets through toll-operate-transfer and InvIT mode;
- We expect InvITs will continue to acquire operational road assets and grow their asset base further in the coming years.

111. Total foodgrain production is estimated at 3288.52 LMT, higher by 211.00 LMT from average foodgrain production of last 5 years - PIB

News: The Ministry of Agriculture and Farmers Welfare has released Third Advance Estimates of Major Agricultural Crops for the year 2023-24.

Highlights:

- Total foodgrain production is estimated at 3288.52 LMT, which is slightly lower than foodgrain production of 2022-23
- However, it is higher by 211.00 LMT from average foodgrain production of the last 5 years.
- Total Rice production is estimated at 1367.00 LMT as compared to 1357.55 LMT in 2022-23, showing an increase.
- Production of Wheat also showed an increase from previous year's wheat production.
- Production of Shree Anna showed a marginal increase from 2022-23 production along with Nutri Cereals, Tur, lentils and Soybean.
- While preparing the Kharif crop production estimates the Crop Cutting Experiments (CCEs) based yield has been considered.

Prelims Takeaway

- Foodgrain production
- Shree Anna

112. Second Advance Estimates of 2023-24 of Area and Production of Horticultural Crops- PIB

News:

- The Department of Agriculture and Farmers Welfare has released the Second Advance Estimates of 2023-24 of Area and Production of various Horticultural Crops compiled on the basis of information received from States/ UTs and other Governmental sources.

Prelims Takeaway

- PM Kisan Sampada
- Operation Greens

Highlights

- The horticulture production in the country in 2023-24 is estimated to be about 352.23 Million Tonnes, a decrease of about 32.51 Lakh Tonnes (0.91%) over 2022-23.
- Increase in production of Fruits, Honey, Flowers, Plantation Crops, Spices and Aromatics & Medicinal Plants is seen over 2023-24 whereas decrease in Vegetables.
- The production of Fruits is expected to reach 112.63 Million Tonnes.
- Production of Vegetables is envisaged to be around 204.96 Million Tonnes.
 - Decrease in production is envisaged in Onion, Potato, Brinjal and Other Vegetables.
- Production of Onion is expected to be at 242.12 Lakh Tonne, a decrease by about 60 Lakh Tonne.
- Potato production in the country is expected to decrease by about 34 Lakh Tonne, mainly due to decrease in production reported in Bihar and West Bengal.
- Production of Tomato is expected to be around 212.38 Lakh Tonne, an increase by 3.98% Lakh Tonne.

Horticulture Sector in India

- India is the 2nd largest producer** of fruits and vegetables.
- The Indian horticulture sector contributes about 33% to the agriculture Gross Value Added (GVA) making a very significant contribution to the Indian economy.
- In terms of export, India is ranked 14th in vegetables and 23rd in fruits, and its share in the global horticultural market is a mere 1%.
- Around 15-20% of the fruits and vegetables in India are wasted along the supply chain or at consumer level, contributing to greenhouse gas emissions (GHGs).

113. Greening the Mines: Coal and Lignite PSUs Lead the Way in Land Restoration and Sustainability - PIB

News: The Coal Ministry has released a report titled "Greening Initiative in Coal & Lignite PSUs" which highlights the efforts of the PSUs in the coal and lignite sectors to restore & rejuvenate mined-out lands.

Prelims Takeaway

- World Environment Day 2024
- NDC

Highlights:

- Coal and Lignite Public Sector Undertakings (PSUs), under the guidance of the Ministry of Coal, have not only increased coal production levels over the years but have also demonstrated their dedication to environmental preservation by implementing various mitigation measures.
- As the year marks the 30th anniversary of the UN Convention to Combat Desertification (UNCCD), focus of World Environment Day, 2024 is on land restoration, desertification and drought resilience, under the slogan "**Our Land. Our Future. We are #GenerationRestoration**".
 - The theme emphasizes the importance of sustainable land management and the need to rehabilitate degraded lands to ensure a sustainable future for all.
- These PSUs have undertaken extensive afforestation and ecological restoration projects, transforming barren landscapes into thriving green areas.
- Such initiatives not only combat desertification and enhance drought resilience but also contribute to **carbon sequestration** and **biodiversity conservation**.
- By integrating these greening efforts, the report underscores the significant role that the coal sector can play in advancing the goals of land restoration and promoting environmental sustainability.

Greening Initiative in Coal & Lignite PSUs

- The Coal Ministry's report highlights adoption of innovative techniques, such as **seed ball plantation, seed casting via drones and Miyawaki plantation**, within coal mines by other entities.
- Coal/Lignite PSUs are implementing scientific reclamation techniques for mined-out lands according to technical and biological schedules outlined in mining plans.
- Additionally, they are pioneering community-oriented land uses such as **restored forests, eco-parks, eco-tourism sites**, etc.
- According to the report, Coal/Lignite PSUs have established green cover spanning approximately 50,000 Ha in and around coal mining regions over the years.
- This collective effort is estimated to create a **carbon sink** potential of approximately 2.5 million tonnes of CO₂ equivalent per year.
- It is anticipated that this report will reinforce the commitment to land reclamation and management among coal PSUs, while also catalysing the establishment of sustainable green cover across coal mining projects.
- This initiative will further contribute to the augmentation of India's green cover, thereby aiding in the fulfillment of India's **Nationally Determined Contribution (NDC)** target of achieving a carbon sink of 2.5 to 3.0 billion tonnes by the year 2030.

114. PMI signals Services growth receded to a 5-month low in May - The Hindu

News: Activity in India's services sectors slumped to a five-month low in May

Highlights:

- With competition, price pressures and a severe heat wave denting growth in new orders and output, India's services sectors slumped to a five-month low in May as per the seasonally adjusted HSBC India Services Business Activity Index.
- A reading of over 50 on the survey-based index indicates an expansion in activity levels.
- Survey participants noted strong growth of demand from Asia, Africa, Europe, the Middle East and the U.S.
- Hiring activity among the 400 firms surveyed for the index increased by the greatest extent since August 2022, as they picked up more junior and mid-level workers in May.
- Firms reported a rise in input costs through May, especially on labour and materials such as meat, vegetables and packaging.
- While some companies suggested that additional labour costs stemmed from overtime payments and upward salary revisions due to demand strength and productivity gains, several firms indicated having taken on extra staff
- With the Manufacturing PMI also at a three-month low in May, overall private sector growth in India receded to the slowest since December 2023.
- Input costs for goods and services firms rose at the highest pace in nine months, compelling them to raise charges by a greater extent in May.

Prelims Takeaway

- PMI
- Inflation

115. RBI keeps repo rate unchanged, raises GDP forecast to 7.2% - The Hindu

News:

- The Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) decided to keep the repo rate unchanged at 6.5%.

Highlights:

- The decision, taken at the MPC's meeting, marks the eighth time in a row that the policy rate has been put on hold to keep the focus on battling high inflation.
- The MPC has revised its GDP growth forecast upwards from the earlier 7% estimate to 7.2% for the financial year 2024-2025.
- It has also decided to remain focused on withdrawal of accommodation to ensure that inflation does not accelerate, while supporting growth.

Prelims Takeaway

- MPC
- Repo rate

- These decisions are in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4% within a band of +/- 2% while supporting growth

116. Digital payments intelligence platform soon to curb fraud - The Hindu

News:

- The Reserve Bank of India plans to set up a centralized digital payments intelligence platform for sharing data on a real-time basis aimed at detecting fraud.

Prelims Takeaway

- UPI
- Digital payment fraud

Highlights:

- Governor of RBI, said growing instances of digital payment frauds highlight the need for a system-wide approach to prevent and mitigate digital frauds.
- It is, therefore, proposed to establish a digital payments intelligence platform which can share data on data real-time across the digital payments' ecosystem
- RBI has constituted a committee to examine various aspects of setting up the platform.
- This would also be significant in bolstering customer confidence and boosting financial inclusion
- The comprehensive measures will empower the industry to deliver a more secure and trusted digital ecosystem for all.

Digital payment fraud

- Digital payment fraud has witnessed a sharp jump of over five-fold to a record in the fiscal year ended March 2024, according to the RBI annual report.
- The alarming increase coincides with explosive growth of 137 per cent in UPI transactions in the past two years to touch ₹200-lakh crore, as per RBI data.
- Digital payments, including card and internet transactions, accounted for 10 per cent of the total fraud amount in FY24, an increase from 1.1 per cent in the previous fiscal year.

117. RBI's agenda: capital account liberalisation, globalisation of rupee and digital payment system - Indian Express

News:

- RBI aims to liberalize capital account, internationalize rupee and attain universalisation of digital payments along with globalization of India's financial sector.

Prelims Takeaway

- Capital account convertibility
- RBI@100

Highlights:

- The central bank has proposed enabling availability of the rupee to non-residents for facilitating cross-border transactions in the rupee and enhancing accessibility of rupee accounts to persons resident outside India (PROIs).
- It has proposed adopting a calibrated approach towards interest-bearing Non-Resident Deposits and promoting Indian multi-national corporations (MNCs) and Indian global brands through overseas investments, according to **Aspirational Goals for RBI@100 in a Multi-Year Time Frame**.
- Meanwhile, on deepening and **universalisation of Digital payment systems** domestically and globally, the RBI's agenda includes plans for the internationalisation of India's Payment Systems and participation in payment systems linkage projects across countries bilateral and multilateral.
- It has planned to increase the domestic usage of digital payments and phased implementation of **Central Bank Digital Currency (e - Rupee)**.

Capital account convertibility

- India has not yet opened up its **capital account** fully which will allow free flow of capital to the country and outside. The rupee was made full float in the trade account during the 1991 reforms initiated by the then government.
- **Capital account convertibility** means the freedom to convert rupee into any foreign currency and foreign currency back into rupee for capital account transactions.
- The **Tarapore committee** had listed several preconditions such as fiscal consolidation, inflation control, low level of non-performing assets, low current account deficit and strengthening of financial markets for achieving capital account liberalisation.

Globalization

- On **globalisation** of India's financial sector and financial sector reforms, RBI plans expansion of banking domestically in consonance with national growth and positioning 3-5 Indian banks among top 100 global banks in terms of size and operations.
- It plans to support the International Financial Services Centres Authority (IFSCA) to make GIFT City a leading international financial centre.
- It suggested strengthening the financial market by fostering a global 24×5 rupee market and recalibration of the FPI (foreign portfolio investor) regime.

Other measures

- Over the next two to five years, the RBI group recommended a review of taxes on rupee masala bonds
- International use of **Real Time Gross Settlement (RTGS)** for cross-border trade transactions and inclusion of Indian Government Bonds in global bond indices.
- The RBI has also proposed a review of the monetary policy framework to address Balancing price stability, economic growth from an **Emerging Market Economy (EME)** perspective, refinements in monetary policy communication and spillovers to EMEs from private and public debt overhang in systemically important economies.
- On dealing with **climate change**, the RBI plans guidance for regulated entities (REs) to stress test their asset portfolio to assess impact of climate change and strengthening payment systems' resilience to climate risks.
- It also proposed climate risk disclosure norms for Res and inputs to the government for finalizing taxonomy on climate risks.

118. 'Unusual surge': Govt restricts imports of gold jewellery and parts - Indian Express

News:

- Amid scrutiny over surge in gold imports, the Commerce and Industry Ministry recently restricted jewelry and parts imports with immediate effect.

Prelims Takeaway

- HSN Code
- Import duty

Highlights:

- Investigative agencies responsible for curbing smuggling activities have been concerned about the surge in gold imports especially from **Least Developed Countries (LDC)** countries and countries with which India has an FTA.
- It is learnt that the rise has been mainly seen on account of importers making use of lower tariffs from these countries
- A government official said that jewellery imports under the five **Harmonised System of Nomenclature (HSN) code** have not been banned and only put under authorisation to ascertain the reason behind an unusual surge in imports and better monitor the geographies from where the imports are taking place.
- India's total gold imports has also been on the rise, taking the goods **trade deficit** in April to a **5-month high**.
- This was largely driven by gold imports that jumped by a sharp **208.99 per cent** in April this year compared to last year.
- It was earlier reported that just a week before the presentation of Budget 2024-25, the Finance Ministry had hiked import duties on a specific category of the jewellery segment called **gold findings**
 - Which are small components such as hooks, clasps, clamps, pins, screws used to hold the whole or a part of a piece of jewellery in place.
- Elevated gold price along with **high import duty** on the metal are seen as one of the key reasons behind the **increased cases of smuggling**.
- This restriction however was with an exception to imports from UAE under the **free trade agreement (FTA)**.

119. World Bank says global growth stabilizing but below pre-COVID levels- BUSINESS STANDARD

NEWS:

- The World Bank said the U.S. economy's stronger-than-expected performance has prompted it to lift its 2024 global growth outlook slightly
- It also warned that overall output would remain well below pre-pandemic levels through 2026.

Prelims Takeaway

- Global Economic Prospects report

KEY HIGHLIGHTS

- The World Bank said in its latest Global Economic Prospects report that the global economy would avoid a third consecutive drop in real GDP growth since a major post-pandemic jump in 2021
 - with 2024 growth stabilizing at 2.6%, unchanged from 2023.
- **India's on Top:** India is forecast to be the world's fastest-growing large economy again this year, with GDP growth expected to be 6% for 2024-25.
- Even though this is a bit slower than last year, it's still healthy growth.
- **Investment Keeps Things Moving:** This growth is mainly driven by strong investment from both the government and businesses, even though investment isn't increasing as quickly as before.
- **India Leads the Region:** India's impressive growth from last year (7.8%) helped South Asia's economy as a whole.
- **South Asia Keeps Growing:** Although India's growth might slow down a bit, it will still be a key factor in keeping the economies of Bangladesh, Pakistan, and Sri Lanka growing or even improving.
- **Better Finances:** The financial situation in South Asian countries is getting better, with India's budget deficit expected to shrink compared to the size of its economy due to more tax revenue.
- **Trade Improves:** Trade imbalances are getting smaller, especially in India, which helps the entire South Asian region's economic stability.

120. Raise capital expenditure by 25%; focus on education: CII- The Indian Express

News:

- As part of a 14-point agenda for the new government to help boost economic growth.
- The Confederation of Indian Industry (CII) suggested the government to utilise the Rs 2.1 lakh crore windfall dividends received from the Reserve Bank of India to raise public capital expenditure by 25 per cent and focus on education to bridge the skill gap.

Prelims Takeaway

- CII
- Capital Expenditure

Highlights:

- India's growth estimate hinges critically on addressing the unfinished reform agenda on priority, and that geopolitical conflicts, high interest rates and high global commodity prices continue to be above pre pandemic levels, are risks that the economy is facing.
- Capital Expenditure is about 16.8 per cent, but 25 per cent will provide a good boost to the economy and this kind of investment is also required to strengthen competitiveness.
- There have been some additional revenue flows through RBI which has provided some opportunity to increase spending in certain areas.
- India's capital expenditure as per revised estimates stood at Rs 9.49 lakh crore for 2023-24.
 - Issues of trade, investment and industrial policies need to be thought through synergistically as India is trying to integrate more with global value chains.
- There are many interrelated issues. There are requirements for trade and standards domestically.
- There is a dire need to bridge the skill gap in the country by increasing investment in education. CII recommends that over a period of time the public expenditure on education should be brought to 6 per cent.
- Unlike various developed countries, our number of formally skilled people is about 5 per cent. And it varies from about 52 per cent in the US, to 80 per cent in Japan.

- So the intensity of formal skilling as per the reported numbers is much lower. So, this needs to be taken up to 25 per cent to provide the resources for growth manufacturing.
- Employment Linked Incentive (ELI) schemes with appropriate outcome indicators can be launched for labor intensive sectors with high growth potential such as toys, textiles & apparels, woods based industries, tourism, logistics among others.
- On the financial sector, CII said that India's financial sector stands robust but the sector needs to expand rapidly to be able to support the funding needs of our economy.
 - Diversifying sources of funding for NBFCs to help them to expand their reach;
 - reviewing the priority sector lending framework every 3-4 years;
 - making available long term patient capital from insurance and pension funds for infrastructure projects are important to finance India's growth journey,
- On indirect taxes, the next set of GST reforms such as bringing GST under the three-rate structure with moderation of rates and bringing petroleum products, electricity, and real estate under GST should be expedited in consultation with the GST Council.

121. Sensex, Nifty scale fresh peaks as inflation cools off - Indian Express

News:

- Equity benchmark indices Sensex and Nifty hit their fresh record levels recently

Prelims Takeaway

- Inflation
- Sensex & Nifty

Highlights:

- This was due to lower inflation numbers which raised hopes of an interest rate cut by the RBI.
- Besides, heavy buying in capital goods, consumer durable and industrial stocks also helped the indices.
- Retail inflation continued its downward slide to reach a one-year low of 4.75% in May due to a marginal decline of prices in the food basket and remained within the Reserve Bank's comfort zone of below 6%, according to government data.
- In Asian markets, Seoul and Hong Kong settled higher, while Tokyo and Shanghai ended lower.
- European markets were trading lower. U.S. markets ended mostly with gains.
- There is good news on the inflation front, both in the U.S. and in India. The takeaway from the inflation numbers is that the disinflation process is well on track.
 - From the market perspective, this is positive news, particularly for banking stocks.
- The policymakers' forecast for one rate cut was down from a previous forecast of three, likely because inflation, despite having cooled in the past two months, remains persistently elevated.

122. May WPI inflation spikes to 15-month high on food prices - The Hindu

News:

- Inflation in India's wholesale prices accelerated to a 15-month high in May

Highlights:

- Economists said the acceleration in wholesale inflation in May signals there is room for a further surge in consumer prices despite retail inflation easing to a 12-month low.
 - especially as food and industrial input prices are spiking globally.
- May was the seventh month in a row that the WPI rose on a year-on-year basis after seven consecutive months of deflation, and it is expected to quicken over 3% this month.
- The **heatwaves** in May helped fire up the inflation rate for vegetables to the highest level in nine months and a six-month high for fruits.
- Spikes in vegetable prices were partly due to **supply shortfalls** and that the **heatwave aggravated the challenge**
- India Ratings flagged similar concerns about **pulses prices remaining elevated** in double-digits as the new crop would be harvested only in October-November.
- Elevated food inflation at the wholesale level is worrisome as this would keep retail food prices firm even going forward.
- Positive rate of inflation in May is primarily due to increase in prices of food articles, manufacture of food products, crude petroleum & natural gas, mineral oils, other manufacturing, etc.

Prelims Takeaway

- WPI
- Inflation

123. Launch of Rs 2800 crore Digital Agri Mission part of govt's agenda for first 100 days - Indian Express

News:

- Centre is set to announce big ticket initiatives as part of its first 100-day agenda, which include a Rs 2,800 crore Digital Agriculture Mission.

Prelims Takeaway

- Digital Agriculture Mission
- Digital Crop Survey

Highlights:

- Digital Agriculture Mission** will pave the way for creation of a nationwide farmers registry, crop sown registry, and georeferencing of village maps.
- A budgetary allocation of **Rs 2800 crore** has been made for the mission and it will be rolled out over the next two years (till 2025-26).
- Meanwhile, the Agriculture ministry started various pilot projects and activities across several states, which are part of the mission.
- One of the components of the mission is to create a **farmers registry**, in which every farmer will be given a unique ID.
 - In some of the states, generation of farmer unique ID has already begun.
- The unique farmer ID will allow launch of new **value-added services** and farmers will be able to avail various government schemes including PM-Kisan and Fasal Bima Yojana through this ID.
- It will also enable them to **avail financial services** like farm loans and insurance.
- The mission also envisages a **crop sown registry**. This will have a record of crops sown by a farmer on his land. It will help better planning and estimation of crop production.
- Last year, the Centre had asked the States and Union Territories (UTs) to automate/ digitise the process of area enumeration/girdawari of crops at field level by adopting **Digital Crop Survey** from July 2024.

124. Is Fed FOMC outcome hawkish or dovish? Here's is what Street says- ECONOMIC TIME

News:

- The US Federal Reserve in its recent monetary policy left rates unchanged for the sixth consecutive time at 5.25-5.50% and its dot plot indicates just one cut against the expectations of three in March.

Prelims Takeaway

- Inflation

Key highlights

- Hawkish economic policy refers to a stance taken by central banks or other economic policymakers that emphasizes the importance of controlling inflation
 - Often at the expense of other economic goals like full employment or economic growth.
- Policymakers who are "hawkish" tend to favor higher interest rates to keep inflation in check and maintain price stability.
- This approach is often contrasted with "dovish" economic policy, which prioritizes stimulating economic growth and reducing unemployment, even if it means tolerating higher inflation.

125. Govt looks at income tax rate cut to boost demand, trigger private investment- The Indian Express

News:

- The tax cuts may be a more efficient measure to enhance disposable income, which in turn would result in higher consumption, and give a fillip to economic activities.
- As the Indian economy grapples with the problem of flagging consumption, policymakers in the government are in favor of rationalizing the existing income tax structure, especially at lower income levels.

Prelims Takeaway

- FRBM Act
- Direct Taxes

Highlights:

- The tax cuts may be a more efficient measure to enhance disposable income, which in turn would result in higher consumption, and give a fillip to economic activities.

- A boost to consumption is being seen as crucial for reviving demand, which in turn is central to restarting the investment cycle, especially rekindling private capital expenditure in consumer-focused sectors.
- The revenue loss from any such measure requires a dynamic analysis
- Since it is expected to spur demand, it requires a general equilibrium analysis to assess the net effect.
- While welfare spending comes with leakages, a tax rate cut at the lower income levels often leads to higher consumption. Tax simplification is seen as a better tool than overt spending on welfare schemes
- While India has posted an average GDP growth rate of 7 per cent plus over the last three years, it is faced with significant challenges from muted agricultural growth, weak exports and lackluster private investment amid flagging consumption demand.
- Private investment has not picked up across the board and subdued demand remains a concern for the Indian industry.
- Private Final Consumption Expenditure (PFCE), an indicator of consumption demand, dropped as a share of GDP to 52.9 percent the lowest level in the 2011-12 base year series.
- Consumption expenditure grew by 4 percent, the slowest growth rate in the last two decades excluding the pandemic year.
- The government has been focusing on fiscal consolidation over the last few years, with an aim to bring down the fiscal deficit to 5.1 per cent of the GDP in 2024-25 and reduce it further to below 4.5 per cent in 2025-26.

126. Kanchanjunga express accident: Railway Board reveals why anti-collision system 'Kavach' was not in place on mishap route- Economics times

News:

- A goods train collided with the Sealdah Kanchanjunga Express near New Jalpaiguri on Monday, resulting in the deaths of five people and injuring approximately 50 others.
- The anti-collision system 'Kavach' was not operational on this Guwahati-Delhi route at the time of the accident.

Prelims Takeaway

- The anti-collision system

Possible causes of the Kanchanjunga Express collision

- Two factors that likely contributed to the crash between the goods train and the Kanchanjunga Express have been identified.

Missing Kavach System

- One significant factor was the absence of the Kavach, a made-in-India system that prevents accidents if two trains travel on the same line.
- According to reports, the Kavach system was not installed on the tracks in Darjeeling, where the collision occurred.
- Officials said the system has yet to be installed across much of India's rail network.

127. Disinflation process facing resistance from stubborn food inflation: RBI Governor

News:

- The Reserve Bank of India Governor said although inflation has eased, the pace of moderation is very slow mainly due to sticky food inflation.
- However, he is confident of achieving the 4 per cent target for consumer price-based inflation (CPI).

Prelims Takeaway

- MPC
- Supply Side Inflation

Highlights:

- "The disinflation process is getting a lot of resistance from food inflation remaining stubborn and very high, primarily because of supply-side factors which are affected by the weather conditions.
- The extreme heat in the last summer has affected cultivation of pulses and vegetable production.

- The Governor said in the last six to seven months, food inflation stood at an average of about 8 per cent.
- The RBI's six-member Monetary Policy Committee (MPC) decided to leave the repo rate, the key policy rate, unchanged at 6.5 per cent for the eight consecutive policies due to concerns around food inflation.
- For FY25, the RBI has projected CPI at 4.5 per cent.
- When asked if the RBI may look at changing the policy stance of withdrawal of accommodation, the Governor said it would be premature to talk about it.

Factors

- The factors that led to the upward revision of the GDP projection for FY25 included strong momentum in economic activity, a pick up in rural demand and improvement in the external sector.
- The Governor said the rural consumption, which was lagging since the Covid, started to improve from the first half of the previous year.
- The FMCG (fast-moving consumer goods) sales in the rural sector have increased, the demand for Mahatma Gandhi National Rural Employment Guarantee scheme labor has gone down and the agricultural season also looks very optimistic because of the projections of above normal monsoon this year.
- Governor said as the expenditure from the government side and the private investment start picking up, rural demand will be well sustained this year.

128. Union Cabinet gives go-ahead to increase MSP of 14 kharif crops - The Hindu

News:

- The Union Cabinet gave its nod to raise the minimum support price for paddy by per quintal for the upcoming 2024-25 kharif marketing season.

Prelims Takeaway

- MSP
- RBI annual report

Highlights:

- The Cabinet approved MSP hikes for all 14 kharif season crops, in alignment with the government's "clear policy" of keeping MSPs at least 1.5 times above the cost of production as calculated by the government
- However, only four of these crops have MSPs that will provide farmers with a margin of more than 50% above their production costs: bajra (77%), followed by arhar dal (59%), maize (54%), and black gram (52%).
- **RBI annual report 2023-2024:** MSPs for kharif and rabi crops ensured minimum return of 50% over cost of production
- Paddy, the season's key crop, will see an MSP increase of ₹117 per quintal, which will allow farmers a margin of exactly 50%.
- Kharif sowing usually begins in June with the **onset of the southwest monsoon**, while the crop marketing season will run from October 2024 to September 2025.
- This year's MSP hike is likely to result in a total financial implication of ₹2 lakh crore, about ₹35,000 crore higher than the previous season,
- The highest absolute increase over the previous year has been recommended for oilseeds and pulses.

129. Food inflation behind grudgingly slow pace of disinflation: RBI Governor Das - Indian Express

News: Slow pace of disinflation is mainly due to the elevated food inflation which has been impacted by recurring supply-side shocks

Highlights:

- In the Monetary Policy Committee (MPC) meeting, of the six-member rate setting panel, four voted to keep the policy repo rate unchanged at 6.5 per cent and policy stance as withdrawal of accommodation as higher food inflation is affecting disinflation process.

Prelims Takeaway

- MPC
- Inflation

- Two external members of the MPC voted for a 25 basis points cut in the repo rate as higher interest rates could hurt growth.
- Headline consumer price-based inflation is moderating but at a very slow pace.
- Food inflation is the main factor behind the grudgingly slow pace of disinflation.
- Recurring and overlapping supply-side shocks continue to play an outsized role in food inflation
- Going forward, the baseline projections show inflation moderating to an average 4.5 per cent in 2024-25.
- In the immediate months, however, the impact of exceptionally warm summer months on output of certain perishables; a likely rabi production shortfall in some pulses and vegetables particularly potatoes and onions; and the upward revisions in milk prices, warrant close monitoring
- The domestic growth outlook for 2024-25 remains upbeat as economic activity continues to maintain momentum.
- The RBI has projected real gross domestic product (GDP) at 7.2 per cent in the current financial year.

130. Government of India approves new transmission schemes to evacuate power-PIB

News:

- The Government of India has approved new **Inter State Transmission System (ISTS)** schemes to evacuate 9 GW of RE power from Rajasthan and Karnataka.

Prelims Takeaway

- KUSUM scheme
- Renewable Energy

Highlights:

- These schemes will be implemented through Tariff Based Competitive Bidding (TBCB) mode.
- These schemes are part of 500 GW RE capacity by 2030 out of which 200 GW is already connected.
- The power evacuation scheme of Rajasthan Renewable Energy Zone (REZ) will evacuate 4.5 GW of RE power from Rajasthan.
 - 1 GW from Fatehgarh complex, 2.5 GW from Barmer Complex and 1 GW from Nagaur (Merta) Complex.
 - This power will be transferred to Uttar Pradesh.
 - The completion period of the scheme is two years..
- The **System strengthening scheme** of Karnataka will evacuate 4.5 GW RE power from Koppal area and Gadag area.
 - The scheme will be completed by June 2027.

131. Current account logs \$5.7-bn surplus in Q4 after 10 quarters- The Hindu

News:

- India's current account balance recorded a surplus of **\$5.7 billion (0.6% GDP)** in Q4 FY24 as per data released by the Reserve Bank of India (RBI).

Prelims Takeaway

- Balance of Payments
- Current Account

Highlights:

- The merchandise trade deficit at \$50.9 billion in Q4 FY24 was lower than a year ago and Q4 **services exports grew 4.1%** on the back of rising software exports, travel and business services.
- India's current account turned to a welcome **surplus in Q4 FY24** after a gap of ten quarters, at \$5.7 billion.
- The turnaround to a surplus from a deficit in the year-ago period, was primarily driven by a narrowing in the merchandise trade deficit in Q4 FY24

Higher services receipts

- Net services receipts at \$42.7 billion was higher than a year ago, which contributed to the **current account surplus in Q4 FY24**.
- net outgo on payments of investment income, rose to \$14.8 billion.
- Private transfer receipts, mainly representing remittances by overseas Indians was \$32 billion, a rise of 11.9%.

Balance of payments

- Overall, India's FY24 current account deficit moderated to \$23.2 billion from \$67.0 billion in FY23.
- Net invisible receipt was higher during FY24 than a year ago, primarily on account of services and transfers.
- In FY24, portfolio investment recorded a net inflow of \$44.1 billion.
- In FY24 net FDI inflow was \$9.8 billion

132. Rising water stress to hurt India's credit strength, Moody's says-THE PRINT

News:

- India's worsening water shortage, triggered by high consumption amid rapid economic growth and frequent natural disasters, can negatively impact the South Asian nation's sovereign credit strength, Moody's Ratings said

Prelims Takeaway

- HEATWAVE

KEY HIGHLIGHTS

- Millions of Indians face water shortages every summer when water demand rises in farms, offices and homes against a limited supply
 - but a prolonged heatwave this year has worsened the shortfall, including in Delhi and the southern tech hub of Bengaluru
- "This is detrimental to the credit health of the sovereign, as well as sectors that heavily consume water, such as coal power generators and steel-makers," Moody's Ratings said.
- "In the long term, investment in water management can mitigate risks from potential water shortages," it added.
- India's average annual water availability per capita is likely to drop to 1,367 cubic meters by 2031 from an already-low 1,486 cubic meters in 2021, according to the Ministry of Water Resources
- A level below 1,700 cubic meters indicates water stress, with 1,000 cubic meters being the threshold for water scarcity, according to the ministry.
- "Decreases in water supply can disrupt agricultural production and industrial operations, resulting in inflation in food prices and declines in income for affected businesses and communities, while sparking social unrest," Moody's said.
- Increases in the frequency of water shortage, severity or durations of extreme climate events stemming from climate change will exacerbate the situation because India heavily relies on monsoon rainfall for water supply, the global agency said.
- Industrialisation and urbanisation will intensify competition for water among businesses and residents, it added.

133. Railways to bring down speed of select Vande Bharat, Gatiman Express trains- THE HINDU

News:

- The Indian Railways will soon cut down the maximum speed of premium trains, including Vande Bharat and Gatiman Express, from the present 160 kmph to 130 kmph on select routes to ensure safety.

Prelims Takeaway

- Gatiman Express
- Vande Bharat Express

Key Highlights

- Going by the proposal that was "desired to ensure safety", the speed of Gatiman and Vande Bharat Express trains will be reduced from 160 kmph to 130 kmph while that of Shatabdi Express will be cut down from 150 kmph to 130 kmph.
- This will result in an increase in running time by 25-30 minutes and lead to changes in the timings of at least 10 superfast express trains on these routes, the sources said.

TPWS failure

- A Northern Railway proposal to dispense with TPWS or reduce speed of trains to 130 kmph was pending with the Board since November 6, 2023.
- As repair or maintenance of TPWS was not possible, according to a report of the Divisional Railway Manager, the Railway Board was requested to downgrade the premium trains to be operated "at a much safer speed of 130 kmph

134. Union Minister announced grant of 'Mini RATNA' status (Category-1) for Central Electronics Limited (CEL)- PIB

News:

- Grant of "Mini RATNA" status (Category-1) for Central Electronics Limited (CEL) at its Golden Jubilee celebration.

Prelims Takeaway

- Mini Ratna
- CEL

Highlights:

- CEL has transformed from a loss-making PSU to a dividend paying PSU and this is the 3rd consecutive year that CEL has paid dividends, that too at increasing rate, to the Government of India.
 - Attaining Net profit of approx. Rs 58 crore.
- In line with Prime Minister's Vision of Amrit kaal, CEL's aim is to increase indigenization of technology and boost manufacturing by capacity building, skill development.
- CEL's contributions in the fields of Defence, Railway, Security, Surveillance and Solar energy shows its vital role in promoting indigenous technologies and manufacturing capabilities.
- Going further, "Rolling out production of Smart Boards which will diversify CEL's product portfolio but also significantly impact implementation of smart education in schools in the country.
- The new initiatives taken by the CEL Management to strengthen Employee Engagement which led to outstanding performance over the last few years and an all-time high achievement in the last financial year.
- Central Electronics Limited has ticked the right boxes of performance parameters for grant of higher status of Mini RATNA (Category-1).

135. Economy robust despite global risks'-THE HINDU

News:

- The Indian economy and the financial system remain robust and resilient, anchored by macroeconomic and financial stability, the Reserve Bank of India (RBI) said in the 29th issue of the Financial Stability Report (FSR)

Prelims Takeaway

- RBI
- CRAR

Key highlights

- With improved balance sheets, banks and financial institutions were supporting economic activity through sustained credit expansion, the RBI said.
- According to the FSR, the capital to risk-weighted assets ratio (CRAR) and the common equity tier 1 (CET1) ratio of scheduled commercial banks (SCBs) stood at 16.8% and 13.9%, respectively, as at end-March 2024.
- SCBs' gross non-performing assets (GNPA) ratio fell to a multi-year low of 2.8% and the net non-performing assets (NNPA) ratio declined to 0.6% at end-March 2024.
- The RBI noted in the FSR that the global economy was facing heightened risks from prolonged geopolitical tensions, elevated public debt, and the slow progress being made in the last mile of disinflation.
- Despite these challenges, the global financial system had remained resilient, and financial conditions stable, the Reserve Bank added.

Report card

India's financial system is robust and resilient, anchored by macroeconomic and financial stability, says RBI



■ Banks' capital to risk-weighted assets ratio (CRAR) and CET1 ratios at 16.8% and 13.9%, respectively, as at end March

■ Stress tests for credit risk show that SCBs would be able to comply with minimum capital requirements

■ Global economy facing risks from prolonged geopolitical tensions, elevated public debt, slow disinflation

136. SEBI tightens norms on financial influencers, eases rules for delisting - The Hindu

News: SEBI recently asked brokers and mutual funds to stop using the services of unregulated financial influencers for marketing and advertising campaigns.

Highlights:

- A booming Indian stock market has increased the popularity of so-called financial influencers who advise on stocks and other related investments through their channels on social media.
- The decision was taken to address concerns related to 'certain persons, including unregulated entities, inducing investors to deal in securities based on inappropriate claims
- India had 154 million trading accounts as of April, as per SEBI data, a more than four times jump from the 36 million trading accounts in April 2019.
- It will be the responsibility of the regulated entity to ensure individuals with whom it is associated do not breach the rules of conduct set by SEBI, including avoiding the promise of assured returns.
- SEBI also introduced new criteria to decide on stocks that can be linked to derivative products, such as futures and options, as proposed in a discussion paper earlier this month.
- The SEBI board also approved changes to delisting rules that would make it easier for companies to exit from stock exchanges.
- Companies can now offer shareholders fixed prices for shares as an alternative mechanism to delist from stock exchanges.
 - Currently, delisting is carried out via reverse book-building.

Prelims Takeaway

- SEBI
- Derivatives

137. Govt to amend 2006 Act to streamline disputes over delayed payments to MSMEs - The Hindu

News: The Union Ministry of Micro, Small, and Medium Enterprises (MSME) is amending the MSME Development Act, 2006

Highlights:

- The Amendment is to improve mechanisms for managing disputes related to delayed payments and to better address the evolving needs of the MSME sector.
- The Act was brought in 2006, and times have changed. The nature of support needed has also undergone a vast difference.
- Similarly, when it comes to the National Board for MSME, it should have representation of all the secretaries from states because the industry has to connect with state governments at the ground level

Prelims Takeaway

- MSMEs
- Samadhaan Portal

- There is also a need to focus on micro enterprises in rural areas to improve quality of life and address unemployment.
- Additionally, the MSME ministry is in the process of transforming the **Samadhaan portal**, which currently only tracks disputes arising from delayed payments to micro and small enterprises (MSEs), into a comprehensive online resolution platform.
- At the event, the ministry also announced the **Trade Enablement & Marketing (TEAM) initiative**, which aims to onboard 5 lakh MSEs onto the **Open Network for Digital Commerce (ONDC)**.
- The initiative, with an outlay of Rs 277 crore over the next three years, also seeks to assist MSEs with cataloguing, account management, logistics, and packaging material and design.
- The ministry also announced the **Yashasvini campaign** to spread awareness for formalising women-owned, informal micro enterprises, with a focus on tier-2 and tier-3 cities.

138. Banks' gross NPA ratio moderates to 12-year low of 2.8% in March 2024: RBI report - Indian Express

News: Gross non-performing assets (GNPA) ratio of scheduled commercial banks moderated to a 12-year low.

Highlights:

- The gross non-performing assets (GNPA) ratio of scheduled commercial banks, moderated to 2.8 per cent in March 2024 the RBI said in its Financial Stability Report (FSR)
- The estimate for GNPA ratio for March 2025 is based on the macro stress tests, performed to assess the resilience of banks' balance sheets to unforeseen shocks emanating from the macroeconomic environment.
- Under the baseline stress scenario, the GNPA ratio of all banks may improve to 2.5 per cent by March 2025.
- If the macroeconomic environment worsens to a severe stress scenario, the GNPA ratio may rise to 3.4 per cent, the RBI's half yearly report said.
- In the severe stress scenario, the GNPA ratios of public sector banks (PSBs) may increase from 3.7 per cent in March 2024 to 4.1 per cent in March 2025
- Stress tests are conducted covering credit risk, interest rate risk and liquidity risk and the resilience of commercial banks in response to these shocks is studied.
- Using the stress tests, the RBI projects impairment or bad loans and capital ratios over a one-year horizon under a baseline and two adverse scenarios – medium and severe.
- The half-yearly slippage ratio (new NPA accretions as a share of standard advances) decreased across bank groups.
- Though the amount of write-offs declined during the year, the write-off ratio remained almost at the same level as a year ago, due to reduction in GNPA stock
- Overall, the sustained reduction in the GNPA ratio since March 2020 has been primarily due to a persistent fall in new NPA accretions and increased write-offs.

Prelims Takeaway

- NPA
- Financial Stability Report (FSR)

139. Interlinked drains to multiple agencies: What's behind Delhi's perennial problem

News: Heavy rains in Delhi resulted in Waterlogging, due to various administrative loopholes.

Highlights:

- The first monsoon shower may have brought major relief from the heatwave to Delhi, but three hours of heavy rainfall was all it took to throw the national capital into chaos.
- This, despite the PWD claiming to have completed 83% desilting work.
- According to senior PWD officials and experts, key reasons are multiplicity of departments, lack of coordination, poor infrastructure, faulty design, and increasing population.
- Another major reason is the long-pending 'Drainage Master Plan', which is yet to be implemented owing to several problems

Prelims Takeaway

- Urban Flooding

- The city's drainage system does not have the capacity. It is also very old and the population is constantly increasing.
 - There is a need for an integrated master plan.

INTERNATIONAL RELATION

140. Nepal's honey gatherers say fewer hives threaten tradition - Indian Express

News: Generations-old craft of harvesting honey in Nepal by Gurung Community is increasingly under threat

Prelims Takeaway

- Honey Bee
- Pollination

Highlights:

- As some experts say, rising temperatures brought by climate change disrupt the growth of bees, the availability of their food and even pollination of plants.
- For generations, the Gurung community in Taap, about 175 km (110 miles) west of the capital, Kathmandu, and other villages in the nearby districts of Lamjung and Kaski, have scoured the steep Himalayan cliffs for honey.
- Earlier, the villagers joined in the ritual slaughter of a red rooster, separating its feet and feathers as an offering to the cliff god, to seek forgiveness for taking the honey from the giant bees, known to scientists as **Apis laboriosa**.
- The honeycomb extract, also known as '**mad honey**', for some intoxicating qualities that can cause hallucinations, sells for 2,000 Nepali rupees (\$1.5) a litre, but the villagers rule out overharvesting as a reason for falling collections.
- With less honey available to collect every year, income from the pursuit has declined over the past decade.

Honeybees and Climate Change

- Some experts blame climate change, driven by a global rise in temperatures, as a major factor in the decline, but other contributors are **deforestation, diversion of water** from streams and rivers for hydroelectric dams and use of pesticides.
- Temperatures in the Himalayas, range higher than an average global increase of 1.2 degrees Celsius above pre-industrial levels, United Nations data and independent research show.
- Global studies show that a temperature **rise of even one degree** affects the growth of bees, the availability of their food and cross pollination of plants
- Research showed climate change was disrupting the food chains for bees and the flowering of plants, affecting populations of both across the world.
- Too much or too little rain, intense or erratic rain, and long dry spells or high fluctuations in temperature, put stress on honeybees to maintain colony strength and honey stocks.
- Lifecycle changes in plants also cause early or late flowering and fluctuations in secretion of nectar and honeydew.
- Some experts say floods and landslides can cause habitat loss and shrink the areas where bees can forage for food.
- The decline in bee populations spells **insufficient pollination** of high mountain crops and wild flora
- It will also have implications on the rural economy, as honey hunting is a tradition emerging as an important eco-tourism activity.

141. Wealth of HNWI's reached unprecedented levels in 2023: Capgemini study - The Hindu

News: The number of high net-worth individuals (HNWI) in India increased by 12.2% in 2023.

Highlights:

- The financial wealth of India's HNWI's increased by 12.4% in 2023 in comparison to 2022.
- Market buoyancy in 2023 sparked a \$3.8 trillion increase in HNWI's wealth.
- Among the best performers in the APAC region were India and Australia.
- A resilient economy and robust performance of the equity markets drove wealth growth in both of these countries.
- Asia-Pacific experienced 4.2% HNWI wealth growth and a 4.8% rise in the HNWI population.
- India's country's market capitalisation increased by 29.0% in 2023, after an increase of 6% in 2022.
- The country's national savings as a percentage of GDP too increased to 33.4% in 2023 compared to 29.9% in 2022.
- Buoyed by a resurging equity market and improving macroeconomics, global high-net-worth individual (HNWI) wealth and population rose by 4.7% and 5.1% in 2023.

Prelims Takeaway

- HNWI
- APAC region

142. Amid strained ties, Maldives President Muizzu accepts invite to attend Modi's swearing-in tomorrow- INDIAN EXPRESS

News:

- Maldives President has accepted the invitation to attend Prime Minister-designate Narendra Modi's swearing-in ceremony

Key highlights

- There were setbacks in ties between India and Maldives, as soon after coming to power in November 2023, Muizzu, who is seen as pro-China, had asked India to withdraw its military personnel from the island country.
- The concept of the Neighbourhood First Policy came into being in 2008.
- Under its 'Neighbourhood First' policy, India is committed to developing friendly and mutually beneficial relations with all its neighbours.
- India is an active development partner and is involved in several projects in these countries.
- India's approach to engaging with its neighbouring countries is characterised by consultation, non-reciprocity, and a focus on achieving tangible outcomes.
- This approach prioritises enhancing connectivity, infrastructure, development cooperation, security, and fostering greater people-to-people contacts.

Prelims Takeaway

- Neighbourhood First Policy

143. Pakistan confirms 5th polio case of year 17 days after victim's death - THE HINDU

NEWS:

- The fifth polio case of the year has been reported from Quetta, Balochistan. The affected two-year-old child developed onset of paralysis on April 29 in his legs

Polio: A Serious Threat to Young Children

- Polio, also called poliomyelitis, is a contagious disease caused by a virus.
- The virus spreads easily, mainly through contact, Contaminated water or food
- Polio often starts with flu-like symptoms, but it can turn serious.
- Sometimes, it attacks the nerves, causing paralysis, especially in the legs.
- In rare cases, it can even be deadly.
- There are different types of poliovirus, two types have been wiped out worldwide
- Only type 1 remains in a few places, and it's the one most likely to cause paralysis.
- The World Health Organization says only two countries still have polio: Pakistan and Afghanistan.

Prelims Takeaway

- POLIO

India's Success Story:

- India has been declared a polio free country due to its vaccination program launched in 1995,

144. UN declares 2025 the Year of Quantum Science- The Hindu

News:

- The United Nations has said 2025 will be designated the 'International Year of Quantum Science and Technology'. I

Prelims Takeaway

- Quantum Computing
- Qubits

Highlights:

- The body said the initiative will be "year-long", "worldwide", and that it will "be observed through activities at all levels aimed at increasing public awareness of the importance of quantum science and applications."
- German physicist Werner Heisenberg published a famous paper in which he reinterpreted classical mechanics to make sense of the quantum phenomena being discovered in the late 19th and early 20th centuries
- To lay the foundation stone of what would come to be called quantum mechanics.
- Quantum science and technologies have been featuring more often in public conversations and issues of late thanks to **quantum computers**.
- While fully operational machines of this type don't yet exist, researchers and industry experts believe it is a matter of time.
- In line with this belief, the Government of India announced a '**National Quantum Mission**' in April 2023 at a cost of **Rs 6,000 crore**, to be implemented from 2023 to 2031 by the Department of Science & Technology (DST).
 - With four verticals: quantum computing, quantum communication, quantum sensing and metrology, and quantum materials and devices.
 - will have transformative effects on electronics, clean energy, and drug development, given their superior computational abilities.
- According to the U.N. statement, its proclamation "is a signal for any individual, group, school, institution, or government to use 2025 as an opportunity to increase awareness about quantum science and technology."
- It added that a steering committee is also "planning global initiatives and events, particularly those that reach audiences unaware of the importance of quantum science and technology."

145. Nearly 60 times jump in silver imports from UAE unusual: GTRI

News:

- A near 60 times jump in silver imports during the last financial year from United Arab Emirates (UAE) is unusual since the West Asian country does not produce silver
- The import jump may be indicative of a breach in rule of origin finalized by India and UAE under the free trade agreement, a report by Global Trade Research Initiative (GTRI).

Prelims Takeaway

- Exim Policy
- MFN

Highlights:

- Silver imports from the UAE increased from \$29.2 million in FY23 to \$1.74 billion in FY24, due to India charging an 8 per cent duty under UAE trade deal versus the earlier 15 per cent Most-Favored-Nation (MFN) tariff on imports from other countries.
- "However, this trade is unusual because the UAE does not produce silver; it imports large silver bars, melts & converts these into silver grains.
- GTRI said a robust monitoring mechanism should be established to track import volumes and values,
 - ensuring quick policy responses to unusual spikes in gold and silver imports to ensure compliance with rules of origin under the trade deal.
- "High import duties in India on gold, silver and jewelry at **15 per cent** are at the root of the problem.
 - The government should consider lowering tariffs to 5 percent which will arrest large-scale smuggling and other misuse.
- The large tariff rate has resulted in a loss of revenue for India of Rs 1,010 crore in FY24 and that the revenue loss could increase as India has committed to make tariffs zero with UAE on unlimited quantities of silver within next eight years.

- In FY24, India imported \$5.4 billion worth of silver globally.
- As tariffs drop to zero over the next eight years, most silver imports will likely come from the UAE, causing a revenue loss of Rs 6,700 crore due to the tariff advantage.
- This trade is mainly driven by the lower tariffs offered by India, GTRI said.

146. Industry seeks rethink on Chinese FDI curbs and high import tariffs - The Hindu

News:

- Confederation of Indian Industry (CII) in its recent report has outlined that critical actions are required to transition India's electronics sector from import dependent to value added manufacturing.

Prelims Takeaway

- External Sector
- CII

Highlights:

- Indian industry has urged the government to revisit its restrictions on investment inflows and the movement of skilled personnel from China
 - And also to slash high import duties on electronics components as they have made Indian electronic goods globally uncompetitive vis-à-vis rivals such as Vietnam and China, rather than boosting localisation of critical inputs.
- Warning that the **Production Linked Incentive (PLI) scheme** for large-scale electronics manufacturing, introduced in April 2020 to offset some cost disadvantages, may soon lose its effectiveness in the face of "tariff-induced cost".

Report : Developing India as the Manufacturing Hub for Electronics Components and Sub-Assemblies

- On the restrictions imposed in 2020, on foreign direct investment (FDI) from countries sharing land borders with India, the report said the move aimed at preventing predatory acquisitions during the pandemic has now outlived its utility and must be reconsidered with "**adequate guardrails**".
- India should adopt a non-restrictive approach towards investments, component imports, openness towards technology transfer in deficient areas, ease of inward movement of skilled manpower and easing of non-trade tariffs.
- In an interdependent world, no country can aspire to produce all components for domestic consumption and a right balance between imports and exports of higher value-added products is the recipe for long term industrial sustenance
 - The largest electronics manufacturer China with its \$1.6 trillion international electronics trade relies on 42% imports
- India's components demand is largely met through imports from China and short-term strategies are likely to have adverse impact on potential expansion of domestic manufacturing
- The import tariffs on priority sub-assemblies and components need to be urgently rationalized in line with key competing economies.
- Majority of tariff lines need to be brought under the level of 5% or lower to ensure that product manufacturers become competitive.

147. India, US discussing co-production of Javelin anti-tank missiles - THE PRINT

News:

- India and the US held discussions on the co-production of American javelin missiles in India to meet the requirements of the Indian military.

Prelims Takeaway

- MP-ATGM
- DRDO

KEY HIGHLIGHTS

- The discussions on the joint production of the missiles took place recently during a high-level visit from the US to India.
- India and the US have been discussing expanding their cooperation, including joint production of military equipment.

- Sources said the requirement of the Army for the latest anti-tank guided missiles is quite significant and the force had to acquire a limited number of Israeli Spike ATGMs under emergency procurement to meet its requirements.
- The requirement for third-generation ATGMs has been there for a long time and attempts to acquire the weapon systems through a global route have not been successful.
- The work of acquiring the ATGMs through the Indigenous route is ongoing, as the Defence Research and Development Organisation is also going to carry out trials of its Man-Portable Anti Tank Guided Missile (MP-ATGM) soon to meet the requirements of the Army, the defence officials said.
- The Indian MPATGM Weapon System has been field evaluated in different flight configurations several times with the objective of proving the technology's superiority.

148. LTTE asked to explain why it should not be declared unlawful-THE HINDU

News:

- The Unlawful Activities (Prevention) Tribunal has issued a notice to the Liberation Tigers of Tamil Eelam (LTTE) to explain why it should not be declared unlawful.

Prelims Takeaway

- LTTE
- UAPA

KEY HIGHLIGHTS

- The notice comes a month after the Centre issued a notification banning the LTTE saying it was of the opinion that the organisation was still indulging in the activities which were prejudicial to the integrity and security of India.
- On June 5, 2024, the Centre constituted the Unlawful Activities (Prevention) Tribunal, under Section 5 of the Unlawful Activities (Prevention) Act 1967
 - comprising, Judge, Delhi High Court, for adjudicating whether or not there was sufficient cause for declaring the LTTE as an unlawful association.
- The LTTE was also given the option to appear before the Tribunal in New Delhi on July 23, 2024, through a duly authorised and instructed Counsel/Advocate.

T.N. notifies ban

- Tamil Nadu government also notified the ban on LTTE on May 18, 2024, in which it stated that the Centre was of the opinion that even after its military defeat in May, 2009, in Sri Lanka
- LTTE had not abandoned the concept of 'Eelam' and was clandestinely working towards the cause by undertaking fund raising and propaganda activities and the remnant LTTE leaders
 - or cadres have also initiated efforts to regroup the scattered activists and resurrect the outfit locally and internationally.

149. India and U.S. in talks for Stryker infantry vehicles- The Hindu

New:

- India has expressed interest in co-producing the Stryker infantry vehicles and it is in "relatively" early stages of talks with the U.S. on the Stryker and the Javelin anti-tank guided missiles (ATGM)

Prelims Takeaway

- Anti-tank guided missiles (ATGM)

Key Highlight

- At the same time, deals for MQ-9B unmanned aerial vehicles and GE-414 jet engines are making progress along with defence industrial collaborations under the initiative on Critical and Emerging Technology (iCET) framework.
- However, several defence officials expressed reservations on going for Stryker given that several such vehicles have been developed and demonstrated by Indian companies in recent years.
- The U.S. has in the past demonstrated both Stryker as well as Javelin for the Indian Army during bilateral exercises.
- Javelin was extensively evaluated by the Indian Army, though the deal did not go through.

GEOGRAPHY

150. Chile to install world's largest astronomy camera on the edge of Atacama desert- INDIAN EXPRESS

Context:

- With a resolution above 3.2 gigapixels, a nearly three-ton weight and the ambitious task of carrying out an unprecedented decade-long exploration, the largest digital camera ever built for optical astronomy is ready to be installed under the clear skies of northern Chile.

Prelims Takeaway

- Map based question

Key Details:

- **Location:** Cerro Pachón in the Coquimbo region, Chile.
- **Camera:** It's massive, weighing almost three tons, with a resolution of over 3.2 gigapixels.
- **Purpose:** The camera is part of a decade-long exploration to study dark energy, dark matter, and potential asteroid collisions.
- **Data:** It will generate 20 terabytes of data nightly, creating a 15 petabyte database over the decade.
- **Aim:** Understand how the universe began and its future development.
- **Location Choice:** Chile's Atacama Desert offers clear skies, ideal for astronomy. Chile hosts much of the world's investment in astronomy due to the clear skies of its Atacama Desert, the driest desert on earth.

POLITY & GOVERNANCE

151. CCI draft regulations attempt to tighten grip on Big Tech- The Hindu

News:

- The Competition Commission of India (CCI), has proposed new regulations to monitor the settlements, and commitments of industry giants.

Prelims Takeaway

- Constitutional body

KEY HIGHLIGHTS

- The CCI's newly issued consultation paper, and draft regulations, promises to usher in a new era of transparency, and accountability for the technology sector.
- The CCI's draft regulations, has introduced a comprehensive framework, for the appointment of independent agencies to oversee the implementation of the Commission's orders.
- This move, aims to ensure that industry giants adhere to their commitments, and do not exploit loopholes to evade regulatory scrutiny

Independent agencies to monitor compliance

- The proposed regulations empower the CCI to appoint a range of independent agencies, including accounting firms, management consultancies, professional organisations, and individuals such as chartered accountants, company secretaries, and cost accountants.
- These agencies will be tasked with the critical responsibility of monitoring the implementation of the CCI's orders, ensuring that the terms of engagement are strictly followed.

Key responsibilities of monitoring agencies

- The agencies appointed under the new regulations, will ensure that the orders of the Commission are implemented
 - inform the CCI of any instances of non-implementation or non-compliance with the orders, and adequately disclose any direct, or indirect pecuniary or non-pecuniary interest
 - that could prejudice their performance, and submit periodic reports, related to the monitoring of order implementation, as directed by the Commission.
- the CCI retains the authority, to suspend or terminate the engagement of these agencies if they fail to meet the stipulated standards.
- This can be done in accordance with the terms of their engagement, or, if deemed necessary by the Commission, for reasons recorded in writing.

- The proposed regulations, stipulate that the payment to the monitoring agencies
 - will be made by the person who has filed an application, under the relevant regulations of the Competition Commission of India (Settlement) Regulations, 2024,
 - the Competition Commission of India (Commitment) Regulations, 2024.
- In cases where the application is filed under the Combination Regulations, or any other relevant regulation, the payment responsibility will lie with the appropriate person as directed by the Commission.
- This ensures that the financial burden does not fall on the regulatory body, but on the parties seeking settlement or commitment.

152. NITI Aayog unveils AIM – ICDK Water Challenge 4.0- PIB

News:

- Atal Innovation Mission, NITI Aayog (AIM) announces initiatives aimed at fostering innovation and sustainability in India: the 'AIM – ICDK Water Challenge 4.0'

Prelims Takeaway

- Niti Aayog
- SDG India Index

Highlights:

- In collaboration with the Innovation Centre Denmark (ICDK)
 - AIM presents the fourth edition of the open innovation water challenge.
 - This initiative, a cornerstone of the Indo-Danish bilateral strategic partnership, addresses critical water-related challenges through inventive solutions.
- The selected teams will participate in the global “Next Generation Digital Action” program and engage with young talents from 9 countries (India, Denmark, Ghana, Kenya, Korea, Tanzania, South Africa, Ghana, Colombia and Mexico).
- Participants from the selected teams can anticipate an engagement comprising group work, boot camp sessions, keynotes, and personalized mentoring.
 - The program encourages exploration of sustainability, digital solutions, inclusion, and universal design principles.
 - Additionally, participants will have the opportunity to showcase innovations at the Digital Tech Summit scheduled in Copenhagen by the Government of Denmark.
- Early-stage startups, researchers, and young innovators committed to driving positive environmental change are encouraged to apply.
 - Focus on Digital Action for Societal Impact, through sustainability challenges with a specific focus on digitization.
- The Young Entrepreneurs track presents an exciting opportunity for Indian technology start-ups in the early stages to accelerate their ideas and form global partnerships
- ‘Innovations For You’, a table book series spotlighting the endeavors of SDG Entrepreneurs of India.
 - This edition features 60 entrepreneurs from diverse corners of India, each contributing to societal betterment through sustainable innovations.
 - These startups focus on recyclable and renewable materials, green energy, inclusive education, and underrepresented communities.

153. Who is the pro-tem Speaker of Lok Sabha and how is an MP chosen for the role?

News: The 18th Lok Sabha will hold its first session from June 24 to July 3, during which the new Speaker of the House will be elected.

Highlights:

- Until this happens, a pro-tem Speaker will be chosen to swear in the new Members of Parliament.
- Prime Minister Narendra Modi will move the motion for election of the Speaker in the Lok Sabha.
- Meanwhile, **Congress leader Kodikunnil Suresh**, as the seniormost member of the Lok Sabha, is expected to be appointed as pro-tem Speaker.

Pro-tem Speaker

Prelims Takeaway

- Pro tem speaker
- Important Articles

- Being the Presiding Officer of the Lok Sabha, the Speaker has to fulfil certain key duties related to its day-to-day proceedings.
- **Article 94 of the Indian Constitution states:**
 - “Whenever the House of the People is dissolved, the Speaker shall not vacate his office until immediately before the first meeting of the House of the People after the dissolution.”
- In the new Lok Sabha, the Speaker of the House is decided by a **simple majority**.
- Until her selection, the pro-tem Speaker is chosen to administer some important duties.
- ‘Pro-tem’ essentially means ‘for the time being’ or ‘temporarily’.
- The Constitution does not mention the post. However, the official ‘**Handbook on the Working of Ministry of Parliamentary Affairs**’ speaks about the ‘Appointment and Swearing in of Speaker pro tem’.

How is the pro-tem Speaker chosen?

- The handbook states when the Speaker post falls vacant before a new Lok Sabha, “the duties of the Speaker are to be performed by a Member of the House appointed for this purpose by the President as **Speaker pro tem**”.
- Administering oaths to the new MPs is the pro-tem Speaker’s primary duty.
- **Under Article 99 of the Constitution**, “Every Member of the House shall, before taking his seat, make and subscribe before the President or some person appointed in that behalf by him, an oath or affirmation according to the form set out for the purpose in the Third Schedule of the Constitution.”
- Normally, three other elected members of the Lok Sabha are also appointed by the President for the MPs to take oath before them.
- According to the handbook, the senior most members (in terms of number of years of membership of the House) are generally chosen for the purpose, though there have been exceptions.
- As soon as the new government is formed, the Legislative I Section of the Government of India prepares a list of the seniormost Lok Sabha members.
- It is then submitted to the Minister of Parliamentary Affairs or the Prime Minister for identifying an MP as Speaker pro-tem and another three members for oath-taking.

Administration of oath to new MPs

- After the Prime Minister’s approval, the consent of these members is obtained by the Minister of Parliamentary Affairs, generally over the telephone.
- The Minister then submits a note to the President, seeking approval for the appointment of the Speaker pro-tem and the other three members.
 - They also decide the date and time of the swearing-in ceremony.
- Following the approval of the President, the Ministry informs the Speaker pro-tem and other members about their appointments.
- Finally, the President administers the oath to the Speaker pro-tem in the Rashtrapati Bhawan.
- The other three members appointed by the President are administered the oath by the Speaker pro-tem in the Lok Sabha.
- The Speaker pro-tem then administers the oath/affirmation to the newly elected members with the help of the other three members.

DEFENCE

154. Indian Army unveils “Vidyut Rakshak” for enhanced generator monitoring and control- INDIAN EXPRESS

News:

- Developed by the Army Design Bureau (ADB), “Vidyut Rakshak” an Internet of Things-enabled system designed to monitor, protect, and control generators was launched

Prelims Takeaway

- IoT
- AI

Vidyut Rakshak:

- “Vidyut Rakshak” is an Internet of Things-enabled system designed by the ADB to monitor, protect, and control generators within the Indian Army.
- This innovation applies to all existing generators, regardless of their type, make, rating, or age.

Key Features:

- **Comprehensive Monitoring:** Vidyut Rakshak not only monitors generator parameters but also predicts and prevents faults, ensuring seamless operation.
- **Fault Prediction and Prevention:** The system anticipates potential faults and takes preventive measures, reducing downtime and maintenance costs.
- **Automation:** By automating manual operations, Vidyut Rakshak simplifies generator management tasks, thereby saving manpower and improving operational efficiency.
- **User-Friendly Interface:** The system features a user-friendly interface, making it easy for army personnel to operate and manage generators effectively.

155. Army gets its first indigenous man-portable suicide drones- Economic Times

News:

- The army has got its first indigenous man-portable suicide drones that are designed to target enemy training camps, launch pads and infiltrators with precision, without endangering the lives of soldiers.

Prelims Takeaway

- The Nagastra-1

Key Highlights

- The Indian military has introduced a new weapon called the Nagastra-1, making it the country's first ever man-portable drone designed and built entirely within India.
- This "loitering munition" is ideal for targeted strikes against enemy training grounds and infiltrators.

The Nagastra-1 boasts several advantages.

- It can hit targets with incredible accuracy (within 2 meters) thanks to GPS guidance, and has a range of nearly 30 kilometers.
- Plus, its electric engine makes it quiet, allowing for surprise attacks.
- Most importantly, the drone can be recovered using a parachute if a mission needs to be called off, which means it can be reused for future operations.
- This development signifies India's progress in creating affordable solutions for modern warfare.
- The Nagastra-1 could even be exported to allied nations in the future.

Key Points of The Nagastra-1:

- Designed and built in India (over 75% indigenous content)
- Precise strikes with 2-meter accuracy and 30km range
- Silent operation due to electric engine
- Reusable thanks to parachute recovery system

156. India ready to host its first multinational air exercise 'Tarang Shakti' in August

News:

- The Indian Air Force's first multinational air exercise, Tarang Shakti-2024, will be held in August, and is likely to see the participation of 10 countries, in addition to a few others acting as observers.

Prelims Takeaway

- Tarang Shakti
- 5th Gen Fighters

Highlights:

- "Enriched with the Red Flag exercise (US Air Force) experience, the IAF keenly looks forward to hosting the participating contingents from other countries during Tarang Shakti-2024,
- The plan is to invite friendly foreign countries with whom the IAF interacts regularly and has a certain degree of interoperability.
- The exercise is now scheduled to be held in two phases.
 - The first will be held in southern India in the first two weeks of August and
 - The second will be in the western sector from the end of August to mid-September.
 - Some countries will participate in both phases, while others will join one of the two phases.

- Among the countries sending contingents are Australia, France, Germany, Japan, Spain, the United Arab Emirates, the United Kingdom, and the United States.
- Germany will deploy fighter jets and also an A-400M transport aircraft.
- The A-400M aircraft will be on showcase for the IAF, given that it is a contender for the open tender for medium transport aircraft.

U.S. event

- The Red Flag exercise, hosted by the U.S. Air Force (USAF) concluded at the Eielson Air Force Base, Alaska.
- Apart from the IAF, this edition saw the participation of the Singapore Air Force, the U.K.'s Royal Air Force, the Royal Netherlands Air Force, and the German Luftwaffe.
- The IAF deployed eight Rafale fighters, a first at Red Flag, supported by IL-78 mid-air refuellers for the transatlantic ferry, as well as C-17 Globemaster aircraft.

157. Cost of future wars is enormous, resources should be optimised: Chief of Defence Staff

News:

- Saying that the cost of future wars would be “enormous”, Chief of Defence Staff General Anil Chauhan stressed the need to optimise resources and manpower and bring in efficiencies to afford weapons and systems of the future.
- Before talks of fusion between civil and military resources, there should be fusion within the Army, the Navy, and the Air Force.

Prelims Takeaway

- CDS
- WASP

Highlights:

- 170-odd initiatives where the three Services can work together in an integrated manner.
- “Forces will be capable of optimizing time, resources, processes, infrastructure and manpower,” CDS said at the Air Force seminar of Warfare & Aerospace Strategy Program (WASP) course.

Strategic programme

- WASP is a strategic education programme of 15 weeks that was started in 2022 to provide participants with a deep understanding of geopolitics, grand strategy and comprehensive national power,
- It is conducted by the IAF along with the College of Air Warfare and Centre for Air Power Studies.
- Integration within the three Services, the logical step would be to take the approach forward to other Services.
- For instance, the Navy and Coast Guard can get the inventories and maintenance, repair and overhaul together.
- We can also involve the Central Armed Police Forces into whatever logistics and infrastructure need to be.

Alternate ways

- It is important to
 - help the government to reduce costs.
 - Because the cost of future wars is enormous, weapon systems and platforms are going to be very costly.
 - We need to think of alternative ways of doing things. It has to be very practical and time bound.
- A scholar warrior is a military professional who combines intellectual acumen with combat prowess in today's increasingly complex and dynamic security environment.
- Talking of India's strategic culture, the Air Force chief said it is shaped by historical experiences and the ever-evolving geopolitical environment.
- It emphasizes strategic autonomy, caution and a strong focus on territorial integrity.

Editorials, Gists and Explainers

158. Discussions on Loss & Damage Fund, setting up COP29 — what to expect at 60th Bonn Climate Conference- The Print

Context:

- The 60th Bonn Climate Conference starting in Germany is set to be a pivotal gathering for global climate action, focusing on the operationalisation of the Loss and Damages Fund and setting the stage for COP29 to be held in Baku, Azerbaijan.

KEY HIGHLIGHTS	Climate finance-loss and damage
<ul style="list-style-type: none"> • The conference — seen as a mid-point between the annual Conference of the Parties (COPs) of the United Nations Framework Convention on Climate Change (UNFCCC) — <ul style="list-style-type: none"> ◦ will also host the Global Stocktake Annual Dialogue, which will help set updated Nationally Determined Contributions (NDC) for all countries. • Organised by the UNFCCC, this annual event allows the Subsidiary Bodies (SBs) of the UNFCCC — responsible for Scientific and Technological Advice (SBSTA) <ul style="list-style-type: none"> ◦ And Subsidiary Body for Implementation (SBI) — to deliberate on the intricacies of decisions made at the preceding Conference of Parties (COPs). • The subsidiary bodies are two permanent bodies of the UNFCCC that help the United Nations governing bodies with the technical expertise needed to follow through on treaties, agreements, and conventions agreed by the different countries. • All members of the UNFCCC are automatically members of the subsidiary bodies. 	<ul style="list-style-type: none"> • Since COP27 officially announced the setting up of the Loss and Damages Fund, there have been several international discussions on streamlining the fund <ul style="list-style-type: none"> ◦ determining the host country, contributors, and beneficiaries, as well as integrating it with other climate finance mechanisms. • Loss and Damages Fund is a specific financial mechanism agreed upon by all UNFCCC countries to respond to the losses and damages suffered by lower-income countries when dealing with climate change impacts. • The provision of the fund was agreed upon to support countries that are vulnerable to climate change impacts <ul style="list-style-type: none"> ◦ especially small island developing nations (SIDN) that are inundated by floods, extreme weather events and other climate change-related events. • So far, the fund has been able to raise only about \$600 million, which is significantly short of the over \$215 billion identified by a United Nations Environment Programme (UNEP) report as necessary for “developing countries to mitigate the impacts of climate change”. • While the World Bank has agreed to host it, the fund’s contributor and beneficiary countries, along with its host nation, remain under negotiation, with decisions anticipated by mid-July. • “The world’s biggest historical polluters, who have consistently fallen short in both domestic climate actions and financial contributions, must now own up to their responsibilities and deliver on their promises • At Bonn, three significant events will influence the Loss and Damages Fund — the 10th Technical Expert Dialogue (TED 10), which aims to achieve the global climate finance goal of \$100 billion annually by 2025 <ul style="list-style-type: none"> ◦ The final Glasgow Dialogue on Loss and Damage; and discussions on the Warsaw International Mechanism for Loss and Damage. • The NDCs are goals for reducing greenhouse gas emissions, advancing energy transition <ul style="list-style-type: none"> ◦ And other forms of mitigation and adaptation against climate change that countries have to declare every five years since the 2015 Paris Agreement. • All NDCs are geared towards the common Paris Agreement goal of maintaining global warming at 1.5 degrees Celsius above pre-industrial levels. <ul style="list-style-type: none"> ◦ For example, India’s current NDC includes a plan to reach net-zero emissions by 2070. • As the 2025 NDCs are due, the Global Stocktake Annual Dialogue will aim to support countries with knowledge and plans on how to update their NDCs. • This also includes an analysis of the Global Stocktake results from COP28, which is when the UNFCCC reviewed or ‘took stock’ of the progress made by every country on their Paris Agreement goals from 2015. • Simply put, Bonn 2024 will lay all the groundwork for countries to update their NDCs keeping in mind which of their earlier goals have already been achieved.

159. Explained: The Great Indian Tree Cover Loss- The Wire

Context:

- The National Green Tribunal (NGT) took up an important case, suo motu and asked the union government to explain why India has lost a whopping 2.33 million hectares of tree cover between 2000 and 2023.

key-highlights

- India lost 2.33 million hectares of tree cover from 2000 to 2023, slightly larger than Meghalaya.
- About 18% of this loss (414,000 hectares) happened in primary forests.
- Northeast India bore 60% of this loss, with Assam, Mizoram, Arunachal Pradesh, Nagaland, and Manipur losing significant tree cover.
- Between 2013 and 2023, 95% of the tree cover loss occurred in natural forests.

- 2016, 2017, and 2023 were the worst years, with 1.75 million, 1.44 million, and 1.89 million hectares lost, respectively.
- This loss emitted 51.0 million tons of carbon dioxide equivalent annually, totaling 1.12 gigatons from 2000 to 2023.
- The tree cover loss across the country has emitted a huge amount of carbon into the atmosphere – exactly what India is trying to prevent as per its Nationally Determined Contributions as submitted to the United Nations under the Paris Agreement.

State	Tree cover loss (hectares)
Assam	3,24,000
Mizoram	3,12,000
Arunachal Pradesh	2,62,000
Nagaland	2,59,000
Manipur	2,40,000

160. Geographical location, deforestation, climate change: What led to the deadly landslide in Papua New Guinea-INDIAN EXPRESS

Context:

- Papua New Guinea is vulnerable to natural disasters such as landslides and earthquakes because of a host of reasons, including its geographical location and deforestation.
- However, climate change has worsened the situation in recent years.

CAUSING FACTOR

- The main reason is the geographical location of the country.
- It sits on the Pacific 'Ring of Fire' — a string of hundreds of volcanoes and earthquake sites which run along the Pacific Ocean.
- The ring, which is a semicircle or horse shoe in shape, witnesses many earthquakes due to constant sliding past, colliding into, or moving above, or below each other of the tectonic plates.
- Frequent earthquakes also lead to a high number of landslide incidents in Papua New Guinea.
- For instance, in 2018, a large earthquake triggered many landslides across the region.
- Other factors like the country's mountainous terrain and tropical climate also contribute to more frequent landslides.
- The situation is exacerbated by the fact that Papua New Guinea lacks infrastructure and economic development to deal with natural disasters
 - unlike other nations like Taiwan, Italy and Japan, which are also vulnerable to such disasters.
- As a result, death tolls are usually high when landslides or earthquakes take place in the country.
- Besides the aforementioned factors, deforestation and mining have also played a role in more landslides.
- As Papua New Guinea is the world's fifth largest exporter of palm oil, it is dominated by palm oil plantations, which have been cropped up in place of forests.
- The mining of "gold, silver, nickel, copper, and cobalt.. and LNG operations have been taking place in areas where deadly landslides occurred in the past

What is the role of climate change?

- Much like the rest of the world, Papua New Guinea is also reeling from the adverse effects of climate change.
- The country has witnessed an increase in temperature of approximately 0.8-0.9 degree Celsius, as measured in the difference between average temperature in 1900–1917 and 2000–2017, according to a report by the United Nations.
- Consequently, extreme weather events have become more frequent and intense in Papua New Guinea.

161. How Delhi gets its water- The Indian Express

Context:

- The Supreme Court directed the Himachal Pradesh government to release 137 cusecs of water it has in surplus, to resolve the drinking water crisis in Delhi.
- It asked Haryana to do the needful to facilitate the water's flow into the national capital.
- Delhi Government blamed Haryana for "stopping" Yamuna's water supply to the national capital.

Where does Delhi's water come from?

- Delhi gets most of its water from the Yamuna, Ravi-Beas, and Ganga rivers.
- From the Ganga, via the Upper Ganga Canal in UP, Delhi receives 470 cusecs of water.
- Two channels entering Delhi from Haryana — supply Delhi with water from the Yamuna and Ravi-Beas rivers.
- The Delhi Jal Board (DJB) also takes water directly from the Yamuna to try and meet demand. Put together, Yamuna water — through provides a supply of 612 MGD to Delhi.
- Finally, the DJB supplements its river-water supply with ground water — around 135 MGD of which are drawn from Delhi's tubewells and ranney wells.

Delhi's water shortage:

- The water treatment plant in North Delhi's Wazirabad was functioning below its capacity
- Coincidentally, this was the time when the national capital experienced record high temperatures, and thus, a steep surge in demand for water.
- But even at full capacity, DJB is not capable of meeting the city's requirement of 1290 MGD during peak summers, as estimated by the Economic Survey for 2023-24.

Wazirabad WTP functioning below capacity:

- Across the states of Himachal Pradesh, Punjab, Haryana, and Delhi recorded large rainfall deficits in May.
- Scant rainfall meant that the Yamuna simply did not have enough water for the DJB to draw from the Wazirabad reservoir.
- Against a 'normal' level of 674.5 feet, the water level at the reservoir fell below 670.3 feet.
- Apart from low rainfall, the water levels are also impacted due to losses in transit, due to seepage, as well as due to evaporation.
- Of the 352 cusecs of water released from Haryana's Hathnikund barrage in the summers, a decent proportion is lost in transit.

How much water is Delhi allotted from the Yamuna?

- A **water sharing agreement** on the 'surface flow' of the Yamuna among Haryana, Uttar Pradesh, Rajasthan, Himachal Pradesh and Delhi in 1994:
 - specified that Delhi is to get 0.076 billion cubic meters of water from March to June.
 - This allocation is regulated by the **Upper Yamuna River Board**, with the 1994 agreement due for revision in 2025.
- In 1996, the Supreme Court ordered and directed that Delhi shall continue to get as much water for domestic use from Haryana through river Jamuna
 - which can be consumed and filled in the two water reservoirs and treatment plants at Wazirabad and Hyderpur.
 - Both the Wazirabad and Hyderpur reservoirs shall remain full to their capacity from the water supplied by Haryana through river Jamuna."

162. Remoulding the Global Plastics Treaty - The Hindu

Context:

- As discussions still continue for an international legally binding treaty on plastic pollution, it becomes crucial to consider how it can support a fair transition for individuals who collect and recycle waste informally.

Highlights:

- According to the Global Plastic Outlook, global production of plastic waste was 353 million tonnes in 2019 more than double since it was in 2000, and is set to triple by 2060.
- Only 9% of this was recycled, 50% sent to landfills, 19% incinerated, and 22% disposed of in uncontrolled sites or dumps.
- According to the United Nations Environment Programme, of the 9% recycled, 85% was done by informal recycling workers.
- These workers collect, sort and recover recyclable and reusable materials from general waste, alleviating municipal budgets of financial burdens around waste management
- The Centre for Environment Justice and Development has also observed that they promote circular waste management solutions and help mitigate greenhouse gas emissions, valuably contributing to sustainability.
- Their efforts significantly reduce plastic content in landfills and dump sites, effectively preventing plastic leaking into the environment.

The need for recognition

- Yet, these workers are often overlooked and remain highly vulnerable in plastic value chains.
- They face risks such as increasing privatization of waste management, waste-to-energy or incineration projects, and exclusion through other public policy interventions in plastic waste management in the norms of Extended Producer Responsibility (EPR).
- The **informal waste and recovery sector (IWRS)** is more than a minor player in worldwide municipal solid waste management systems.
- According to the UN-Habitat's Waste Wise Cities Tool, the informal sector accounts for 80% of municipal solid waste recovery in many cities.
- The recent Leave No One Behind Report, strategies to reduce plastic pollution often neglect to effectively involve the recovery capacities, skills, and knowledge of the IWRS.
- This oversight worsens livelihood vulnerabilities and undermines existing informal recovery systems.

Global treaty, need for a just transition

- The Global Plastics Treaty is a significant attempt to establish a legally binding agreement aimed at reducing and eliminating plastic pollution.
- The decision to establish an Intergovernmental Negotiating Committee (INC) was made during the fifth UN Environment Assembly in Nairobi, Kenya.
- These measures aim to acknowledge waste pickers' historical contributions, protect their rights, and promote effective and sustainable plastic waste management practices.
- There is no universally agreed-upon terminology for a just transition or a formal definition of the informal waste sector and its workforce. Clarifying these definitions is crucial.

India's voice is important

- As a key representative from the Global South, India promotes an approach that enhances repair, reuse, refill, and recycling without necessarily eliminating the use of plastics altogether.
- India has also stressed the importance of adopting country-specific circumstances and capacities. Hence, India's informal waste pickers, who are indispensable, remain central to the discussion.
- Rethink the formulation of our **EPR norms** and raise questions on how to integrate this informal worker cohort into the new legal framework.
- As the final round of negotiations for the Global Plastics Treaty, a key question remains on how a global instrument to end plastic pollution can enable a just transition for nearly 15 million people who informally collect and recover up to 58% of global recycled waste, thereby shaping a sustainable future.
- By incorporating their perspectives and ensuring their livelihoods are protected, the treaty can embody social justice and equity principles while leaving no one and no place behind.

163. The message from the Andhra Pradesh bifurcation- The Hindu

Context:

- It has been 10 years since Andhra Pradesh was divided into two States.
- A decade is a long enough time to examine the political, economic and historical implications of the division of the political geography of the Telugu people, for them as well as for the Indian Republic.

Scant nostalgia

- These two regions (Telangana and Andhra) were under different political authorities for only about 150 years.
 - Before the Nizam gave away the coastal districts and the 'ceded' districts that came to be called Rayalaseema to the European powers,
 - And, they were together again in 1956.
- However, these long years of living under one political authority could not foster enough of a sense of togetherness.
- That parting of ways has not yet happened with the Kannada-speaking area of the Nizam's Hyderabad State, nor did it happen as yet with its Marathi-speaking area.
- They both joined Karnataka and Maharashtra States, respectively, after the linguistic reorganization of States.
- Does the fate of Andhra Pradesh which has pioneered the reconfiguration of the Indian political architecture along linguistic lines also foreshadow its demise.
- Does the Indian Republic eventually have to look for an organizing principle other than language?
 - That is the larger question that the division of Andhra Pradesh pelts at the Republic of India.
 - except a few States in the Indian Republic, all other States of our Republic are organized on a linguistic basis.
 - If the underlying organizing principle of language is unlikely to hold them together as units, an alternative principle will have to be formulated.
- There are already noises of unease among the political elites in some States, especially in the south, regarding speculation about future delimitation in which some northern States could gain abnormal numbers in the central legislature.

Where States stand

- The bifurcation of Andhra Pradesh can give us some idea as how reconfiguration can radically alter the political authority of States.
 - In the united Andhra Pradesh had 42 Lok Sabha seats and was the largest State in south India.
 - But now, with a mere 25 seats and Telangana, with 17 seats.
- If some States become smaller while others remain big, political equations among them will become unequal and may result in undesirable strains in the federal structure.
- The questions that the bifurcation of Andhra Pradesh threw up and the lessons the process of division offers cannot be parried or ignored.
- It is unwise to take comfort from the fact that neither side has as yet sharply articulated and followed up on their grievances regarding the messy way the process of bifurcation was handled.
- The Andhra Pradesh side, in the first five years after the division, got bogged down in its attempt to build for itself a world-class capital like Hyderabad
- And the next five years were consumed by profligate direct benefit transfer (DBT) welfarism.
- The fact that both the obsessions have made the State financially anemic is glossed over for now.
- Unfulfilled promises made by the Centre on
 - special category status and financial help for building the capital city,
 - inability to effect proper division of joint assets
- The idea of the linguistic reorganisation of India had a long incubation period.
 - It was thought through, elaborately debated, agreed upon and then implemented.
 - But a departure from it was neither thought through nor debated.
 - The Republic cannot afford such clumsy and thoughtless handling of major departures from its core organizing principles.
 - The Andhra Pradesh bifurcation and its fallout, merit a deeper and mature examination to ensure a firm footing for our Republic.

164. No party wins majority: What does a coalition government mean for economic reforms in India?-INDIAN EXPRESS

Context:

- In terms of economic governance, the one aspect that distinguished the past two Lok Sabhas was the fact that it was the first time since the start of economic reforms that a single party enjoyed a majority mandate.
- This was supposed to have a salutary effect on the trajectory of economic reforms in India.

BACKGROUND

- Since 1991, when India was forced to open up its economy and give up on the planned economy model
- all governments were coalitions of the sort where even the lead party was quite far from the majority mark of 272.
- This obvious weakness of the leading party — be it the Congress or the BJP or the so-called third front — meant that India always had
 - to borrow the words of Montek Singh Ahluwalia (former Deputy Chairman of the erstwhile Planning Commission) — “a strong consensus for weak reforms”.

What were the notable reforms brought by the previous coalition governments?

- Two, if one looks back at India's economic history since 1991, it becomes clear that coalition governments have undertaken some of the boldest and most visionary reforms that laid the foundation for India's resurgence.
- The biggest example is the whole host of reforms during the P V Narasimha Rao-led government, which was essentially a minority government.
- It discarded centralised planning and opened the Indian economy to global competition by removing the licence-permit raj.
- The country also became a member of the World Trade Organisation.
- Under the short-lived Deve Gowda government, then Finance Minister P Chidambaram came out with what is still referred to as the “dream budget”.
- It placed faith in the Indian taxpayers and cut tax rates — both personal income tax, corporate taxes, and customs duties.
- Under the Atal Bihari Vajpayee-led National Democratic Alliance (NDA) government, India framed the Fiscal Responsibility & Budget Management (FRBM) law for fiscal rectitude, and limited the government's ability to borrow within prudential limits.
- The Vajpayee-led coalition further advanced the push towards disinvestment of loss-making Public Sector Undertakings (PSUs), and focused on boosting rural infrastructure and connectivity through the PM Gram Sadak Yojana.
- The very first NDA also brought in the Information Technology Act, in 2000, that laid the foundation for the bustling e-commerce giant that India is today.
- Under the Manmohan Singh-led United Progressive Alliance (UPA) India built on the Vajpayee era Sarva Shiksha Abhiyan to initiate the Right to Education Act.
- government brought in several reforms under the rights-based approach — far more robust than the personal guarantees of an individual leader.
- These included the Right to Information Act, which boosted transparency in India's democracy, and the Right to Food, which ensured that no Indian should go hungry.
- In the same light, the UPA brought in the Mahatma Gandhi National Rural Employment Guarantee Act (MG-NREGA), which provided minimum employment to the rural poor.
- government also deregulated fuel prices before it left office and started work on direct benefit transfers as well as Aadhaar and GST.

165. Federalism in India: What you need to know- The Indian Express

Context:

- The journey of India towards federalism began with its struggle for independence from colonial rule. Its evolution has been dynamic since.
- The government has been emphasising more on cooperative and competitive federalism through National Institution for Transforming India (NITI) Aayog.
 - Many state governments often allege that the Union government is not sharing the fund of the Goods and Services Tax (GST) compensation and this has led to a confrontational federalism.
- Generally, Federalism can be classified into three different types
 - Holding Together Federation,
 - Coming Together Federation and
 - Asymmetrical Federation.
- In the Holding Together Federation, powers are shared between various constituent parts to accommodate the diversity in a country. In such cases, the central authority often holds the upper hand. India, Spain, and Belgium are included in this group.
- Coming Together Federation stands for an arrangement where separate states combine to create a more unified entity.
- In this case, states enjoy greater autonomy compared to a holding federation. Examples include the United States, Australia, and Switzerland.
- Asymmetrical Federation refers to a form of federalism in which the components that make up a nation have uneven powers and relationships in the domains of politics, administration, and finance.

- Asymmetry in a federation's arrangements from both a vertical (between the states and the center) and a horizontal (among the states) perspectives. India with the sole exception, of Jammu and Kashmir (till 2019). Also, there are various clauses in Article 371 which accord special powers to India's north-eastern states.

<p>India's journey towards federalism</p> <ul style="list-style-type: none"> • The demand for autonomy and self-governance had a significant influence on a variety of linguistic, cultural, and geographical groupings. • The framers of the Indian Constitution recognised the need to uphold unity in diversity. • India possesses bicameralism, two governments (the Union and the State), a written constitution, and an independent court to uphold the system of checks and balances. • The Indian constitution also contains many unitary elements, <ul style="list-style-type: none"> ◦ including a powerful union government, a single constitution, a single citizenship, the appointment of state governors by the central government, all-India services, emergency provisions. • Moreover, the term "federation" is not used in the Constitution, suggesting that no state has the power to secede from the federation and that the Indian Federation is not the result of an agreement reached by individual states. • India is hence referred to as a "holding together federation", • while political analyst K. C. Wheare describes Indian federalism as quasi-federalism. In a quasi-federal system, the union has more authority than the states. <p>Evolution of federalism in India</p> <ul style="list-style-type: none"> • Since independence, the evolution of federalism in India has been dynamic and can be examined along various phases: • Inner-party federalism: <ul style="list-style-type: none"> ◦ During the first phase of federalism (1950-68), major disputes between the federal government and the states were resolved in Congress party forums. ◦ created a consensus-based form of "inner-party federalism". • The Congress Party suffered a great loss of autonomy after the party split in 1969. In this phase, because of the party's extreme centralisation and authoritarianism under the leadership of Indira Gandhi, the Congress party completely subordinated its regional leaders and organisational structures. • Multi-Party Federalism: <ul style="list-style-type: none"> ◦ The 1990s saw the coalition period, also known as multi-party federalism, in which national parties were not able to win a majority in parliament. National coalitions maintained influence in the union with the help of regional powers. ◦ This period saw a decline in the intensity of Center-state confrontations as well as in the Center's arbitrary use of Article 356 to topple state administrations. ◦ A 1994 Supreme Court ruling (SR Bommai v. Union of India case verdict) that questioned the Center's arbitrary use of the provision 	<ul style="list-style-type: none"> • Co-operative federalism: <ul style="list-style-type: none"> ◦ During this period, the Indian economy was also liberalised, giving state governments a considerable amount of autonomy to initiate businesses and attract foreign investment. ◦ Strengthening the foundation from the bottom up, the 73rd and 74th Constitutional Amendment Acts of 1992 further empowered local self-government. ◦ Thus, true federalism was made possible by the discussions and contests between the Union and states during this period. • Competitive federalism: <ul style="list-style-type: none"> ◦ In terms of governance, the federal government advocated co-operative federalism and agreed on measures like enacting the GST law, establishing the GST Council and NITI Aayog, and approving the Finance Commission's suggestion to raise the states' funding share. In addition. ◦ Through open rankings in a number of areas and a helping hand, it promotes healthy competition across states. • Confrontational federalism: <ul style="list-style-type: none"> ◦ "dominant party" reappeared with the NDA's rise in 2014. ◦ Concurrently, the party solidified its grip on power by taking over several states. ◦ Confrontational federalism emerged during times of significant federal disputes between states led by the opposition and the centre. ◦ Examples include governor abuse, state fiscal centralisation, and subversion of state rights. • To summarize, Indian federalism entered a new phase after 1991 when states engaged in bargaining or negotiation to settle politics and economy. • It is possible to argue that cooperative and competitive federalism are inherently advantageous, but confrontational federalism maintains that the state and federal governments ought to bargain or negotiate on behalf of the people. • The ultimate objective of federalism is to accept diverse issues and offer a common path so that welfare and national advancement come first.
--	--

166. Slight dip in number of women in LS, well under proposed 33% quota- The Indian Express

Context:

- India has elected 74 women MPs to Lok Sabha this year, four fewer than in 2019 and 52 more than in India's first elections in 1952.
- These 74 women make just 13.63% of the elected strength of the Lower House, much less than the 33% that will be reserved for women after the next delimitation exercise.

<p>Slow change</p> <ul style="list-style-type: none"> • Over the years, Lok Sabha's gender composition has shown a general trend towards increasing women's representation. But progress has been slow and not linear. • In 1952, women made up just 4.41% of the strength of the Lower House. • This number increased to more than 6% in the election held a decade later, but again dipped to below 4% in 1971 (ironically, with Indira Gandhi, as Prime Minister). • Since then, there has been a slow, but steady rise in women's representation (with a few exceptions), which crossed the 10% mark in 2009, and peaked in 2019 at 14.36%. • India still lags behind several countries: 46% of MPs in South Africa, 35% in the UK, and 29% in the US, are women. 	<p>Party-wise share</p> <ul style="list-style-type: none"> • In 2024, women Lok Sabha MPs came from 14 parties. • The BJP leads this list with 31 women MPs, followed by the Congress (13) and TMC (11). • Among the 3 parties with double-digit women MPs in the Lok Sabha, the TMC boasts the highest proportion (37.93%), followed by Congress (13.13%) and BJP (12.92%). <p>New faces, younger</p> <ul style="list-style-type: none"> • Of the 74 women MPs elected, 43 are first time MPs. • The overall age of the House is 56. They are as educated as their male counterparts, with 78% completing undergraduation. • Out of the total 8,360 candidates, who stood in the 2024 Lok Sabha elections, around 10% were women. • This is the first time that women candidates' proportion touched 10%. This number too has increased over time; it stood at 3% in 1957. • Roughly 16% of BJP's candidates were women, as opposed to 13% of Congress candidates both higher than the overall average.
---	--

167. Special Category Status for AP: Chandrababu Naidu's big demand- The Indian Express

Context:

- Telugu Desam Party (TDP) president N Chandrababu Naidu emerged as a key player in national politics on Wednesday (June 4) after his party won 16 seats in the Lok Sabha election. Naidu's support is critical for the BJP, which has only 240 seats in Lok Sabha

What is Special Category Status (SCS)

- In 1969, the **Fifth Finance Commission** of India introduced the mechanism of SCS to assist certain states in their development and fast-tracking growth if they faced historical economic or geographical disadvantages.
- Factors such as difficult and hilly terrain, low population density and/ or a sizable tribal population, strategic location along borders, economic and infrastructural backwardness, and non-viable nature of state finances were typically considered to accord SCS.
- The system was scrapped by 14th Finance Commission, which suggested that the resource gap of the states should be filled by increasing the devolution of tax to 42% from the existing 32%.
- SCS was accorded to 11 states, including the entire Northeast, and the border hill states of Jammu and Kashmir, Himachal Pradesh, and Uttarakhand.
- Subsequently, other states too demanded SCS including Andhra Pradesh; Bihar, and Odisha.

Why does AP want Special Category Status:

- When undivided AP was bifurcated to create Telangana in 2014 through the AP Reorganisation Act, 2014,
 - The UPA government at the Centre had promised to grant SCS to AP to compensate for the loss of revenue, and compensate for Hyderabad.
- Andhra Chief Ministers from 2014 to 2024, repeatedly appealed for SCS, so more funds were made available from the Centre to overcome the "distressing" financial situation.
 - For example, Rs 57,000 crore of software exports from AP for the year 2013-14, Hyderabad city alone accounted for Rs 56,500 crore, with Telangana now.
 - Today's AP is essentially an agrarian state leading to huge revenue disabilities.
- The per capita revenue of Telangana for 2015-16 was Rs 14,411, while it was only Rs 8,397 for Andhra.

What would SCS mean for AP

- SCS would mean higher grants-in-aid to the state government from the Centre.
- SCS states enjoy special industrial incentives such as Income-tax exemptions, custom duty waivers, exemptions relating to GST, and lower state and central taxes.
- In SCS states, the Centre funds central schemes up to 90%, compared to 60% in non-SCS states.
- Granting SCS would encourage investments in specialty hospitals, five-star hotels, manufacturing industries, high-value service industries such as IT, and premier institutions of higher education and research, AP has argued.

Demand with the Centre:

- The TDP was with the Modi government in 2014, and Naidu was frustrated by his failure to persuade the Centre of his case.
- The NDA, now could give SCS for a specific period, say five years.
- Naidu, from his position of strength, could settle for a compromise with favorable terms perhaps several Central projects in AP, a halt to the privatisation of the Vizag steel plant, increased assistance to backward districts, setting up of SEZs where the Centre would be able to waive taxes, etc.

168. Bihar, Andhra Pradesh's demand for special category status | Explained-INDIAN EXPRESS

Context:

- Bihar and Andhra Pradesh demand for special category status (SCS) for their States Andhra Pradesh and Bihar.

Key highlights

- Special Category Status for plan assistance was granted in the past by the National Development Council to the states that were characterised by a number of disadvantages necessitating special consideration.
- These disadvantages included:
 - hilly and difficult terrain
 - low population density and/or sizeable share of tribal population; strategic location along borders with neighbouring countries

- economic and infrastructural backwardness; and non-viable nature of state finances.
- Special category status was granted based on an integrated consideration of these criteria.
- However, the distinction among states was done away with starting the Fourteenth Finance Commission, and abolition of the Planning Commission by government.
- “Any state that is relatively poor and has special requirements may ask for it.
- If many states ask for it, and if the government wants to make a systematic arrangement, then the matter should be handed over to the Niti Aayog and it may be given some special window to finance such states through some criteria

169. The Centre is notional, the States the real entities - The Hindu

Context:

- The results of the general election 2024 have thrown up a surprise.
- The Opposition-ruled States have been complaining about ill treatment by the Centre.

Key highlights

● Complaints by states

- Kerala has complained about the inadequate transfer of resources,
- Karnataka about drought relief and
- West Bengal about funds for the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- The attempt seems to be to show the Opposition-ruled States in a bad light.
- The Supreme Court recently said that Centre-State issues need to be sorted out amicably because there is a huge diversity among the States.
- A common approach is not conducive to the progress of every State.
- They need greater autonomy to address their issues in their own unique ways. This is both democracy and federalism. So, a dominant Centre forcing its will on the States, leading to the deterioration in Centre-State relations, does not augur well for India.

Financing and conflict is one issue

- States face major issues. Some of them can be dealt with by each State without impacting other States such as in education, health and social services.
- But infrastructure and water sharing require States to come to an agreement.
- Issues such as currency and defence require a common approach.
- Expenditures have to be financed to achieve goals, which results in conflict. Revenue has to be raised through taxes, non-tax sources and borrowings.
- The Centre has been given a predominant role in raising resources due to the efficiency in collecting taxes centrally.
- Among the major taxes, personal income tax (PIT), corporation tax, customs duty and excise duty are collected by the Centre.
- GST is collected by both the Centre and the States and shared.
- So, the Centre controls most of the resources, and they have to be devolved to the States to enable them to fulfill their responsibilities.
- A Finance Commission is appointed to decide on: the devolution of funds from the Centre to the States, and the share of each State.
- The Centre sets up the Commission and has mostly set its terms of reference. This introduces a bias in favor of the Centre and becomes a source of conflict between the Centre and States.
- The States also pitch their demands high to try and get a larger share of the revenues. They tend to show lower revenue collection and higher expenditures in the hope that there will be a greater allocation from the Commission.

Inter-State tussles, Centre-State relations

- The States cannot have a common position as they are at different stages of development and with vastly different resource positions.
 - The rich States have greater resources while the poor ones need more resources in order to develop faster and also play catch up.
 - So, the Finance Commission is supposed to devolve proportionately more funds to the poorer States.
 - The rich States, which contribute more and get proportionately less, have resented this.
- What they forget is that the poorer States provide them the market, which enables them to grow faster. The poorer States also lose much of their savings which leak out to the rich States, accelerating their development.
- The Centre allocates resources to the States in two ways. First, on account of the Finance Commission award.
- Each State wants more expenditure in its territory. The Centre can play politics in the allocation of schemes and projects. For instance, it is accused of favouring Gujarat and Uttar Pradesh. The Opposition-ruled States have for long complained of step-motherly treatment.
- The autonomy of States is not to be confused with a freedom to do anything. It is circumscribed by the need to function within a national framework for wider good. It implies a fine balance between the common and the diverse.

Issues in federalism

- The Sixteenth Finance Commission has begun work. It should try to reverse fraying federalism and strengthen the spirit of India as a 'Union of States'.
- This is not only a political task but also an economic one. The Commission could suggest that there is even-handed treatment of all the States by the Centre and also less friction among the rich and poor States when proportionately more resources are transferred to poor States so as to keep rising inequality in check.
- The issue of governance, both at the Centre and in the States, needs to be flagged. It determines investment productivity and the pace of development. Corruption and cronyism lead to resources being wasted and a loss of social welfare.
- To reduce the domination of the Centre over the States, the devolution of resources from the Centre to the States could be raised substantially from its current level of 41%.
- The Centre's role could be curtailed. For instance, the Public Distribution System or MGNREGS are joint schemes, but the Centre asserts that it be given credit. It has penalised States that have not done so.
- This has become feasible with the changed political situation after the results of the 2024 general election.

170. Tonga volcano could cause unusual weather for rest of decade: study - The Hindu

Highlights:

- **Hunga Tonga-Hunga Ha'apai** (Hunga Tonga for short) erupted on January 15, 2022, in the Pacific Kingdom of Tonga.
- It created a tsunami, which triggered warnings across the entire Pacific basin, and sent sound waves around the globe multiple times.
- The eruption could have lingering effects on our winter weather for years to come.

Smoke cloud

- Usually, the smoke of a volcano and in particular the **sulphur dioxide** contained inside the smoke cloud ultimately leads to a cooling of the earth's surface for a short period.
- This is because the sulphur dioxide transforms into **sulphate aerosols**, which send sunlight back into space before it reaches the surface.
- This **shading effect** means the surface cools down for a while, until the sulphate falls back down to the surface or gets rained out.

Opposite Scenario in Hunga Tonga.

- Because it was an underwater volcano, Hunga Tonga produced little smoke, but a **lot of water vapour**.
- The enormous heat of the eruption transformed huge amounts of sea water into steam, which then shot high into the atmosphere with the force of the eruption.
- All that water ended up in the stratosphere
 - a layer of the atmosphere between about **15 and 40 kilometres** above the surface, which produces neither clouds nor rain because it is too dry.
- Water vapour in the **stratosphere** has two main effects:
 - It helps in the chemical reactions that destroy the ozone layer
 - It is a very potent greenhouse gas.

Recent Study

- The **large ozone hole** from August to December 2023 was at least in part due to Hunga Tonga.
- As the ozone hole lasted until late December, with it came a **positive phase** of the **Southern Annular Mode** during the summer of 2024.
- For Australia, this meant a higher chance of a wet summer, which was exactly opposite what most people expected with the declared **El Niño**.
- In terms of global mean temperatures, the impact of Hunga Tonga is very small.
- But there are some surprising, lasting impacts in some regions of the planet.
- The volcano seems to change the way some waves travel through the atmosphere and atmospheric waves are responsible for highs and lows, which directly influence our weather.

171. What grade of coal does India produce? - The Hindu

Highlights:

- The Gross Calorific Value (GCV), or the amount of heat or energy that can be generated from burning the coal, determines the gradation of coal.

<p>'High grade' and 'Low grade' coal</p> <ul style="list-style-type: none"> • Coal being a fossil fuel is a mixture of carbon, ash, moisture and a host of other impurities. • The higher the available carbon in a unit of coal, the greater is its quality or 'grade.' • There are 17 grades of coal by this metric from grade 1, or top quality coal, with a kilo of it yielding higher than 7,000 kcal, and the lowest producing anywhere between 2,200-2,500 kcal, as per a classification by the Coal Ministry. <p>Characteristics of Indian coal</p> <ul style="list-style-type: none"> • Indian coal has historically been evaluated as being high in ash content and low in calorific value compared to imported coal. • The average GCV of domestic thermal coal ranges from 3,500-4,000 kcal/kg compared to imported thermal coals of +6,000 kcal/kg of GCV. • Also the average ash content of Indian coals is more than 40% compared to imported coal which has less than 10% ash content. • The consequence of this is that high-ash coal when burnt results in higher particulate matter, nitrogen and sulphur dioxide. • Given this, the government, since 1954, has controlled the price of coal in a way that power companies were disincentivised to use high-grade coking coal for power generation. 	<p>Clean Coal</p> <ul style="list-style-type: none"> • Broadly, we get clean coal when the carbon content has been increased by reducing its ash content. • Coal plants have 'washing plants' on site which can process the coal in ways that reduce ash and moisture content. • They employ huge blowers or a 'bath' to remove fine, coarse ash. <ul style="list-style-type: none"> ◦ However, deploying such equipment is expensive and adds to the cost of power. • The other method to clean coal again requiring significant investment is coal gasification. • Here, the need to directly burn coal is bypassed by converting it into gas. • The resulting syngas, a mixture of carbon monoxide, hydrogen, CO2 and water vapour, is then cleaned and burned in a gas turbine to make electricity.
--	--

Future of coal in India

- Official data says that India in 2023-24 produced 997 million tonnes of coal, an 11% growth over the previous year. Most of this was produced by the state-owned Coal India Ltd and its subsidiaries.
- Despite stated commitments to transition India's electricity sector away from fossil fuel, **coal is the mainstay of India's energy economy.**
- Change, however, is in the air as for the first time this year, **renewable energy accounted for 71.5% of the record 13.6 GW** power generation capacity added by India in the first quarter of this year
- While **coal's share** (including lignite) of total power capacity **dropped below 50% for the first time since the 1960s.**

172. James Webb Space Telescope spots earliest-known galaxy: What a new study says - Indian Express

Context:

- NASA's James Webb Space Telescope (JWST) has spotted the earliest-known galaxy, one that is surprisingly bright and big considering it formed during the universe's infant stage.
 - This period spanning the universe's first few hundred million years is called cosmic dawn.

What do we know about the galaxy?

- This galaxy, called JADES-GS-z14-0, is about 1,700-light years away. A light year is the distance light travels in a year, which is 9.5 trillion km.
- The galaxy has a mass equivalent to 500 million stars the size of our Sun and is rapidly forming new stars — about 20 every year.
- Until now, the earliest-known galaxy dated to about 320 million years after the Big Bang, as announced by the JADES team last year.

- It's going to be challenging to understand just how something this large could form in only a few hundred million years.
- The fact that it's so bright is also fascinating, given that galaxies tend to grow larger as the universe evolves, implying that it would potentially get significantly brighter in the next many hundred million years.
- The JADES team in the same study disclosed the discovery of the second oldest-known galaxy, from about 303 million years post-Big Bang.
 - is smaller with a mass equal to about 100 million sun-sized stars, measuring roughly 1,000 light years across and forming about two new stars per year.

Why is the galaxy so bright?

- Main hypotheses have been advanced to explain the **luminosity of early galaxies**.
 - The first attributed it to supermassive black holes in these galaxies gobbling up material, which appears to be ruled out because the light observed is spread over a wider area.
 - The other hypothesis is that these galaxies are populated by more stars than expected

173. The delicate balancing of health-care costs- the hindu

Context:

- As we navigate the dynamic landscape of Indian health care, cost considerations are increasingly influencing every aspect of service delivery and patient care.

Healthcare Costs in India: Striking a Balance

- Rising healthcare costs in India are creating a complex situation. While ensuring affordability is key, some worry that price controls could harm quality and innovation.
- Studies show hospitals under financial strain may struggle to maintain quality care and develop new treatments.
- The goal is to reduce healthcare disparities without jeopardizing the economic health of providers.
- International examples, like Thailand's tiered pricing system, offer models for balancing cost and care.
- However, effective solutions require legal reforms that consider India's unique demographics and economic landscape.

Technology playing role-

- Telemedicine and AI can improve diagnostics and care coordination, especially in remote areas.
- Additionally, mobile health apps and wearable devices can help manage chronic conditions outside hospitals, lowering costs and improving outcomes.
- However, ensuring everyone has access to these technologies is crucial.
- Ultimately, data-driven insights are essential for shaping policy.
- This data can help create nuanced pricing structures and predict the long-term impact of cost controls on innovation and accessibility.

174. The bacteria that write new genes to cope with infections- The Hindu

Context:

- Amid the unprecedented challenges presented by the COVID-19 pandemic, a once obscure enzyme found itself in the spotlight: **reverse transcriptase**.
- The discovery of reverse transcriptase is a story unto itself. Researchers in the labs of **Howard Temin and David Baltimore** independently discovered it and published their findings.
- In his paper, Dr. Baltimore suggested that in the vesicular stomatitis virus, a protein called RNA polymerase was involved in reverse-translating RNA to DNA.

<p>A molecular biology revolution</p> <ul style="list-style-type: none"> The prevailing belief at the time was that in all living beings, hereditary information flowed only from DNA to RNA and from RNA to protein (a.k.a. the 'Central Dogma'). The discoveries of Drs. Temin and Baltimore showed information could flow the other way, too, with RNA giving 'rise' to DNA. The ability of cells to create DNA copies from RNA revolutionised research methods where researchers could reverse-transcribe messenger RNAs to pieces of DNA, clone that DNA into bacterial vectors, and study the function of the corresponding genes. In diagnostics, clinicians used reverse transcriptase to convert RNA to DNA and thus estimate the amount of viral material in a given sample. This technique quickly found wide application and use in the study of RNA viruses, including hepatitis B and the human immunodeficiency virus (HIV). 	<p>Retroelements in the human genome</p> <ul style="list-style-type: none"> The human genome is interspersed in many places with sequences, called elements, that appear to have originated from retroviruses. Thus, researchers call them retroelements. Evolutionary biologists believe these retroelements to have been transferred horizontally during the course of millions of years of evolution. <ul style="list-style-type: none"> Horizontal gene transfer refers to genes 'jumping' between organisms rather than from parent to offspring. And until recently, researchers also considered them to be "junk" elements: they were repeated through the genome and they seemingly did not confer any function to the human organism. In a recent paper in the journal Nature Communications, researchers extensively studied the expression of genes in different parts of the human brain from post-mortem brain samples. They reported that the expression of more than a thousand human endogenous retroviruses, a major class of retroelements in the human genome, could be associated with a risk of neuropsychiatric diseases in humans. Retroelements in the human genome and bacterial reverse transcriptases have a common evolutionary history as well as share functional mechanisms. Bacterial reverse transcriptases believed to be the precursors of their eukaryotic counterparts exhibit analogous mechanisms. The discovery of reverse transcriptase activity across the different domains of life underscores the enzyme's fundamental role in both prokaryotic and eukaryotic systems as well as a remarkable evolutionary continuity and functional versatility.
--	--

175. Health regulations need a base to top approach- The Hindu

Context:

- The subject of Health regulation has always been of interest to health programme managers but the challenge is unrealistic health-care quality standards.

<p>KEY HIGHLIGHTS</p> <ul style="list-style-type: none"> Governments at every level in India are known to draft policies which are near perfect. <ul style="list-style-type: none"> The Clinical Establishments (Registration and Regulation) Act, 2010, enacted 14 years ago, was not fully adopted by States. This is because State governments, in discussions with stakeholders, have realized that many provisions in the Act are impossible to implement. the Indian Public Health Standards, drafted by the government for its own health-care facilities in order to deliver quality health services. <ul style="list-style-type: none"> Yet in 17 years of existence, only 15% to 18% of government primary health-care facilities in India meet the government's own standards. <p>India has a mixed health-care system</p> <ul style="list-style-type: none"> The fact is that India has a mixed health-care system, where private health-care facilities and providers deliver nearly 70% of outpatient and 50% of hospital-based services. In States such as Maharashtra or Kerala, the health indicators are better not because these States have outstanding government facilities but because the facilities and clinics in the private sector are fulfilling the health needs of the people. Yet, when it comes to health-care regulation, there seems to be an unfair attempt to enforce the regulations in the private sector. <ul style="list-style-type: none"> Clearly, for effective regulation and adherence, the stakeholder should not feel they are being targeted. In health-care regulation, in the current scheme of things, the burden of responsibility is more on providers and facility owners. 	<p>Affordable care is one need</p> <ul style="list-style-type: none"> The private sector has various types from single doctor clinics, small nursing homes and medium-sized hospitals to large corporate hospitals. Single doctor clinics and small nursing homes are often the first point of contact for access and utilization of health services in India by middle-income and low-income populations, and are the real lifeline of health services. They deliver a large share of health services at a fraction of cost of that of the big corporate hospitals. Clearly, there needs to be supportive and facilitatory regulations to serve the public purpose of keeping health-care costs low and affordable. In regulatory aspects, expecting smaller facilities to meet the same standard would make it expensive for the smaller facilities, a cost that is likely to be transferred to patients, making health services unaffordable. There is a need for a differential approach for different types of facilities. Representatives of doctors' associations and the types of facilities for which regulations are being formed should be involved in the process of forming regulation. <p>Focus on the primary-caregivers</p> <ul style="list-style-type: none"> India needs to promote single doctor clinics apart from smaller health-care facilities, and nursing homes. These are what deliver primary care and contribute to keeping the cost of health care low. Every such facility and its doctors need to be supported rather than burdened with excess regulations. There is a need for fairness in implementations, time-bound decisions and renewal of licenses, promoting smaller health-care facilities with subsidies, and support for increased quality and safety. <ul style="list-style-type: none"> India's health-care system is already becoming skewed towards admission based in-patient services. Promoting providers and facilities that deliver out-patient care at lower costs. This would contribute to the goal of the National Health Policy, 2017 to deliver health services that should be people-centric, accessible, available, affordable, and have quality. This requires health regulations being drafted from bottom up and not top down, and implemented in a nuanced and calibrated manner.
--	--

176. Property is real, and so should the 'compensation' - The Hindu

Context:

- The United States President once quoted “Property is surely a right of mankind as real as liberty”.
- The right to property initially envisaged as a fundamental right and later as a constitutional right has witnessed an interesting history in the post-colonial era.
- No other right as enshrined in the Constitution has witnessed a tussle as fierce as between courts and the legislature.
- The genesis of this power struggle dates back to
 - the case of Bela Banerjee(1953) which involved the interpretation of Articles 19(1)(f) and 31(2) of the Constitution (prior to amendment).
 - The Supreme Court of India held that the word compensation in Article 31(2) postulated “a just equivalent of what the owner has been deprived of”.
 - To undo this interpretation, the Constitution (Fourth) Amendment was passed in 1955 amending, inter alia, Article 31(2) to expressly state that the courts could not delve into the question of inadequacy of compensation.
- To retaliate, the courts held that although the final compensation was non-justiciable, the principles fixed by the legislature to arrive at such determination would be open to scrutiny.

Word substitution

- Vide the Constitution (Twenty-Fifth) Amendment Act, 1971 the word “compensation” was substituted by the word “amount” which kept the interpretation of the courts at bay.
- The adequacy of such “amount” was consequently not open to judicial review.
- Though the validity of the Constitution (Twenty-Fifth) Amendment Act, 1971 was upheld in Kesavananda Bharati, the Supreme Court watered down the intended effect of the amended Article 31(2) by an interpretive process .
 - The majority in Kesavananda Bharati took the view that though the adequacy of the amount paid was not justiciable
 - the courts could still examine whether the principles fixed for determining such compensation were relevant.
 - After this decision, Parliament was convinced that the right to property remained a proverbial thorn in the goal of achieving a socialist state.
 - This was because the right to property, from a socialist point of view, was very much a citadel of the bourgeoisie.

A significant change

- After the defeat of the Congress in the general election of 1977, the Janata Party, which came to power, passed the Constitution (44th Amendment) Act, 1978.
- The right to property under Article 19(1)(f) was deleted from Part III and rehabilitated in the form of a constitutional right under Article 300-A.
- Article 31, which had witnessed much controversy in the matter of the determination of compensation, was also deleted.
- Article 300A reads that “no person shall be deprived of his property save by authority of law”.
- In the years that have followed the deletion of Articles 19(1)(f) and 31, the Supreme Court has held that the right to property is not only a constitutional right but also a human right.

Facets that are protected

- The recent decision of the Supreme Court in Kolkata Municipal Corporation has fleshed out different facets which are protected under Article 300-A.
- A person deprived of land by the state is entitled to be paid compensation which is just and reasonable. The Court has reiterated that deprivation or extinguishment of that right is permissible only upon restitution.
- Thus, the requirement of paying compensation. i.e., money's worth of the property acquired, which was the original position in the Bela Banerjee case has now been reinstated. The wheel has come full circle.

177. Challenge for farm sector: How to share growth gains- The Indian Express

Context:

- The key is not just to improve productivity, but to see to it that the productivity gains can be sustained
- As India traverses the road to Amrit Kaal, the agriculture sector's journey will be difficult, and filled with challenges.
- In this century, Indian agriculture has been grappling with how to move away from the old model. Policymakers have failed to ensure dignified livelihoods for farmers.
- We are confronted by a certain set of circumstances, changing which may be beyond our ability.
 - One, the climate is changing irreversibly for the worse. We are witnessing the beginning of erratic climatic events impacting crop production and livelihoods.
 - Two, the World Trade Organisation will not change and we will have to live with its mandate.
 - For many years, the US has deliberately crippled the dispute-settlement mechanism.
 - When it does become operational, Indian politicians are not likely to know how to wriggle out of its rulings domestically.
 - Three, the large number of small land holdings (85 percent of total arable land) fundamentally limits the scope for primary producers to live a life of dignity.
 - Four, the global priority to ensure low food prices for consumers is easiest achieved by artificially driving down farm-gate prices.
 - This makes farming environmentally unsustainable and economically unremunerative.
 - Five, depleting aquifers due to the insatiable demand for water for agriculture is reaching a threshold point where it won't be economically viable to extract water for irrigation.

Concerns that remain

- Investments in agricultural research and extension services have stayed below the level of inflation. Also, Agriculture markets are inherently unfair.
- Agriculture is a state subject, where the states do not work in tandem with national objectives, but use populist dole-outs rather than investing in the future.
- Free or unrealistically low prices at which cereals are distributed through the public distribution system continue to drive down farm-gate prices such that primary production remains an unenviable and unviable profession.
- Input subsidies like the skewed fertiliser subsidy leads to indiscriminate use of fertilisers, impacting the health of the people and the planet.
- Public debt, both at central and state government levels, leaves less financial flexibility to plan for the long term and does not allow for endless further subsidies.
- Many states are in line to be technically categorised as bankrupt. A sovereign bankruptcy procedure for states is missing.
- Lastly and most importantly, inept governance and lack of accountability in the ministries managing the agricultural sector at the Centre and the states
- The key challenge is not just to improve agricultural productivity, but ensuring that the productivity gains can be sustained and are broadly shared. That growth is inclusive.
- A mere tinkering of the framework will not suffice and if nothing were to fundamentally change, including the process of framing policies, we may find ourselves chasing chimeras and living our nightmares.

178. Cooperative-based distribution model mooted for power supply to farmers in Rajasthan- THE HINDU

Context:

- A dialogue on systemic issues of poor electricity supply faced by the farmers in Rajasthan has recommended the establishment of a farmers' cooperative-based distribution model with the regulatory viability under the Electricity Act, 2003.
- The critical need to increase regulatory accountability for supply of electricity to agricultural consumers was also raised on the occasion.

Power Struggles: Why Farmers Need a Solution

- Indian farmers face a major hurdle - unreliable electricity.
- They often get only four hours of power a day, instead of the promised six.
- This low and unstable voltage damages equipment crucial for irrigation, leading to crop losses and higher costs.

Farmers' cooperative-based distribution model

- This model brings farmers together to manage and distribute power in their communities. They'd build their own system to meet the specific needs of agriculture, like irrigation and powering equipment.
- This approach offers several benefits.
- Farmers would gain control of their energy resources, ensuring reliable access to electricity.
- They could tackle the challenges that currently hurt their production. Additionally, these cooperatives could boost local economies and make rural communities more resilient.

179. India's GDP growth is impressive, but can it be sustained?- The Indian Express

Context:

- It will be important for the new government to ensure that the benefits of high growth trickle down to the lower income categories
- India's GDP data was keenly awaited, Indeed, it has surpassed market expectations, with a growth of 8.2 per cent in 2023-24 as against 7 per cent in 2022-23.
- It is to be noted that the growth in 2023-24 is much higher than MOSPI's second advance estimate of 7.6 per cent.
- While overall GDP growth is impressive, it is important to understand some of the nuances of the data to infer the sustainability of the growth this year.
- Another important point is the sharp divergence of 1 percentage point between GDP and GVA growth in 2023-24.
 - This is mainly because of sharp growth in net taxes (due to higher tax collection and lower subsidies). This has also aided in pushing up the GDP growth.
- If we look at the sectoral break-up, as expected, overall agriculture value added growth has been muted, given the poor monsoon last year.
- Supported by lower input prices, manufacturing GVA has shown a healthy recovery, with growth of 9.9 per cent in 2023-24.
- While services sector growth has been healthy at 7.6 percent.
- The construction sector has remained robust, recording a growth of 9.9 per cent

GDP Expenditure Side:

- If we look at the break-up of GDP from the expenditure side, we find that the overall GDP growth is not very broad-based.
- Private consumption, the main pillar of the economy, has grown by a feeble 3.8 per cent in 2023-24. This is the slowest consumption growth rate in the last two decades (excluding the pandemic year contraction).
- Investment, the other pillar of the Indian economy, has grown by a healthy 9 per cent. Investment in the economy has been mainly led by the government sector.
- Central government's capex has grown by a healthy 28 per cent in 2023-24,

Growth and Exports:

- The third pillar of India's economy has been muted due to weak global growth.
- While India's services exports have remained healthy, merchandise exports specifically felt the pinch of global slowdown.
- We can expect India's GDP growth to moderate. However, it is estimated to be still healthy at around 7 per cent this year.
- For the growth momentum to be sustained, the most critical aspect would be an improvement in private consumption.
- While the higher income category has been spending, the lower income category remains cautious amidst high inflation and low wage growth.
- Rural demand had also been weak due to poor monsoon last year.
- With normal monsoon expected this year, we can expect a revival in rural consumption demand.
- Moderation in food inflation will be another prerequisite for rural consumption revival.
- Improvement in the employment scenario will also be an important piece for consumption revival.
- Improvement in the employment situation in the unorganised sector will also be critical.
- A pick-up in the private capex cycle is another important requirement for sustained growth momentum.
- The private sector is showing increasing intent to invest, as reflected by the CMIE data on investment projects announced.
- Of course, a sustained revival in consumption demand would be most critical for private investment to pick up meaningfully.

Global Scenarios

- With the global growth outlook improving, India's exports are likely to improve.
- However, with geo-political tensions brewing, the risk of supply shocks continues.
- The recent uptick in global commodity prices, specifically industrial metals prices, could adversely impact the Indian economy through higher input cost.

180. Road mobility in India is both unsustainable and unjust - Mint

Context:

- The deterioration of existing roads results in more accidents, lower fuel efficiency and higher air pollution

Key highlights

- India is building a lot of new roads, but some people say it's not the best way to spend money.
- India has more roads per person than China, but the quality is often poor.
- This leads to accidents, wasted fuel, and more pollution, which causes many health problems. Even though India wants to reduce traffic deaths, this approach might not work.
- Building more roads can also hurt the environment.
- Cars and trucks are a major source of pollution, and expanding roads without a good plan can actually make traffic worse. In some cities, like Delhi, new expressways haven't solved congestion problems.
- Instead of focusing on cars, India should invest in public transportation.
- Trains and buses are better for the environment and can move more people.
- Additionally, current road projects don't consider everyone's needs.
- They often favor high-speed traffic over pedestrians and cyclists, and they can harm the environment and displace communities.
- A better approach would be to plan for sustainable transportation that benefits everyone.

181. Global debt crisis: Nations spending more on interest payment than education & health- DOWN TO EARTH

Context:

- With hardly six years left for the Sustainable Development Goals (SDGs) to be met by 2030
- Serving loans is a key expenditure for many countries that keeps them away from development funding, like on health and education.

KEY HIGHLIGHTS

- This report, titled "A World of Debt 2024," paints a concerning picture of global finances. Debt has ballooned to an alarming level, with every person on Earth owing roughly USD 39,000.
- This massive debt burden is choking governments, forcing them to spend more on interest payments instead of crucial areas like healthcare and education.
- Household, business, and government debt have all reached historic highs.
- Developed countries are offering less traditional aid, replacing it with loans that add to the debt load of developing nations.
- These countries are especially vulnerable, paying exorbitant interest rates and struggling to invest in their own development.
- Countries risk defaulting on their debts, leading to crippling cuts in essential programs.
- This is already happening in Africa, where education and healthcare budgets are suffering due to heavy debt burdens.
- High debt levels also hinder progress on the UN's Sustainable Development Goals (SDGs) as nations struggle to allocate resources towards these crucial initiatives.

Conclusion

- To address this crisis, the report proposes a global financial system overhaul.
- It calls for increased participation of developing countries in financial decision-making, a mechanism to manage rising debt costs, and more readily available financial support during crises to avoid excessive borrowing.
- Additionally, mobilizing resources to expand access to affordable, long-term financing is seen as a key step towards a more sustainable future.

182. Pakistan, Denmark, Greece, Panama and Somalia are set to get seats on the UN Security Council- LIVE MINT

Context:

- Denmark, Greece, Pakistan, Panama and Somalia were set to get seats on the UN Security Council in a secret ballot Thursday in the General Assembly.

Key highlights

- The 193-member world body is scheduled to vote to elect five countries to serve two-year terms on the council.
- The 10 non-permanent seats on the 15-member council are allotted to regional groups who usually select their candidates but sometimes can't agree on one.
- Last year, Slovenia soundly defeated Russia's close ally Belarus for the seat representing the East European regional group, a vote that reflected strong global opposition to Russia's full-scale invasion of Ukraine.
- This time, the regional groups put forward Somalia for an African seat, Pakistan for an Asia-Pacific seat, Panama for a Latin America and Caribbean seat, and Denmark and Greece for two mainly Western seats.

Why UNSC require "reforms"?

- The formation of the UN Security Council, comprising five permanent members — China, France, Russia, the United Kingdom, and the United States — occurred nearly eight decades ago.
- At that time, the global landscape comprised approximately 50 independent nations.
- Despite the significant increase in the number of sovereign states to around 193 today, the control over UNSC membership has remained concentrated in the hands of the original five permanent members.
- India's Efforts:** India, alongside Japan, Germany, and Egypt, has actively advocated for UNSC reform.
- The proposal put forth by this coalition seeks to address the imbalance in representation and enhance the Council's effectiveness.
- Challenges Faced:** Obtaining consensus for UNSC reform has proven challenging. While some nations have expressed support, others have been hesitant or resistant to change.
- Overcoming these hurdles necessitates concerted efforts and strategic diplomacy.

183. Indian Navy gets its first woman helicopter pilot - THE HINDU

News:

- Sub Lieutenant Anamika B. Rajeev became the Indian Navy's first woman helicopter pilot during a passing out parade held in the naval air station INS Rajali at Arakkonam

India Opens Doors for Women in the Military

Army:

- Women officers can now have long-term careers (Permanent Commission) in many areas
- Women can train alongside men at the prestigious National Defence Academy (NDA). New batches start every six months.
- The Army is opening its cockpits to women pilots in the Corps of Army Aviation.
- Women can also join the Military Police as enlisted soldiers (Other Ranks).

Navy:

- Since June 2023, women can become officers in almost every branch of the Navy, except for submarines (for now).
- Women officers are already serving on warships and in specialized roles like Naval Air Operations.
- They can also fly drones (Remotely Piloted Aircraft) for the Navy.
- The Navy is opening up more training spots for women cadets in both the NDA and the Indian Naval Academy (INA).

Air Force:

- The Air Force provides excellent facilities for its women personnel.
- Women officers can compete for positions in any branch or role, including combat missions.
- The Air Force is actively recruiting women through programs like the NDA and NCC Special Entry.
- They're also running campaigns to get the word out about these exciting opportunities for women.

More Women in Uniform

- Right now, over 11,400 women serve in India's Army, Navy, and Air Force.
- The Army has the most women, with over 7,000, but that number is growing across all branches.
- This figure includes both officers and enlisted personnel, as well as those in medical professions.
- There are nearly 5,000 women serving in non-medical roles across the three forces.

184. Is it time for proportional representation? - The Hindu

Context:

- The ruling National Democratic Alliance (NDA) has won 293 seats with a 43.3% vote share while the Opposition bloc INDIA (including Trinamool Congress) has secured 234 seats with a 41.6% vote share. Other regional parties and independents polled around 15% but ended up with only 16 seats in total.

What is first past the post system:

- The First Past the Post System (FPTP) is followed in elections to the Lok Sabha and Legislative Assemblies.
 - Under this system, the candidate who receives more votes than any other in a constituency is declared elected.
 - This is the system that is followed for elections in democracies like the U.S., the U.K. and Canada.
 - The primary advantage of the FPTP system is that it is simple and the most feasible method in a large country like India.
- FPTP provides greater stability to the executive in our parliamentary democracy because
 - the ruling party/coalition can enjoy a majority in the Lok Sabha/Legislative assembly without obtaining a majority of the votes (more than 50%) across constituencies.
- The issue with FPTP is that it may result in over or under representation of political parties when compared to their vote share.
 - In the first three elections after independence, the Congress party won close to 75% of seats in the then Lok Sabha with a 45-47% vote share

What is proportional representation?

- The Proportional Representation (PR) system ensures representation of all parties based on their vote share.
- The most commonly used PR system is where voters vote for the party (and not individual candidates) and then the parties get seats in proportion to their vote share.
- There is usually a minimum threshold of 3-5% vote share for a party to be eligible for a seat.
- The main criticism against the PR system is that it could potentially result in instability as no party/coalition may obtain a majority to form the government in our democracy.
- Further, it may result in the proliferation of political parties based on regional, caste, religious and linguistic considerations that may promote casteist or communal voting patterns.
- In order to maintain balance between stability and proportionate representation, the system of Mixed Member Proportional Representation (MMPR) can be considered.

What are international practices?

- Presidential democracies like Brazil and Argentina have the party list PR system.
- So do parliamentary democracies like South Africa, the Netherlands, Belgium and Spain.
- In Germany, that follows the MMPR system, out of the 598 seats in the Bundestag (their equivalent of our Lok Sabha), 299 seats (50%) are filled from constituencies under the FPTP system.
- The voters also provide their preference for a party in the ballots. The balance 299 seats (50%) are filled by apportioning them amongst parties that secure at least 5% votes, based on their percentage of votes.
- Similarly, in New Zealand, out of the total 120 seats in the House of Representatives, 72 seats (60%) are filled through the FPTP system from territorial constituencies.
- The remaining 48 seats (40%) are allotted to various parties that secure at least 5% votes, based on their vote share.
- This system is likely to provide the required stability in a parliamentary democracy like India while also ensuring representation for all parties based on their vote share.

What can be the way forward?

- The law commission in its 170th report, 'Reform of the electoral laws' (1999), had recommended the introduction of the MMPR system on an experimental basis.
- It had suggested that 25% of seats may be filled through a PR system by increasing the strength of the Lok Sabha.
- While it had recommended to consider the entire nation as one unit for PR based on vote share, the appropriate approach would be to consider it at every State/UT level considering our federal polity.
- It is also pertinent to note that the delimitation exercise for increasing the number of seats is due based on the first Census to be conducted after 2026.
 - The population explosion that happened in our country during the last five decades has been uneven among various regions.

- Determining the number of seats in Lok Sabha solely in proportion to population may go against the federal principles of our country and may lead to a feeling of disenchantment in the Southern States
- However, in the event of increasing the seats during the delimitation exercise, the MMP system may be considered for incremental seats or at least 25% of the total seats to be filled from each State/UT.

185. What are the powers of the Speaker - The Indian Express

Context:

- As the 18th Lok Sabha prepares to meet, key allies in the National Democratic Alliance (NDA), are said to be jockeying for the post of Speaker.
- After a pro tem or temporary Speaker administers the oath to new members, the Speaker is chosen to be the Presiding Officer of the House.

Constitutional mandate

- The Constitution of India provides for the offices of the Speaker and Deputy Speaker who, according to Article 93, are to be elected after the commencement of the House.
- There are no specific qualifications for becoming Speaker, which means any member is entitled to be considered.
- The salary of the Speaker is drawn from the Consolidated Fund of India unlike for other MPs, which flow from a statute voted on by the House itself.

Powers of the Speaker

- The conduct of government business is decided by the Speaker in consultation with the Leader of the House.
 - Prior permission of the Speaker is required for members to ask a question, or to discuss any matter
 - There are Rules and Procedure for the functioning of the House, but the Speaker has vast powers in ensuring these Rules are followed.
 - This makes the impartiality of the Speaker a crucial check and balance for the Opposition to have its say in the House.
- The Speaker decides the admissibility of a question raised by a member, as well as how the proceedings of the House are published.
- The Speaker has the power to expunge, in full or in part, remarks that she may consider to be unparliamentary.
- If the Speaker is of the opinion that is “unnecessarily claimed”, can simply ask the members who are for ‘Aye’ and those for ‘No’ respectively.
- One of the most important times when a Speaker’s impartiality impacts the Opposition is when a motion of no-confidence is moved against the government.
- Although it is rare that a Speaker is required to give her casting vote, in case of tie of votes.

Disqualification of members

- For the Opposition, the realities of the power of the Speaker under the Tenth Schedule of the Constitution are perhaps more significant than how the House is conducted.
- The Tenth Schedule or the anti-defection law, gives the Speaker of the House the power to disqualify legislators who ‘defect’ from a party.
- In the landmark case Kihoto Hollohan versus Zachillhu in 1992, the Supreme Court upheld the power vested in the Speaker and said that only the final order of the Speaker will be subject to judicial review.
- In 2020, the Supreme Court had ruled that Speakers of Assemblies and Lok Sabha must decide disqualification pleas within three months except in extraordinary circumstances.

186. Impact of Oriental despotism and the idea of otherness- The Hindu

Context:

- It was Aristotle who provided a clearer and more theoretical foundation for the concept in his book Politics.
- He regarded despotism as a legitimate and hereditary form of monarchy, particularly suitable for societies perceived as barbarous, like Persia, where the monarch wielded absolute power, due to people's inclination towards subordination.

Various interpretations of the concept

- The limited understanding of Asiatic societies, shaped by a Eurocentric perspective, led to misconceptions about Asians,
- These works reinforced the idea of Oriental otherness, creating a separation between the so-called superior European societies and the inferior Asiatic societies.
- By the late 17th and early 18th centuries, travellers' accounts of Persian monarchies shaped the understanding of Oriental despotism.
- French physician François Bernier criticised the despotic government of the Mughal Empire he visited.
- He highlighted the stark wealth disparity between rich princes and poor subjects, attributing it to the lack of private ownership rights.
- Such a view helped challenge the uniform interpretation of Asiatic governments and emphasised the need for empirical experience in understanding political systems.

Oriental despotism and Enlightenment

- During the Age of Enlightenment, theorists from countries such as France critiqued the authoritarian monarchy within their own nation.
- The concerns of the period are reflected in the fact that many drew parallels between Louis XIV's rule and that of Eastern despots.
- The French philosopher Montesquieu analyzed despotism as an autonomous form of government which was different from Aristotle's monarchy.
- Montesquieu also examined the relationships between climate, religion, manners, economy, and laws, laying an empirical foundation for the concept.
 - Like Montesquieu's emphasis on the role of religion in despotism, many other theories also linked it to theocracy.
 - However, many criticised Montesquieu's limited understanding.
 - French writer Voltaire, explained how Montesquieu's argument did not hold.
 - Orientalists critiqued the notion that limitless authority existed in Asia, citing examples of princely states in India.
- Conversely, the Physiocratic school admired and promoted systems with central authority, like that in China, which managed economic and social laws.
 - These perspectives, emphasising efficiency, portrayed despotism positively.
- Colonisation of Asia by Europe, provided various perspectives about governance in Asian countries emerged due to increased interaction with the local populations.
- Detailed accounts about the East by diplomats and administrative staff aimed at ensuring the smooth functioning of authority, contributed to a more nuanced understanding of the East.

Role in the Asiatic mode of production

- The concept took a new turn when German philosopher Georg Wilhelm Friedrich Hegel used it to understand the Asiatic mode of production.
- He viewed Oriental despotism as the initial stage of historical development, where individual autonomy was limited, and the universal spirit was concentrated in a single free person — the despot.
- Later, German sociologist Max Weber explored the concept further to explain the differences between Mediterranean and Asiatic societies.
- He considered economic and geographical factors, arguing that the agrarian needs in Asian countries led to a more centralised system of power, rigid and concentrated on the ruler, while Mediterranean societies became more secular and capitalistic.
- The concept of Oriental despotism evolved from its origins in Greek thought, through medieval adaptations and Enlightenment ideas, to explain power in agrarian societies across Asia.
- Although its theoretical relevance declined with the rise of post-colonial theories and global historical perspectives, its influence on European culture remains significant.
- The persistent influence of Oriental despotism on European culture is seen in the complex interaction between ideas, experiences, historical views, and political attitudes toward Asian countries.

187. Who are the Satnamis, the Dalit religious community with a history of protests - The Indian Express

Context:

- Members of the Satnami religious sect set fire to the office of Police in central Chhattisgarh, after alleged inaction over the desecration of a religious site at Amar Cave in the district.
- The desecrated shrine, known as Jaitkham, at the birthplace of Guru Ghasidas, an 18th century saint to whom the Chhattisgarh Satnamis trace their theological lineage.

Key highlights

- Scheduled Caste Satnami Samaj or Satnam Panth live mainly in Chhattisgarh and contiguous areas of Madhya Pradesh.

<p>Early Satnamis of Narnaul</p> <ul style="list-style-type: none"> • In 1657, a mendicant named Birbhan, who was inspired by the teachings of Kabir, founded a Satnami community in Narnaul in present-day Haryana. • The Mughal court historian Khafi Khan (1664-1732) wrote that the Satnamis in the pargana of Narnaul and Mewat, whose livelihood and profession is usually agriculture and trade in the manner of Banyas • "Ritual and superstition were condemned, and allegiance was rendered to Kabir. • Initially, most Satnamis belonged to an "untouchable" caste engaged in leatherwork. The community has, however, moved away from the profession over time. <p>Revolt against Aurangzeb</p> <ul style="list-style-type: none"> • "If anyone should want to impose tyranny and oppression upon [the Satnamis]... they will not tolerate it; and most of them bear arms and weapons," Khafi Khan wrote. • In 1672, Satnamis living in present-day Punjab and Haryana rose in revolt against Aurangzeb's ever-increasing tax demands. • The Mughals eventually crushed the rebellion and killed thousands of Satnamis. Despite lacking weapons and equipment, the Satnamis fought valiantly and "repeated scenes of the great war of Mahabharata", the Mughal chronicler Saqi Mustad Khan wrote in the Maasir-i-Alamgiri. 	<p>Revival under Ghasidas</p> <ul style="list-style-type: none"> • Aurangzeb all but wiped out the community, which would see a revival only in the mid-eighteenth century — in present-day Uttar Pradesh under Jagjivandas, and in present-day Chhattisgarh under Ghasidas. • There are several theories as to the sources of Ghasidas' inspiration and spiritual development — from Sant Ravidas (15th or 16th century) to Kabir. • However, "most present-day Satnamis either deny or know nothing of a connection between Ghasidas and the previous Satnami movements" in northern India. • Nonetheless, the religious philosophy of Guru Ghasidas echoed that of the older Satnamis • Ghasidas also asked his followers to abstain from eating flesh, consuming alcohol, smoking, or chewing tobacco. • He asked them to use brass utensils instead of clay, stop working with leather and carcasses, and to wear a necklace of beads made from tulsi, like those worn by the Vaishnavas and Kabirpanthis. • He also told his followers to drop their caste names and use 'Satnami' instead. <p>The Satnamis today</p> <ul style="list-style-type: none"> • At the time of Ghasidas' death, he stipulated a lineage of gurus who would lead the sect after him, starting with his son Balakdas. • By the late 1800s, a two-tiered organizational structure developed with the guru at the top, and several village-level priests below him. • These priests perform marriages, mediate disputes, meted out penance as well as acted as intermediaries in the organization. • Over the years, many Satnamis adopted caste-Hindu practices, beliefs and rituals, and came to see themselves as part of the Hindu religious mainstream. • Some started to worship idols of Hindu Gods, and claimed to be of Rajput or even Brahmin lineage. • Satnamis are now an increasingly assertive political force. Satnami leaders enjoy clout over not just members of the sect, but also over the rest of Chhattisgarh's 13% SC population.
---	---

188. Singular focus- The Hindu

Context:

- The portfolios of many of the newly sworn-in Ministers of the 18th Lok Sabha signal no significant changes from what they held in the previous regime.
- The 18th Lok Sabha also includes five Ministers of State with independent charge.

One Ministry

- However, only one Minister is responsible for the Departments of Space (DoS) and Atomic Energy (DAE), the Ministries of Earth Sciences (MoES), Science and Technology (MST), and Personnel, Public Grievances and Pensions.
- Each of these ministries or departments by itself is a handful these days.
 - The DoS is grappling with the entry of private sector players in the national space programme as well as managing the development of the maiden human spaceflight mission and new launch vehicles.
 - The MoES is involved in missions to explore the seabed for mineral resources, an enterprise just beginning to feature in multilateral fora as well as climate adaptation and mitigation.
 - The Ministry of Science and Technology oversees India's three foremost research departments at a time when the world is eager to test artificial intelligence, build quantum computers, develop and deploy multi-omics approaches in sectors from agriculture to medicine, and invent advanced energy storage solutions.
 - The DAE has announced plans to rapidly advance nuclear power, which includes starting phase two of its reactors programme and commissioning one facility every year.

Increasing Demand

- Just the sheer amount of technical divergence in the offing here, and their evolving interactions with society at large, merits more than a shared Minister of State.
- The fields these bodies oversee also suffer many persistent problems. To pick a few:
 - the timelines of fellowship and grant disbursements for young researchers are often farcical;
 - facilities that can support interdisciplinary research are largely localised and inimical to collaboration;
 - cutting-edge research is hamstrung by vacillating regulations;
 - intellectual property rights protection is less than airtight, and
 - translational research is bare and restricted to some sectors.
- Importantly, the gross domestic expenditure on research and development as a fraction of GDP has been declining since 2008-09.
- While demands for more money should be preceded by capacity building that can productively absorb these funds, the growth of that capacity has been in fits and starts.
- Among other things, India sorely needs a separate Minister, ideally of Cabinet rank, for each of its major nodal research bodies to escape their long-standing rut, and have their needs met and problems solved in meaningful fashion.

189. Why Centre should not junk arbitration to settle disputes- The Indian Express

Context:

- The Finance Ministry announced a surprising policy decision.
- After trying to promote India as a hub for arbitration for decades, the Government of India now feels that arbitrations do not work for them and that the arbitration clause should be dropped from all future government contracts (except in relation to minor disputes of a value of Rs 10 crore or less).

New Policy

- The new policy provides that the government departments should, amicably settle as many disputes as possible in overall long-term public interest
- To facilitate amicable settlement, the government agencies will constitute "high-level" committees composed of former judges/retired senior officials to vet or approve such settlements.
- If settlement efforts do not work out, the dispute will be left to the courts for adjudication.
- The core reason given for this dramatic shift in policy is the government's perception that arbitrators often lack integrity and collude with private parties
- Arbitrators are meant to be independent and impartial and decide disputes on merits. They are not there to toe the government line or do its bidding.
- The government should recognise that adverse orders do not necessarily mean that the tribunal has been compromised.
- It matters little that the settlement is approved by a "high-level" committee as it will remain a voluntary, administrative decision. A mediator (if involved) cannot advocate any particular position.
- In terms of transparency and accountability, a settlement can never rest on an equal footing with an award
- An Award is issued following a judicial process and by a process known to law .

Government's Attitude

- The government's current attitude can be seen from its 2023 Vivad se Vishwas - II scheme for contractual disputes, which says when an arbitral award is rendered, the government may, instead of honoring the award, agree to a 35 per cent discount on the sum awarded by way of a settlement.
- Finally, if there is no settlement, the aggrieved party is left to the mercy of the courts.
 - There can be no two opinions that the courts are not equipped to handle heavy commercial disputes in any sensible way.
 - The courts are so overworked that they are barely able to deal with the award challenge proceedings (where the scope of judicial review is minimal).
- The 2015 Amendment to the Arbitration Act, prescribes that award challenges shall be disposed off expeditiously "and in any event" within one year.
- Arbitrations may not be perfect, but they are clearly more workable than court litigation.
- Effective dispute resolution methods are a necessary adjunct to economic growth.
- It is clear that the government has not thought this through, including how it can better address its concerns and what it can do to improve arbitrations.
- The policy change is short-sighted and needs a swift reversal.

190. Red Fort case: What are the standards for awarding death sentence, the President's 'mercy' power- INDIAN EXPRESS

News:

- President has rejected a mercy petition filed by Pakistani national Mohammed Arif who was sentenced to death for the December 22, 2000 terrorist attack at the Red Fort in which three people including two Army jawans were killed.

India's President Holds Power to Grant Clemency

- The Indian Constitution grants the President the authority to show mercy to convicted criminals.
- This includes pardoning them entirely, reducing their sentences, or delaying their execution (Article 72).
- Governors have similar powers, but not for death sentences (Article 161).
- The President isn't completely independent in these decisions. Supreme Court rulings require them to consider advice from the Cabinet.
- The President can only ask the Cabinet to reconsider once if they disagree (Article 74).
- A new law, the Bharatiya Nagarik Suraksha Sanhita (BNSS), proposes to streamline the process for death row inmates seeking mercy from the President.
- This would eliminate appeals against the President's choices, making their decisions final.
- Courts wouldn't be able to review the reasons behind the President's mercy decisions either.

Death Penalty and Legal Considerations

- Capital punishment is legal in India, but the Supreme Court restricts it to "rarest of rare" cases (Bachan Singh v. State of Punjab, 1980).
- Courts have also asserted their right to review the President or Governor's mercy decisions (Epuru Sudhakar vs Andhra Pradesh, 2006).
- The right to life (Article 21) applies to death row inmates as well (Shatrughan Chauhan vs Union of India, 2014).
- Unreasonable delays in execution due to pending mercy petitions can lead the courts to intervene and change the sentence to life imprisonment.

Debate on the Death Penalty

- India's Law Commission has recommended abolishing the death penalty for most crimes, keeping it only for terrorism and war (262nd Report, 2015).
- This system offers a final chance for those facing death row to seek clemency from the President, but with limitations on the President's ultimate power.

191. Recalcitrant jumbo – The Hindu

Context:

- The RBI's Monetary Policy Committee (MPC) has for an eighth consecutive meeting chosen to leave the benchmark repo rate unchanged at 6.50% on concern that 'elevated food inflation could derail' its efforts to ensure durable price stability.

Highlights:	Monetary Policy Committee
<ul style="list-style-type: none"> • Governor, who had just flagged the risk that stubborn food price gains pose to the overall disinflation path as justification for the MPC's stand. • Food inflation as measured by the Consumer Food Price Index accelerated to a provisional 8.7% in April, from March's 8.52%, and <ul style="list-style-type: none"> ◦ Recent indicators suggest that price gains spurred by a surge in tomato, onion and potato prices may have quickened even further in May. • The Centre for Monitoring Indian Economy (CMIE) forecast on June, <ul style="list-style-type: none"> ◦ Headline retail inflation likely increased last month to 5.14%, driven by acceleration in food price gains. ◦ The CMIE cited last month's heatwaves as the cause for the rise in the costs of fruits and vegetables. 	<ul style="list-style-type: none"> • The MPC, which voted by a 4-2 majority to "remain focussed on withdrawal of accommodation to ensure <ul style="list-style-type: none"> ◦ that inflation progressively aligns to the target" of 4%, ◦ flagging the challenges it faces in achieving this goal as increasing adverse climate events trigger supply shocks make it very hard to foresee the food price trajectory. • The MPC is also only too aware that besides the threat from <ul style="list-style-type: none"> ◦ Escalating food costs, which remain vulnerable to the precariously low water storage levels at the country's reservoirs as well as the ongoing exceptionally hot summer temperatures, ◦ Rising prices of industrial metals could undermine the deflationary trend in core inflation. ◦ Adding the uncertain outlook for crude oil prices given the tensions in West Asia and the output cuts being implemented by the OPEC+ producer nations, and it is a recipe for heightened uncertainty on the inflation path. • The RBI's latest round of surveys underline precisely why price stability is the central concern for policymakers. • While households' surveyed in May expect inflation to quicken for all major product groups, both over the three months and one year ahead periods. • Consumer confidence too moderated from the March survey with an increased majority of almost 80% of respondents expecting price gains to accelerate in one year's time. • The RBI Governor is absolutely justified in maintaining an unwavering focus on anchoring inflation expectations, as he put it, "the required foundation for sustained" long-term growth.

—It's about quality—

192. India's looming financial crisis- The Hindu

Context:

- Rapid credit growth is akin to a siren.
- It lures economies with the promise of prosperity but can lead them into crises.
- Each financial boom is framed as a story of financial innovation and good times.
- Governments and market participants dismiss previous crises that followed credit booms by invoking the mantra “this time is different”.

A lofty and dangerous narrative

- India is in the midst of similar folly, driven by policymakers wedded to an unhinged hype about the country's performance and prospects.
- The ‘this-time-is-different’ theme touts India's digital infrastructure as the catalyst for financial innovation and inclusion, promising growth and equality.
- Ironically, this lofty narrative has enabled a poorly regulated financial sector and consumers living beyond their means to generate a lending surge.
- Both international and domestic analysts are applauding this surge.
- In 2023, the International Monetary Fund (IMF) praised the performance of the Indian financial sector, citing robust growth in bank lending and low levels of non-performing assets.
- Similarly, the National Council of Applied Economic Research cheered a 20% increase in bank lending over the previous year as signaling bright prospects.
- This celebration of credit growth deflects attention from the deep-rooted jobs' and human capital deficit; and it extends the hype into dangerous territory.
- The truth is that when lending expands, the financial sector looks in good health as new loans pay off old ones.
- The IMF knows this history well: heavily indebted households and businesses sharply reduce spending to repay their debt, causing an economic crunch.
- A household debt boom is a quintessentially “bad” boom. It does not add to productive capacity but, instead, bids up domestic prices, making the country less competitive.

A chaotic financial services industry

- Making matters worse, Indian-style liberalisation has promoted a large and chaotic financial services industry.
- At the top are 30-odd large providers, scheduled commercial banks and major non-banking financial institutions (NBFCs), all with a history of rogue behaviour.
- But especially after COVID-19, financial services providers redirected lending toward households eager to borrow in lieu of stagnant incomes.
- The newly emergent fintechs led this charge by offering loans to desperate households at extortionary interest rates.
- The poster child for unsecured consumer borrowing is credit card debt. In January 2024, Indians owned almost 100 million credit cards, up from 20 million in 2011.
- As the Reserve Bank puts it, explosive credit card growth has attracted “below-prime” or riskier borrowers.
- The source of the impending crisis lies in a paradox: despite buoyant credit growth, household consumption is increasing at an excruciatingly slow pace.
 - Households are struggling; their savings rates have declined and they are boosting meagre consumption by borrowing money.

A solution

- Indian policymakers have committed themselves to the notion that finance will spur growth and help overcome the severe developmental handicaps in human capital.
- As the risks of a financial crisis grow, an acute job shortage persists, reflected most poignantly in a catastrophic regression of the workforce back to agriculture.
- Preventing the crisis requires surgically downsizing the financial services industry to better match lending capacity and productive borrowing needs, and weakening the rupee to help expand exports and cushion the downturn when it comes.
- History makes clear that rapid credit growth and an overvalued exchange rate are a lethal combination.
- After all, the weak and vulnerable will bear the burden of the crisis, as the dire employment situation becomes worse — and stark inequalities become starker.

193. A push for more climate action- The Hindu

Context:

- The International Tribunal for the Law of the Sea (ITLOS) delivered an advisory opinion sought by the Commission of Small Island States (COSIS) concerning the specific obligations of the Parties to the United Nations Convention on the Law of the Sea (UNCLOS) on climate change mitigation.
- The COSIS is an association of small island states set up in 2021.

<p>New elements</p> <ul style="list-style-type: none"> • The ITLOS took a radical step by accepting the request of COSIS with the aim of identifying the obligations of states. • ITLOS, in its Opinion, laid down very clearly that under Article 194(1) of the UNCLOS, <ul style="list-style-type: none"> ◦ “the Parties have specific obligations to take all necessary measures to prevent, reduce and control marine pollution from greenhouse gas emissions (GHG)”. • The surface ocean absorbs around a quarter of the CO₂ emitted into the atmosphere, at increasingly rapid rates, resulting in the progressive acidification of seawater. <ul style="list-style-type: none"> ◦ Other greenhouse gases (GHGs) do not have this effect. ◦ The sea also absorbs over 90% of the excess heat (energy) generated by global warming, resulting in higher ocean temperatures and sea-level rise. 	<p>Understanding its legal importance</p> <ul style="list-style-type: none"> • The Opinion, by siding with the principle for climate change (which is a collective interest as compared to bilateral ones), adds a new chapter. • But the Parties’ obligations in terms of taking all necessary measures to reduce anthropogenic GHG emissions within Article 194 (1) are very general in nature. • Mere identification of general obligation will be of symbolic value and is inadequate. • the crux of the matter is not the obligation to mitigate climate change, but the standard of conduct in relation to this obligation”. • the necessary measures to be taken, are to be subject to the means available to the states and their capabilities, <ul style="list-style-type: none"> ◦ which means that the principle of equity cannot be ignored in deciding the requisite level of mitigation action, • Though advisory opinion lacks legal force, it does not necessarily affect its political pull as authoritative judicial pronouncements.
---	---

194. Understand the Indian Ocean and you’ll understand much about earth- The Hindu

Context:

- The Indian Ocean has been getting a lot of attention recently for its rapid warming
- As it happens, the Indian Ocean is critical today to understand the earth’s overall ocean response to increasing greenhouse gases and global warming.

<p>Home to the deadliest storms</p> <ul style="list-style-type: none"> • The Indian Ocean is famous for its dramatic monsoon winds and the rain it brings to the Indian subcontinent. • The warm summer months are characterised by the rapid warming of the Arabian Sea and the Bay of Bengal as well as the southern tropical Indian Ocean. • The winds begin to turn around from a land-to-ocean direction during winter and to an ocean-to-land direction as summer commences. • The scorching heat on the subcontinent also comes with the threat of pre-monsoon cyclones. • The North Indian Ocean doesn’t generate as many cyclones as the Pacific or the Atlantic Oceans, but the numbers and their rapid intensification have been growing ominously. • The developing countries along the rim of South Asia, East Africa, and West Asia are sitting ducks in their path. Thus, cyclones tend to be the deadliest storms by mortality. • The warm ocean supports fisheries, big and small, and fish such as anchovies, mackerel, sardines, and tuna. Dolphins are a tourist attraction; some whales have also been sighted in the Arabian Sea. • Tourists also flock to popular beaches and the corals from Lakshadweep to the Andaman-Nicobar Islands, all the way down to Reunion Island off Madagascar. <p>A unique configuration</p> <ul style="list-style-type: none"> • The northern boundary of the Indian Ocean is closed off by the Asian landmass, minus tiny connections to the Persian Gulf and the Red Sea. • The southern Indian Ocean is connected to the Pacific and the Southern Oceans. <ul style="list-style-type: none"> ◦ The Indonesian seas connect it to the Pacific Ocean which transports a substantial amount of heat. ◦ The other tunnel connects the Indian Ocean to the Southern Ocean with two-way traffic. ◦ Colder, saltier and thus heavier waters flow into the Indian Ocean from the Southern Ocean below a depth of about 1 km. • The mix of heat and water masses in the Indian Ocean confer some mighty abilities to affect the uptake of heat in the world’s oceans. 	<p>The little ocean that could</p> <ul style="list-style-type: none"> • The Indian Ocean is a warm bathtub because it is heavily influenced by the Pacific Ocean through an atmospheric bridge as well. <ul style="list-style-type: none"> ◦ The Indian Ocean thus gains heat which must be removed by waters moving south. ◦ With global warming, the Pacific has been dumping some additional heat in the Indian Ocean. ◦ The cold water coming in from the Southern Ocean is also not as cold as before. ◦ The net result: the Indian Ocean is among the fastest warming oceans, with dire consequences for heat waves and extreme rain over the Indian subcontinent. ◦ Marine heat waves are also a major concern for corals and fisheries. <p>A hand in human evolution</p> <ul style="list-style-type: none"> • Until about three million years ago, Australia and New Guinea were well south of the equator and the Indian Ocean was directly connected to the Pacific Ocean. • And this Indo-Pacific Ocean was in a warm state known as a ‘permanent El Niño’ — <ul style="list-style-type: none"> ◦ a state that was associated with permanently plentiful rain and lush green forests over East Africa. Today, this part of Africa is arid. • The northward drift of Australia and New Guinea, which is still ongoing, separated the Indian and the Pacific Oceans around three million years ago. <ul style="list-style-type: none"> ◦ As a result, the eastern Pacific Ocean became cooler and the El Niño went from a permanent state to an episodic one. ◦ This transition aridified East Africa, turning its rainforests into grasslands and savannahs. • The storied history of our neighborhood ocean is thus a worthy thing to understand and study on World Oceans Day.
--	--

195. Why heatwaves have not been included as a notified disaster in the Disaster Management Act - INDIAN EXPRESS

Context:

- The ongoing spell of extreme heat in many parts of the country has once again reopened discussions on the inclusion of heatwaves as one of the notified disasters under the Disaster Management (DM) Act, 2005.

What are notified disasters?

- The DM Act was enacted in the wake of the 1999 Odisha super-cyclone and the 2004 tsunami.
- It defines a disaster as a "catastrophe, mishap, calamity or grave occurrence" arising from "natural or man-made causes" that results in substantial loss of life, destruction of property, or damage to the environment.
- It must also be of such nature which is "beyond the coping capacity" of the community.
- If such an event happens, then the provisions of the DM Act can be invoked.
- The provisions allow states to draw money from the two funds that have been set up under this law — the National Disaster Response Fund (NDRF) at the national level and the State Disaster Response Fund (SDRF) at the state level.
- The states first utilise the funds available in the SDRF, and only if the magnitude of the disaster is unmanageable with the SDRF, states seek the money from the NDRF. In the FY 2023-24, only two states drew money from the NDRF
- While the entire money of the NDRF comes from the central government, states contribute 25% of the money in the SDRF (10% in case of special category states), the rest comes from the Centre.
- The money in these funds cannot be used for any purpose other than response and management of notified disasters.
- Currently, there are 12 categories of disasters which are notified under this Act.
- These are cyclones, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, and frost and cold waves.

Why were heat waves not included as notified disasters?

- It was because heat waves were a common occurrence during summer, and not really an unusual weather event.
- States have put the demand of including heat waves as a notified disaster before the last three Finance Commissions — the periodically established Constitutional body that decides on the distribution of financial resources between the Centre and states.

Practical Difficulties

- Although unstated, the main reason behind the reluctance to add heatwave as a notified disaster is the potentially huge financial implication of the move.
- The government has to provide monetary compensation — Rs 4 lakh — for every life lost because of a disaster that is in the notified list. Grievous injuries also have to be compensated.

196. No outcome in Bonn: why money is key to climate action - Indian Express

News:

- A climate meeting in Bonn, Germany, has failed to make much headway on the crucial issue of defining a new climate finance goal.

Highlights:

- By the end of 2024, countries have to finalise a new sum of money above the existing figure of \$100 billion per year that the developed world must mobilise for the developing countries to help them fight climate change.
- The Bonn talks, an annual fixture in June, were expected to give at least some indicative numbers.
- But this did not happen. All that came out was an input paper, which was a broad description of the wish lists of different countries.
- The lists pertained to not just the quantum of climate finance, but also other associated issues such as who should be contributing, what should this money be spent on, and how the finance flows should be monitored.
- The paper is likely to be developed into a formal negotiating draft that can be agreed upon at COP29.

New Collective Quantified Goal (NCQG)

- Under the international climate architecture set by the UN Framework Convention on Climate Change (UNFCCC), rich and developed countries are obliged to provide money to developing countries to fight climate change.
- In 2009, the developed countries promised to mobilize \$100 billion every year from 2020 towards this purpose.
- A report by the Organisation for Economic Cooperation and Development (OECD), a grouping of rich countries, two weeks ago claimed that this \$100 billion target had been met for the first time in 2022.
- The 2015 Paris Agreement says that developed countries must periodically increase this sum after 2025, considering the rapidly growing requirements for climate finance.
- The increased target, or the **New Collective Quantified Goal (NCQG)**, for the post-2025 period, is to be finalized this year.

Need for adequate amount

- It is widely acknowledged that developing countries now need trillions of dollars, not billions, annually.
- A UNFCCC assessment last year said these countries needed about \$6 trillion between now and 2030 just to implement their promised climate actions.
- A few months back, India formally proposed that developed countries should commit themselves to providing at least \$1 trillion every year after 2025.
- The developed countries have not made any offer publicly. They have just acknowledged that the new amount has to be higher than \$100 billion per year.

Debate over contribution

- According to the UNFCCC and Paris Agreement, only the countries listed in Annexure 2 of UNFCCC 25 of them and the European Economic Community are responsible for providing climate finance to developing countries.
- The listed countries, however, have been trying to shift the responsibility to others as well.
- They argue that many other countries are now economically better off than in the early 1990s when the list was made.
- They also argue that the requirements are too huge for the original group of listed countries to meet.
- China, the world's second-largest economy, oil-rich Gulf countries, and others like South Korea are not part of Annexure 2.



197. From warp speed to reset, the state of India-U.S. ties- The Hindu

Context:

- The U.S. offered to restart the decade-old plan to transfer technology for jet engines to India.
- The announcements of strategic initiatives on Critical and Emerging Technology (iCET) considered a major success for bilateral relations that would set the stage for a whole new phase in ties.
- However, the pace of the relationship has not matched those ambitions for a number of external and internal reasons.

The crests

- Post-Pokhran tests, India referred to the U.S. as its “natural allies in the quest for a better future” for the world in the 21st century.
- Since then, Delhi and Washington have built up strategic ties year on year, with dialogues in a growing number of spheres from climate change and green energy to critical and emerging technologies and outer space.
- The growth is seen in strategic trust with foundational agreements, a plethora of military exercises, growing interoperability and coordination on maritime operations, not to mention the considerable purchases of military hardware.
- A broader mutual understanding has silenced old concerns on Jammu-Kashmir that once roiled ties
- India's increased engagement with the Quad (India, Australia, Japan and the U.S.) and the U.S.'s Indo-Pacific strategy, and shared concerns over China's aggression have brought both on “same page”.
- While the bilateral engagement has been thriving,
 - Russia's war in Ukraine has been one major area of difference.
 - But the U.S. has withdrawn its objections to India's continued purchase of oil and other Russian exports.
- It remains to be seen how the newly-elected Prime Minister manages engagements with the Russian President, with a possible meeting at the Shanghai Cooperation Organisation (SCO) Summit in Kazakhstan and the BRICS Summit in Russia's Kazan.

The China factor

- On the other multilateral front and growing concerns over China's threats against Taiwan, and Philippines in the South China Sea too
- China's policies have bought India and the USA closer than ever before
- India-US push aggressively on “Quad-Plus” meetings with the Republic of Korea and the Philippines.

Tensions over 'plots'

- Amid this discourse, tensions grew with the attempted assassination of Khalistani separatist and U.S. citizens in New York.
- Differences have broadened, particularly with U.S. intelligence agencies, and the U.S. Congress raises concerns that a section of its diaspora feels targeted by India.
- Also, ties with the U.S. Ambassador in India have been strained after his comments on Manipur and human rights.
- Comments on the state of democracy in India before the general election 2024 as well as consistent bad reviews for India in the US's Religious Freedom report enraged India
- The opportunity to complete the iCET review, as decided by the leaders, is both desired and necessary for the restart they require.

198. China is wasting no time in the small reactor great game—India must act fast, work with US- THE PRINT

Context:

- Last year, China reached an important milestone in its small modular reactor programme by successfully installing the core module of the Linglong One SMR in Hainan Province.
- SMRs like Linglong offer an array of advantages over conventional land-based reactors in terms of size, portability, safety, and cost.

China's SMR Advantage:

- China is a leader in SMR technology, with its Linglong One reactor showcasing the benefits of SMRs - smaller size, easier transport, improved safety, and lower costs.
- China's nuclear energy program is rapidly expanding, potentially surpassing the US in total capacity within a decade.

Global Reach and Strategic Concerns:

- China plans to export SMRs internationally, potentially increasing its influence, particularly in South Asia (like past collaborations with Pakistan).

This raises concerns for India:

- Reliance on Chinese SMRs could create long-term dependence for recipient countries, jeopardizing their independence (similar to Sri Lanka's Hambantota Port situation).
- US officials are worried about China deploying floating SMRs in disputed territories, like the South China Sea, which could heighten regional tensions and affect India's strategic interests.

India's Response:

- India needs to accelerate its own SMR program to counter China's lead and maintain regional stability.
- To achieve this, India should Partner with the US, building on the recent nuclear cooperation agreement.
- This requires addressing challenges like India's nuclear liability law.
- Collaborate with US companies like Holtec International to gain access to advanced SMR technologies, allowing for deployment in various locations and using existing infrastructure.

199. Death of workers in Kuwait underlines vulnerability of Indian migrants- INDIAN EXPRESS

Context:

- The death of 45 Indian workers in a fire in Kuwait is a reminder of the dismal working conditions of a large, and often ignored, section of the Indian diaspora.

KEY HIGHLIGHTS

- The labour camp that was gutted recently, was reportedly packed beyond capacity.
- The rapid spread of the blaze and the high number of casualties indicate that the six-storey building did not have adequate safety provisions, such as fire exits and fire-fighting equipment.
- The Kuwait government has ordered an investigation and assured that the guilty will be held to account.
- The country's deputy prime minister has asked the Kuwait Municipality and the Public Authority of Manpower to address similar violations elsewhere, where a large number of workers are crowded into residential buildings.
- the Centre and state governments must do much more — they should use the growing goodwill for India in the West Asian countries to guarantee the well-being of the migrant labour force.

Indian diaspora in West Asia

- According to the Ministry of External Affairs data, nearly 8.8 million Indians live and work in the Gulf.
- The money they send back home makes for more than a fourth of the diaspora's annual remittances.
- In Kuwait, Indian carpenters, masons, electricians, construction site labourers, factory and domestic workers and food delivery agents constitute nearly a fifth of the country's workforce.
- While the significantly high salaries in the Gulf continue to make countries in the region a favoured employment destination
 - at the same time, the availability of a large number of unskilled and semi-skilled workers and footloose labourers reduces the bargaining capacity of the migrants.
- Many are recruited through the visa sponsorship, or kafala system, which binds workers to their employers, severely limiting the capacity of the migrants to seek better housing or occupational safety improvements.
- Fear of loss of employment or deportation prevents most from complaining about the quality of working or living conditions.
- India has signed MoUs with West Asian countries, including Kuwait, to streamline procedures for recruiting workers and providing them with legal protection.
- However, the course of legal redress is prolonged, court processes are expensive and an already vulnerable community has to contend with the absence of legal assistance and shortage of interpreters in an alien country.
- The problem also is that India deals with migration through a 40-year-old Emigration Act, which leaves the migrant worker at risk.

Conclusion

- In the Budget session of Parliament last year, the External Affairs Ministry acknowledged the need for an updated law to deal with migration issues.
- That piece of legislation is still in the works.
- The toll taken by the Kuwait fire is a reminder that the new government has to do much more to safeguard the lives of Indians who go abroad to work.

200. Tackling the fatty liver disease epidemic- The Hindu

News:

- The theme for International Fatty Liver Day this year is 'Act Now, Screen Today'.
- Liver diseases were predominantly associated with excessive alcohol use and this remains an important cause of advanced chronic liver disease.

Key highlights

- However, in recent years, we are seeing the emergence of a silently growing threat to liver health — non-alcoholic fatty liver disease.
- As our understanding of this condition has evolved, we now know that fatty liver is closely linked to metabolic health, cardiac health, and a risk for developing cancers.
- This disorder has now been appropriately reclassified and is known as 'Metabolic dysfunction-associated steatotic liver disease' (MASLD).
- A paradigm shift is required in how we approach liver health. The key is to screen, test, and treat.

Growing burden

- MASH (Metabolic dysfunction-associated steatohepatitis), that causes liver inflammation and scarring, is expected to become the most common cause of chronic liver disease and the leading indication for liver transplantation.
- In 2022, a meta-analysis revealed that in India, among adults, the pooled prevalence of fatty liver was 38.6%, while among obese children, it was around 36%.
- There is a close link between fatty liver disease and metabolic syndrome, including obesity, diabetes, high blood pressure, and abnormal cholesterol levels.
- Consuming excessive carbohydrates, especially refined carbs and sugars, worsens these conditions by causing metabolic problems.
- Over time, this continuous damage affects the liver's ability to function properly, progressing from simple fatty liver to more severe conditions such as steatohepatitis and cirrhosis, and may require a liver transplant.
- Despite this growing burden of fatty liver disease, it often goes undetected as there is usually no warning or symptom in the early stages.
- The key to early diagnosis is simple — a comprehensive health screening that includes a thorough history, physical examination, blood tests, and an ultrasound of the abdomen.
- An ultrasound of the abdomen is an important test to screen for liver disease and an important first step to diagnose fatty liver.
- It is often missed or not included in many health checks, largely because of the limited availability of radiologists as well as stringent regulatory approvals.
- Advanced liver tests will include liver fibrosis assessment to look for liver scarring, most accurately done by using newer technologies such as vibration-controlled transient elastography.

Personalisation is the key

- The selection of screening tests and the frequency with which they are performed should be personalized.
- This decision should be based on factors including an individual's risk factors such as family history, lifestyle, and pre-existing health conditions.
- Necessitating integrated strategies that combine dietary modifications, regular physical activity, and effective weight management to mitigate liver disease risks.
- The liver is a 'silent organ' that typically does not exhibit noticeable signs of damage until it reaches an advanced stage.
- It is important that we are aware of the impact our lifestyle choices make in the long run.
- We need to take active control of our health, be aware of what we consume, and go for frequent screenings because the groundwork for a happy life begins with good health

201. Four new studies report progress towards long-awaited HIV vaccine- The Hindu

Highlights:

- AIDS does not have a vaccine or cure.
- This anomaly in humanity's otherwise remarkable track record in tackling major infectious diseases is a result of several factors.

Key highlights

- Chief among them is that the replication of the **human immunodeficiency virus (HIV)**, which causes AIDS, is an incredibly error-prone process that results in multiple variants of the virus circulating.
- To put it in perspective, HIV has more variants circulating in a single patient at any given point of time than influenza cumulatively generates in one year in all influenza patients around the world combined.

Role for B-cells

- When the immune system encounters a virus, one of its responses is to produce antibodies highly specific to proteins on the virions' surface.
- The immune system does this by starting with a pool of specialised cells that produce antibodies, called B-cells.
- When a B-cell encounters a similar protein fragment on a foreign object, say, a virus or a bacteria it begins to divide and refine the antibody until it binds perfectly to the target.
- These antibodies then bind to their corresponding pieces on the viral surface, rendering them incapable of further infection.
- A vaccine aims to generate these antibodies prior to viral infection so that whenever a virus enters the body, the antibodies can neutralise the virus and prevent it from initiating an infection.
- However, when multiple variants of the same virus exist, generating antibodies against all the different variants simultaneously becomes very difficult.
- In the case of most viruses, the immune system ultimately does catch up. But against HIV, it doesn't because of the sheer volume of different variants that are circulating, overwhelming the immune system's ability to generate new antibodies.
- In fact, by the time the immune system makes antibodies against a few strains, the virus will have produced hundreds more.

bNAb, a sliver of hope

- In the early 1990s, scientists noticed that in a small subset of HIV-infected individuals, a new kind of antibody was being produced that could neutralise a large number of circulating viral strains.
- These broadly neutralising antibodies (bNAb) worked by targeting areas of the viral proteins that the virus couldn't afford to change, since doing so would make it lose infectivity.
- Scientists have since discovered many bNAbs, and they are classified into different groups based on the region of HIV they target.
- Some of these bNAbs can effectively neutralise more than 90% of circulating strains.
- But there is a catch: a body usually takes years to make bNAbs, and by then, the virus has already evolved to escape them.
 - It takes years because the parental B-cell that makes the bNAbs is incredibly rare in the starting pool.

Germline Targeting

- The challenge, therefore, has been to make the immune system produce these bNAbs in large numbers in response to a vaccine.
- The route to doing this, called **germline targeting**, which has three steps:
 - In the first step, those B-cells that can mature into cells that can produce bNAb are identified and engaged to increase their population and prepare them for the second-step
 - Second step involves a booster dose that will guide these cells into generating stronger bNAbs against HIV.
 - The third and final step is to refine these bNAbs such that they can neutralise a wide range of HIV strains.

202. What is SWM cess and why is it levied on waste generators?- The Hindu

News:

- The Bengaluru Urban Body has proposed a Solid Waste Management (SWM) Cess of ₹100 per month for each household.
- It is important to understand the rationale behind SWM cess, its intended use, and the broader context of solid waste management challenges faced by Urban Local Bodies (ULBs) in India.

Key highlights

- Urban Local Bodies (ULBs) levy user fees or SWM cess as per the provisions of Solid Waste Management Rules, 2016.
- ULBs are now considering revising these rates and imposing higher charges on bulk waste generators to meet a portion of the costs incurred in providing SWM services.

What are the costs?

- ULBs typically deploy about 80% of their manpower and up to 50% of their annual budgets to provide SWM services to city residents.
- Bangalore generates about 5,000 tonnes of solid waste per day.
- Managing this volume of waste requires around 5,000 door-to-door waste collection vehicles, 600 compactors, and about 20,000 Sanitation Workers
- SWM services comprise four components: collection, transportation, processing and disposal.
- Collection and transportation are resource and labor-intensive and come up to 85-90% of the SWM budget, whereas only about 10-15% is spent on processing and disposal of waste.

What are the challenges?

- Solid waste generated in Indian cities consists of about 55-60% wet biodegradable material and 40-45% non-biodegradable material.
- Although 55% of the wet waste can be converted into organic compost or biogas, the yield is as low as 10-12%, making both composting and biogas generation from solid waste financially unviable.
- Apart from financial challenges, ULBs face other challenges associated with SWM services, such as extra work of clearing drains, preventing open littering, seasonal changes in waste generation, and sweeping operations.
- Disposal of non-compostable and non-recyclable dry waste, such as single-use plastic, textile waste and inert materials, is expensive since the material needs to be shipped to cement factories or waste-to-energy projects located about 400-500 km from cities.

What is the solution?

- Although collection and transportation of waste generate no revenue, several strategies can reduce overall expenditure on SWM and lower user charges.
 - These are segregation of waste at source,
 - reducing single-use plastic, decentralised composting initiatives,
 - Information, Education and Awareness (IEC) to prevent open littering, and
 - asking bulk waste generators to process their own waste.
- A balanced approach, combining marginal user charges with efficient operations, could help make our cities cleaner.

203. Why direct seeding of rice (DSR) is yet to pick up in Punjab- The Indian Express

News:

- The Punjab government has been actively promoting the direct seeding of rice (DSR), or 'tar-wattar' technique.
- This can reduce water use by 15% to 20%.
- Moreover, DSR requires less labor and matures 7 to 10 days faster, giving farmers more time to manage paddy straw.
- Despite these benefits, and government incentives this technique is yet to see widespread adoption in Punjab.
 - Last year, only 1.73 lakh acres of the 79 lakh acres under paddy cultivation in Punjab saw the use of this technique.
 - Even the government's target of bringing 7 lakh acres under DSR this year represents less than 10% of Punjab's total rice acreage.

Paddy Farming

- Traditionally, paddy farmers prepare nurseries where seeds are first sown.
 - After 25-35 days, young seedlings are uprooted and replanted, in the main field.
 - While this method is labor and water-intensive, it is known to maximize yields and maintain better crop health.
- The first round of irrigation is carried out 21 days after sowing, followed by 14-17 more rounds at 7-10 day intervals, depending on soil type and the quality of the monsoon.
- The final irrigation takes place 10 days before harvest.
- The traditional method requires 25-27 irrigations in total.

Soil texture is key

- Experts emphasise that soil suitability is crucial for the successful implementation of DSR. There are two factors here.
 - First is the texture of the soil.
 - It is more suitable for heavy or medium-to-heavy-textured soils.
- This is primarily because light-textured soils do not retain water well.
- Simply put, heavy-textured soils contain more clay and less sand, whereas light-textured soils have less clay and more sand. Also 80% of Punjab's soil is light-textured.

Importance of iron content

- The iron content of the soil also determines the suitability of DSR. Soil with severe iron deficiency, and weed problems must not be cultivated using this technique.
- Lack of iron content can severely impact yields and lead to major financial losses for farmers. Sometimes, farmers might even have to transplant the crop anyway, after a month or so, leading to DSR losing its labour-saving benefits.

Path forward for DSR

- In this method, seeds are directly drilled into the fields, eliminating the need for nursery preparation and transplantation.
- A basic lack of awareness and understanding is holding DSR back.
- After using the method on unsuitable soil, farmers do not get the expected yields.
- They then develop apprehensions regarding DSR and revert to their traditional puddling method.
- Crucially, negative feedback spreads quickly by word of mouth, further dissuading other farmers for whom DSR might have been ideal.
- Extensive training and a ready helpline be provided, to handhold the farmers through the whole process, from pre-sowing to harvesting.
- Additionally, if farmers incur losses during the initial years of adoption, adequate compensation should also be provided, so as to not disincentive them from trying again.

204. Strategic imperative and environment concern in Great Nicobar project- The Indian Express

Context:

- Opposition has described the proposed Rs 72,000-crore infra upgrade at the Great Nicobar Island as a “grave threat” to the island’s indigenous inhabitants and fragile ecosystem, and demanded a “thorough, impartial review of the proposed project, including by the Parliamentary committees concerned”.

Great Nicobar

- Great Nicobar is the southernmost and largest of the Nicobar Islands, a sparsely inhabited 910-sq-km patch of mainly tropical rainforest in southeastern Bay of Bengal.
- Indira Point on the island, India’s southernmost point, is only 90 nautical miles (less than 170 km) from Sumatra, the largest island of the Indonesian archipelago
- Great Nicobar has two national parks, a biosphere reserve, small populations of the Shompen and Nicobarese tribal peoples, and a few thousand non-tribal settlers.
- The Andaman and Nicobar Islands are a cluster of 836 islands, split into two groups - the Andaman Islands to the north and the Nicobar Islands to the south - by the 150-km wide **Ten Degree Channel**.

The infra project

- The mega infrastructure project - is proposed to include an International Container Transshipment Terminal (ICTT), a greenfield international airport with a peak hour capacity to handle 4,000 passengers, a township, and a gas and solar based power plant spread across 16,610 hectares.
- The project for the “holistic development” of Great Nicobar Island was implemented after a report by NITI Aayog.
- It is close to the Malacca Strait, the main waterway that connects the Indian Ocean to the Pacific, and the container terminal is expected to “allow Great Nicobar to participate in the regional and global maritime economy by becoming a major player in cargo transshipment”.
- A proposed “greenfield city” will tap into both the maritime and tourism potential of the island.
- The site for the proposed ICTT and power plant is **Galathea Bay** on the southeastern corner of Great Nicobar Island, where there is no human habitation.

Strategic importance

- The Bay of Bengal and Indian Ocean region are of vital strategic and security interest to India as the Chinese Navy seeks to expand its footprint across the region.
- India is wary of a build-up of Chinese maritime forces at the Indo-Pacific choke points of especially Malacca, Sunda, and Lombok.
- China’s attempts to expand its footprint in the region includes building a military facility at Coco Islands (Myanmar) lying just 55 km to the north of the Andaman & Nicobar Islands.
- surveillance of the entire area, and the building up of a strong military deterrence at Great Nicobar is of vital importance to India’s national security.

Environmental concerns

- The proposed infra upgrade has been opposed on grounds of the threat it poses to the ecology of the islands.
- Also, potential impact on the Shompen, a particularly vulnerable tribal group (PVTG) of hunter-gatherers with an estimated population of a few hundred individuals who live in a tribal reserve on the island.
- It is feared that the port project will destroy coral reefs with spinoff effects on the local marine ecosystem, and pose a threat to the terrestrial Nicobar Megapode bird and leatherback turtles who nest in the Galathea Bay area.
- In April 2023, the Kolkata Bench of the National Green Tribunal (NGT) declined to interfere with the environmental and forest clearance granted to the project.
- The Tribunal, however, ordered that a high-power committee should be constituted to look into the clearances.
- There is no clarity yet on whether the committee, consisting mainly of government representatives, has submitted its report.

205. The last continent must remain a pristine wilderness- THE HINDU

News:

- Antarctic tourism has experienced a sharp rise since the 1990s, with visitor numbers exceeding 100,000 during the 2022-23 season.
- This growth, fueled by interest in adventure travel, presents significant environmental risks.

Environmental Concerns:

- The increasing human presence disrupts wildlife, harms ecosystems, and introduces the threat of invasive species.
- Additionally, tourism contributes to pollution and carbon emissions, intensifying the impacts of climate change on fragile Antarctic environments.

Balancing Benefits and Risks:

- While tourism offers educational and economic advantages, it strains the delicate equilibrium between scientific research, responsible tourism practices, and environmental conservation.

Gaps in Regulatory Framework:

- The Antarctic Treaty (1961) and the Madrid Protocol provide general guidelines but lack specific regulations for tourism.
- The International Association of Antarctica Tour Operators (IAATO) currently self-regulates, which many find inadequate.

Challenges of International Consensus:

- The Antarctic Treaty Consultative Meeting (ATCM) requires unanimous agreement for decisions, which often complicates effective regulation.
- Diverse national interests and interpretations of Antarctic principles further hinder governance efforts.

Recent Developments:

- ATCM-46 marked progress with the establishment of a working group aimed at developing a comprehensive regulatory framework.
- However, achieving consensus and implementing effective measures remain significant challenges.

206. How can Himachal Pradesh fight against forest fires? | Explained- The Hindu

News:

- Himachal Pradesh (H.P.) is witnessing widespread forest fires across the region.
- According to the Himachal Pradesh Forest department, there have been a total of 1,684 forest fires since April 15.

Key Highlights

- These fires have damaged a total of 17,471 hectares of forest land, resulting in significant loss to wildlife.
- From 2001 to 2023, H.P. has lost 957 hectares of tree cover from fires and 4.37 thousand hectares from all other drivers of loss.

How do forest fires start in the State?

- Fires in the Himalayas occur during the pre-monsoon summer period of moisture stress, due to the resultant depletion of snowmelt water.
- The moisture conditions of the pre-monsoon season, characterised by rainstorms, play a critical role in determining the nature of forest fires.
- The less moisture there is, the greater the impact of the fires.
- Human activities such as unattended campfires, discarded cigarettes etc., are also some of the common causes for forest fires.
- These fires are also a major source of pollutants, including black carbon, which significantly contribute to glacier melt in the Himalayas and negatively influences the regional climate.
- The primary causes of these forest fires are faulty forestry practices, and treating forests from a utilitarian perspective, excluding people's participation.

What needs to be done?

- Democratization of forests is essential to ensure that people and communities who have lived in and around forests are made part of the forest management process.
- The rights of the local community have been periodically curtailed, and as a result, when forest fires start, first responders are nowhere to be found.
- The traditional forest rights of Himalayan dwellers included the right to extract wood for fuel, timber, fodder, and other activities. H.P. is under Schedule V of the Indian Constitution, which requires community assent for development activities in the region.
- However, for large projects like hydro power generation, road widening, and four-lane highways, forests are being diverted with ease.
- What the Himalayan States now need is to build mixed forestry and remove pine trees;
 - ensure that both scientific and community knowledge converge and forest management is conducted in a participatory manner
 - implement check dams and other methods to revive water springs; create environmental services at the village level
 - articulate their case with the ongoing 16th Finance Commission, seeking help apart from disaster mitigation funds.

207. Should not EVs and Hybrids be treated equally for govt. Subsidies?- The Hindu

Context:

- India's road transport sector contributes about 12% to the country's CO₂ emissions, according to the International Energy Agency, making it the third most greenhouse gas emitting sector after energy and agriculture.
- The Union government has been attempting to fast track decarbonising transport for almost a decade with the introduction of the Faster Adoption and Manufacture of Hybrid and Electric Vehicles, or FAME in 2015.

FAME

- FAME attempts to generate demand for electric vehicles (EVs) and hybrids by subsidizing retail sales, encouraging the manufacture of components and creating and nurturing an EV ecosystem nationwide.
- However, the lack of charging infrastructure, import dependence on advanced battery components and technology, and a grid still dominated by coal-based power, leading to an increase in EVs overall carbon footprint from mining rare earth elements.
- The government in 2017, withdrew the subsidy support for "mild hybrids" affecting popular car models.
- When we look at commercial vehicles, freight vehicles are just 5% of the overall vehicle population, but they alone contribute 34% of emissions, yet we do not have the hybrid truck discussion on the table.
- Also, more than 75% of electricity is produced from coal. So, when EV enthusiasts say that it is CO₂ free, it is not.
- We also don't have the basic raw materials for making battery electric vehicles. Large amounts of metals like cobalt, nickel and lithium are imported.

Reforms

- Absolutely, but the government should look at the overall objective.
- It must specify life cycle emission and GHG norms. For a country like India, the subsidy is not sustainable because of the sheer numbers.
- In the backdrop of the rapid deployment of renewables across India and the country's COP26 commitment to generate power from renewables to 500 GW by 2030.
- We are striving to ensure our grid becomes greener and cleaner. But if we wait for our grid to become green and then start our transport transition, it might be too late.
- So there would be some overlap where both sectors' transition must go hand in hand. We will keep electrifying our transport, while we green our grid.
- As the government frames FAME 3, it should think we must consider multiple calculations and factors.
- Policies must evolve with the changing sectoral landscape. It must aim towards zero-emissions vehicles because that will help us reach our climate and energy security goals.

208. IRDAI improves health cover experience- The Hindu

News:

- The insurance landscape in India has seen a major transformation over the last few years, thanks to the consistent efforts of the Insurance Regulatory and Development Authority of India (IRDAI).

Key highlights

- The latest reform is that “no claim can be rejected due to the lack of documents”.
- To simplify the claim process, IRDAI mandated the necessary documents be sought by the insurer at the time of underwriting.

Hassle-free claims

- The IRDAI had earlier directed that while cashless claims must be cleared within a three-hour limit, the decision on cashless authorisation by the insurer has to be made within one hour of the claim request.
- The IRDAI circular also mandated all insurers should strive to achieve 100% cashless claim settlement in a time-bound manner and ensure claim settlement through reimbursement mode is done only in exceptional circumstances.
- This directive is in line with IRDAI's recent 'Cashless Anywhere' directive which asked insurers to settle claims in cashless mode even in those hospitals not in their list of network hospitals.
- Moreover, they should provide digital pre-authorisation to policyholders to facilitate the claims.
- To address this, the IRDAI said in case the claim is not settled in three hours, any additional costs charged by the hospital would be borne by the insurer.

Impact on sector

- The only way this directive can be implemented is through better coordination between insurers and hospitals.
- Not only operational processes would have to be improved, sharing of medical records between different stakeholders would have to be more streamlined to help insurers to take a decision on the claim.
- Medical record digitisation is already happening via the National Health Claims Exchange, which is facilitating a more transparent and smooth exchange of information.
- The good news is insurers have been showing positive intent to support the regulator in all its efforts to improve the insurance experience for customers.
- Timely settlement will eliminate most glitches and go a long way to better healthcare experience for patients and caregivers.
- The IRDAI added if a policyholder dies during treatment, the insurer must immediately process the request for claim settlement and get the mortal remains released from the hospital immediately.
- This will surely offer the grieving family some semblance as they deal with a tragic loss
- The norms are consumer-centric and prioritise policyholders' welfare above everything else.
- This commendable move is poised to revolutionise the health insurance landscape, ensuring timely and hassle-free claim settlements, enhancing customer satisfaction, and providing inclusive and affordable health insurance solutions for all.

209. Why new government should embrace global markets- The Indian Express

Context:

- Even as the newly-elected government begins the quest for a Viksit Bharat, here is some trade policy counsel, entirely gratuitous, without provocation and with a dose of abundant humility.
- The period immediately after a General Election is good for breakthrough policy, and if there is an area that needs one, it is trade.
- For, without an increase in trade, India will be unable to emulate the successes of its East Asian neighbors and without heightened competitiveness, it will be unable to trade.

India's Dilemma

- The Global Financial Crisis of 2008, the Euro Zone struggles of 2010 and the economic downturn as a result of the Covid-19 pandemic recently, all in close succession, have prompted many governments to rethink global engagements.
- India faces many challenges in this regard.
 - One is to promote its ambition of an Atmanirbhar Bharat, to make India self-reliant by being "vocal for local", prioritizing domestic goods over imports.
 - It sits uneasily with India's other ambition of attaining \$1 trillion worth of exports.
- India's export ambition cannot be achieved without integrating with global value chains (GVC), which in turn requires a healthy prescription of openness, foreign direct investment (FDI) and import competition.
- An import tariff or rise in protection is akin to an export tax.
- India's hard-earned lesson that export promotion and import substitution are conflicting policies looms large over its trade policy and economic agenda.
- The pandemic showed the world the consequences of import disruptions.
- We are banking on the augmentation of local capacity through schemes such as production-linked incentives (PLIs) that provide performance-based financial incentives.
- PLI schemes resulted in the production/sales of Rs 8.61 lakh crore and generated employment (direct and indirect) of over 6.78 lakh.
- Before that, the government exited negotiations for the Regional Comprehensive Economic Partnership (RCEP).
 - Its existing trade deficit with China emerged as a key reason for this exit,
 - the cooperatives-intensive farm and dairy sector that feared competition from New Zealand and Australia among others.
- India's journey towards free trade and multilateralism has been fraught with challenges.
 - It pursued an aggressive import substitution policy during the 1980s but found import substitution and export promotion to be quite contradictory.
- During the 1991 crisis, it adopted a liberal trade policy but subsequently remained reluctant to embrace second- or third-generation trade reforms.
 - This policy narrative slowed down its liberalization and participation in GVCs.
- India has signed several FTAs including four FTAs since 2021 after nine years of no agreements.
 - These include the India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement (CECPA) in 2021,
 - India-UAE Comprehensive Economic Partnership Agreement (CEPA), and
 - India-Australia Economic Cooperation and Trade Agreement (CECTA) in 2022.
- The latest Trade and Economic Partnership Agreement (TEPA) with EFTA countries (Switzerland, Iceland, Norway, Liechtenstein) was signed on March 10 and secured commitments of \$100 billion and 1 million direct jobs over the next 15 years.

India's Attempts

- Geopolitically, India has attempted to establish itself as an important global player, aided by its hosting of the G20 presidency.
- It is aiming to position itself as an alternate manufacturing destination to China and compete with other South Asian economies like Vietnam, Cambodia and Bangladesh.
- The concept of digital public infrastructure (DPI) has gained significant attention.
- DPI is a potentially transformative process that utilizes ubiquitous digital technologies to connect people and devices.
- Now is an opportunity to shed inhibitions and do a repeat of 1991—without waiting for a crisis to do so.

210. West Bengal train accident highlights need for a thorough review of misplaced priorities of past two decades in Indian Railways- INDIAN EXPRESS

News:

- The Indian Railways is back in the news after a freight train rammed into a passenger train, near Siliguri in West Bengal, which left at least nine people dead and more than 40 injured.

Key highlights

- Since 1995, the country has witnessed seven deadly train accidents, five of which took more than 200 lives — the highest number of deaths, 358, was recorded in the Firozabad collision of 1995.
- The multiple train collision at Balasore in Odisha, about a year ago, claimed 287 lives. Together, these seven accidents took more than 1,600 lives.
- Among railway planners, it is widely held that a large, densely populated developing country like India should have a strong railway system that can compete with road and air transport to serve the needs of the people and economy.
- Neither the Railway Board nor the Centre has ever denied this imperative.

Doubling speed of railway

- In fact, plans have been repeatedly announced to double the speed of trains while improving safety and drastically increasing line capacity, as most trunk routes have faced acute congestion.
- But the results have been very discouraging.
- The Indian Railways has consistently lost market share in both passenger and freight streams.
- In fact, since 2010-12, the total volume of both freight and passenger traffic has stagnated or declined, while air and road modes have seen growth of 6-12 per cent each year.
- Between 2014-15 and 2019-20, passenger traffic declined from 995 billion pass-km to 914 billion pass-km, and freight stagnated between 682 and 739 billion net tonne-km. For the period after 2019-20 to the present, the Railways has not made these traffic figures public.
- It is no exaggeration that the Indian Railways (IR), which enjoys a monopoly on rail transportation, is facing a severe crisis.
- IR could be relegated to a secondary role where it primarily carries heavy freight and some slow-moving passenger trains, as in large, thinly populated, economically advanced countries like the US, Canada, and Australia.
- Surely, with its high population density, a large developing country like India can't afford such a decline in rail transport.

The Comptroller and Auditor General report

- The Comptroller and Auditor General (CAG) of India has recently issued two important reports on safety, speed, and punctuality on IR.
- The report on speed and punctuality for the years 2019-20 says that between 2014 and 2019, there has been no increase in the average speed of mail and express trains —this has remained at 50 to 51 kmph
 - Contrary to claims of achieving an average speed of 75 kmph under Mission Raftar, which has appeared in some form every five to seven years since 2005.
- As for freight trains, the average speed actually declined marginally, contrary to the Board's claims of doubling the speed.
- It is pertinent to mention that 20 years ago, IR acquired technology and manufacturing capabilities to build coaches and locomotives to raise the maximum operational speed from 110-130 kmph to 160-200 kmph.
- The second CAG report, which is on accidents, is equally sobering.
- Though there has been some reduction in the number of accidents, it is largely a result of the manning of unmanned railroad crossings.
- The data shows little improvement with respect to derailments and collisions.
- The report has expressed serious concerns about the continuing high rate of asset failures, particularly signal failures and rail fractures.
- Some of the worst accidents on IR have been due to these. Last year's multiple train collision at Balasore was caused by a signal failure.
- Clearly, a thorough review of the misplaced priorities of the past two decades that are driving IR to a terminal decline is absolutely required.

211. How demand for cereals in India is changing- The Indian Express

Highlights:

- A rising share of that is going not for direct human consumption, but for use in processed form (as bread, biscuits, cakes, noodles, vermicelli, flakes, pizza base, etc) or for making animal feed, starch, potable liquor and ethanol fuel.
 - This is evidenced by data from official household consumption expenditure surveys (HCES).
- The National Sample Survey Office's latest HCES report reveals a steady decline in the quantity of cereals consumed by an average person per month between 1999-2000 and 2022-23.

Cereals

- While direct household consumption has stagnated, even dipped, this isn't so with production, which has significantly increased.
- The gap between officially estimated cereal production and HCES-based household consumption, too, has widened

Where is the excess production going?

- Part of it is getting exported, i.e. going out of the country.
- A second source of difference would be cereals consumed by households in processed form bread, biscuits, noodles, etc.
- A third source is cereal grain used for manufacture of feed or industrial starch.
- The agriculture ministry has pegged India's maize production in 2022-23 at 38.1 mt.
- The bulk of it 90%, if not more would have been used as the primary energy ingredient in poultry, livestock and aqua feed or for wet-milling and conversion into starch, which has applications in the paper, textile, pharmaceutical, food and beverage industries.
- Feed and starch manufacturing apart, cereal grains are also fermented into alcohol (after milling and converting their starch into sucrose and simpler sugars) and further distilled into about 94% rectified/industrial spirit or 99.9% ethanol.
- In other words, cereals are today not just food and feed, but also fuel grains.

The unexplained surplus

- Adding exports of 32 mt, usage in processed food form (38 mt) and diversion for feed, starch making and fermentation purposes (50-55 mt) these are very rough estimates to direct household consumption of 150-155 mt will take the total yearly demand for cereals to 275-280 mt at best.
- That's way below the estimated 300 mt-plus domestic cereal output. The difference is the surplus grain being mopped up by government agencies and accumulated in the Food Corporation of India's warehouses.
- If the agriculture ministry's cereal output estimates are right, the country is producing at least 25 mt of excess grain every year, thereby exerting downward pressure on market prices, if not adding to government stocks.
- But given the recent experience of high cereal inflation, notwithstanding ban/restrictions on exports, and depleting stocks in government warehouses, questions can be raised on the veracity of the official production estimates themselves.

212. Can GM crops promise food security?- Indian Express

Context:

- A new "gene revolution" is being heralded as a cure-all for a growing global appetite as food systems are decimated by extreme weather.
- Farmers have cross-bred fruits, grains or vegetables to create tastier or higher-yielding hybrids for millennia.

- But it wasn't until the 1970s that scientists first employed bioengineering to transfer genes from one organism to another to produce **transgenic crops**.

GM crops and changing climate

- When these genetically modified organisms (GMOs) first hit shelves in the 1990s, they were dubbed Frankenstein foods.
- Resistance to GMO crops was based on a continuing public fear that they're harmful to human health.
- Now in the 2020s, a new gene revolution, whereby DNA can be genetically edited without splicing in genes from a separate organism, is bolstering biotech crop industry claims that it can ensure food security for a global population expected to approach 10 billion by 2050.
- The World Economic Forum (WEF), says that research into new rice, maize, wheat, potato and cassava strains, for example, will further help these vital food staples survive extreme weather and **"new climate-induced diseases"** in a warming world.
- One US-based research project is also helping to optimize photosynthesis so plant staples like maize and rice can better convert sunlight, water and carbon dioxide into energy to improve yields while also reducing atmospheric carbon.

Criticism

- Many scientists and environmental campaigners don't agree that GM crops can promise food security or help fight the climate change-induced extreme droughts and floods that are decimating agriculture.
- Currently, food systems generate around one-third of the greenhouse gas emissions fuelling climate change.
 - In the US, more than half of harvested cropland is produced with genetically modified seeds.
- Kenis' research argues that GMOs often involve "large-scale monocultures" of limited crop varieties that also require great amounts of artificial fertilizers, pesticides and irrigation.
 - It's a very energy-intensive system in terms of the input it needs to function.
- So far, this system has also failed "to feed large parts of the population in different parts of the world"
 - At least 250 million people in nearly 60 countries endure crisis-level food insecurity, according to the World Food Programme (WFP).

Exceptions

- In the context of smallholdings in southern Africa, "insect resistant" crops in Southern Africa are a godsend to these farmers.
- Australian scientists are also spearheading a cowpea production project by bioengineering "built-in" insect pest protection since the legume has been a dietary staple across Africa for millennia.
 - Without insect resistance, they get no crop in many cases,
- Despite the rising potential of new GM crops, resistance to gene manipulation continues as does skepticism, with around half of people polled globally in 2020 believing GMOs are unsafe to eat.

213. The vulnerabilities of India's elderly - The Hindu

Highlights:

- In Indian conditions, in particular, the four vulnerabilities of later ages in life course are in terms of restrictions in activities of daily living, multi-morbidity, poverty and absence of any income.
- The **Longitudinal Ageing Survey of India (LASI, 2017-18)** reports that about 20% of the elderly population experience each of these vulnerabilities.

Related Data	Suggestive Measures
<ul style="list-style-type: none"> • The projected magnitude of the elderly population is estimated at 319 million by mid-century, growing by around 3% a year. • This group will be feminine with a sex ratio of 1,065 females per thousand males; further, 54% of elderly women will be widows. • While 6% of the elderly men live alone against 9% of their female counterparts, 70% of them are to be found in rural areas. • The most disturbing feature relates to the health status that is reported to be poor by a quarter of the elderly as against about 20% among the population aged 45 and above. • While 75% of the elderly population are victims of one or more chronic diseases, 40% of those aged 45 and above have one or the other disability. • With the advent of the global burden of disease, it is apparent that the two threatening forces are diabetes and cancer which appear to be frequent among India's elderly. • Also, the emerging concern relates to mental health with 20% of those aged above 45 self-reporting some ailment, primarily associated with depression; this is reasonably higher compared with the self-reported extent among the elderly. • Hardly 12% are aware of the Maintenance and Welfare of Parents and Senior Citizens Act, 2007 and 28% are aware of various concessions offered to the elderly. • While 5% of them report abuse, they are quite frequent, particularly for women in rural areas where they remain the most neglected. 	<ul style="list-style-type: none"> • The remedy requires a multi-pronged approach involving the principles of inclusion and adoption of social security measures. • Viewing these vulnerabilities as a life course phenomenon, promotion of life preparatory measures has to be put in place; this need not be limited to financial or economic independence per se but also means to ensure healthy active and productive years. • The rising count of the elderly need not be seen in isolation as the population transition is occurring along with a familial transition. • The familial transition needs to be read in consideration of the household compositions and the accommodation pattern of the elderly within them. • While there are households without elderly and households with multiple elderly, there are frequent instances of elderly living with elderly within the household. • Not only is this living arrangement becoming more and more frequent but there are other features of dependence, care provisioning as well as social security and financial protection assuming prominence in households with elderly compared with those without them. • Contrasting today's elderly with tomorrow's, there is every possibility of characteristic advantage in terms of education, life preparation and economic dependence. <ul style="list-style-type: none"> ◦ However, adversities in health and quality of living owing to rising longevity and emergence of long-term chronic ailments. • In this context, the slogan of healthy aging need not focus on the elderly population but the prospective elderly to a large extent. • Limitations as regards activities of daily living (ADL) do show a worsening trend over age even among the elderly population but one wonders as to whether that pattern will be moderated down among the future elderly and be postponed to much later ages of life.

214. New dynamics- The Hindu

Context:

- The G-7 must review its own purpose in a rapidly changing world
- Welcoming leaders of 10 countries including Indian Prime Minister to the “G-7 Outreach” Summit, Italy’s Prime Minister said it was important to step away from the old trope of the “West vs the Rest”.

Increasing Reach

- Italy’s decision to invite mainly the Global South countries including BRICS notables such as Brazil, India, and the UAE, to hold an outreach with seven African countries on energy issues.
- The G-7 was once hailed as a dynamic group of the world’s most developed democracies where heads of state would roll up their sleeves once a year to effect real solutions to global financial and development issues.
- However, with manufacturing slowdowns, the COVID-19 pandemic, and the impact of the Russia-Ukraine conflict and western sanctions, the grouping has appeared more tired, and its meetings less effective.

Continued Troubles:

- Most salient was the G-7’s continued “military, budget, humanitarian, and reconstruction support” for Ukraine, but with no constructive plan on how to end the war.
- A Gaza ceasefire appeal has also not been accepted by Israel.
- The G-7’s focus on China in the Indo-Pacific and on “industrial targeting” and unfair practices was particularly sharp, but it remains to be seen whether any member-country will reduce its own considerable trade ties with Beijing.
- It recommitted to about eight infrastructure corridors, including the India-Middle East-Europe Corridor, reinforced the lack of focus on executing (as distinct from discussing) projects.
- Given the G-7’s current situation, India, in attendance for the eleventh time, could well take stock of the engagement’s utility.
- The importance of harnessing technology and artificial intelligence to bridge global inequalities, and on the value of the Global South, especially Africa.
- It would seem most of those issues would be better addressed in a larger and more representational format such as the G-20.
- But the G-7 may wish to review its own identity and purpose amidst a rapidly changing global power dynamic.

GEO IAS
 —It's about quality—

215. A story of displacement to one of empowerment- The Hindu

Context:

- The Sri Lankan Tamils who arrived on the shores of Tamil Nadu, India, for the first time in 1983 had lost everything.
- Their only objective was to save their lives from the hate-filled ethnocentric violence which caused their displacement.
- Most vulnerable Sri Lankan Tamils chose India due to its proximity, accessibility and linguistic commonality of Tamil.
- Since 1983, 3,34,797 Sri Lankan Tamils have sought refuge in Tamil Nadu.
- They came in four phases that coincided with the escalation of conflict in Sri Lanka since 1983:
- Currently, there are 57,975 refugees living in 105 government-run camps in Tamil Nadu and an estimated 40,000 Sri Lankan Tamils living outside the camps in Tamil Nadu with police registration

New beginnings

- The lifestyle of these populations underwent a drastic change.
- They had to get attuned to a new life of living in isolated camps in different locations.
- However they receive several benefits in these camps such as free housing, electricity, water and monthly food rations.
- They also have access to all the welfare schemes available to the people of Tamil Nadu including the latest women's rights scheme of ₹1,000 per month.
- In terms of education, the refugees have access to government schools, and receive the additional benefit of ₹1,000 a month if they progress to higher education.
- There are also specific one-time education support programmes that are available to refugees, arts and science college students get ₹12,000 and students of engineering courses get ₹50,000.
- Most recently, the Government of Tamil Nadu has handed over brand new homes to about 5,000 Sri Lankan Tamils.
- A costing study that was completed in end-2023 documented that the government spent about ₹262 crore on refugees annually.

Bringing back dignity

- The welfare schemes form a large part of the protection of the Sri Lankan Tamils to restore their dignity and empower them to build a sustainable future.
- This has resulted in 100% enrolment in schools and over 4,500 graduates from the camps. They have been able to break free of their caste barriers as they fall under the Refugee category.
- The treatment of the Sri Lankan refugee is significant because India is not a signatory to the Refugee Convention of 1951 and has absence of domestic laws to govern refugees.
- Having lived in India for over two generations, the refugees have constantly empowered themselves with experience and education.
- Since the end of the war in Sri Lanka in 2009, a total of 16,641 refugees have returned to Sri Lanka according to the UNHCR. While the momentum to return was picking up at a steady pace, the COVID-19 pandemic, and thereafter the economic crisis in Sri Lanka, paused and later slowed down the process.
- The story of the Sri Lankan refugee living in the welfare centres of Tamil Nadu is one of a refugee-care model that is to be emulated.
- the Sri Lankan Tamils living in the welfare centers has resulted in a transformation story
 - of helpless refugees turning into resource persons who could potentially contribute to the rebuilding of the nation when they return.
 - They will also form the most important skilled human resource that is ready to take up any challenge as it arises.

216. What is the Resolve Tibet Act?-

Context:

- The United States Congress on June 12 passed the Promoting a Resolution to Tibet-China Dispute Act, better known as the Resolve Tibet Act.
- The bipartisan legislation now awaits assent from President Joe Biden following which it will be ratified into law.
- This act is the third notable piece of legislation that the US has taken regarding Tibet, following the Tibetan Policy Act or TPA (2002), and the Tibetan Policy & Support Act or the TPSA (2020).

What is Resolve Tibet Act

- The Resolve Tibet Act authorises the use of funds to counter Chinese disinformation about Tibet including disinformation about the history of Tibet, the Tibetan people, and Tibetan institutions, including that of the Dalai Lama.
- The act also challenges the Chinese contention that Tibet has been a part of China since ancient times.
- It urges China to engage in meaningful and direct dialogue with the Dalai Lama or his representatives, as well as democratically elected leaders of the Tibetan community.
- Underlining the right of the Tibetan people to self-determination and human rights
- The act makes a note of China's duty as a signatory of two covenants the **International Covenant on Civil and Political Rights** and the **International Covenant on Economic, Social and Cultural Rights** that advocate the same.
- The Resolve Tibet Act seeks to recognise and address the multi-faceted socio-cultural identity of the Tibetan people, in particular their distinct historical, cultural, religious, and linguistic identity.
- Finally, it amends the TPA to define the exact geographical areas part of the Tibetan Autonomous Region.

Different from previous legislation

- The **Resolve Tibet Act** is a bold successor to the two acts which preceded it.
- The TPA, the first of its kind explicitly concerning Tibet, took a cautious stance in defining American policy on Tibet. While it flagged the ill-treatment of Tibetans, unlike the 2024 act, it recognised China's claim that Tibet was an integral part of China.
- The 2002 act encouraged the Chinese government to pursue dialogue with the Dalai Lama as a "constructive partner," but reiterated his lack of intent in pursuing sovereignty or independence for Tibet, stressing instead on his desire for greater autonomy for Tibetans in China.
- The TPA even clarified that the US government did not maintain any official relations with the Tibetan government-in-exile, led until 2011 by the Dalai Lama himself, and would only meet him in his capacity as a spiritual leader, and Nobel Laureate.
- The TPSA of 2020 pushed for constructive dialogue between the PRC and the Dalai Lama or his representatives, or democratically elected leaders of Tibet resulting in a "negotiated agreement", encouraging international support towards the same.
- The Resolve Tibet Act underlines the need for such talks to be pursued without "preconditions" on the terms to seek a settlement that resolves differences.
- The TPSA also stated that the matter of succession of the Dalai Lama was not of China's concern and would best be left to Tibetan Buddhists.

217. New Parliament should get rid of bad laws- INDIAN EXPRESS

News:

- As Parliament is reconstituted after the 2024 Lok Sabha elections, the following laws should be reconsidered and repealed to ensure justice, equality, liberty for all citizens.

Law needs to be revisit

- **Citizenship Amendment Act:** As the Citizenship Amendment Bill was introduced in Parliament in 2019, the country protested over concerns that coupled with the proposed National Register of Citizens (NRC).
 - It could lead to the disenfranchisement of many Indian citizens.
- Home Minister's insistence that the NRC would be implemented nationwide, despite the disastrous pilot project in Assam – where around 6 per cent of residents were left out of the final NRC list – exacerbated these concerns.
 - If this exclusion rate is extrapolated nationally, crores of Indians could potentially become stateless.
- **Criminal Law Bills:** The recent arbitrarily – enacted Criminal Law Bills, require urgent reconsideration and repeal
 - since they encompass the provisions on marital rape and sedition, and pose the risk of “police raj” by criminalising “resisting, refusing, ignoring or disregarding to conform to any direction given by a police officer”.
- **Marital Rape Exception:** Section 63 of the Bharatiya Nyaya Sanhita deals with the offence of rape but provides an exception for marital rape
- It undermines the fundamental principle that rape is a violation of personal autonomy and bodily integrity, regardless of the relationship between the perpetrator and the victim. Sedition: The use of Section 124A of the IPC (the old sedition law) had been kept in abeyance following a Supreme Court order in May 2022.
- The court had given the government time to reconsider the law. Subsequently, the Home Minister claimed that sedition has been removed from the list of offences in the Bharatiya Nyaya Sanhita.
- The Chief Election Commissioner and other Election Commissioners Act, 2023: The Act changes the composition of the selection committee to appoint Election Commissioners.
- The Supreme Court's directive that the Chief Justice should be a part of the Committee was disregarded.
- The Prime Minister, Leader of the Opposition (Lok Sabha), and a nominated Union cabinet minister now make the selection, giving the Union government total control over the selection.
- **The Mines and Minerals (Development and Regulation) Amendment Act, 2023:** The Act empowered the Union government to exclusively auction mining leases and composite exploration licences for certain critical high-value minerals such as cadmium, selenium, nickel, cobalt, tin, etc.
- It also dispensed with the forest clearances required for mine reconnaissance and prospecting operations.
- It is critical to point out that the Act allows sub-surface excavation as part of reconnaissance, which had been prohibited under the 1957 Act.
- The environmental consequences of such invasive operations can be severe and irreversible, undermining sustainable development goals and disregarding previously existing environmental protections.
- **The Transgender Persons Act, 2019:** The Transgender Persons (Protection of Rights) Act, 2019, only recognises “sexual abuse” with a maximum punishment of two years as opposed to life imprisonment for rape of women.
- This punishment is insufficient and discriminatory.

218. 11 candidates apply to verify EVM burnt memory: what is this process? - Indian Express

Context:

- In a first, 11 candidates in the recently-concluded 2024 Lok Sabha and State Assembly elections have applied for verification of the **burnt memory** of the Ballot Units and Control Units of electronic voting machines (EVMs), and of Voter Verified Paper Audit Trail (VVPAT) units.
- The remedy of verification was made available to losing candidates by the Supreme Court this April.
- The candidates would have to bear expenses of the verification process, but they would be refunded if any tampering was found.

Supreme Court order

- While upholding the **EVM-VVPAT system** and rejecting the plea for a return to ballot papers and for 100% counting of VVPAT slips, the court directed the Election Commission of India (ECI) to allow second- and third-placed candidates to seek verification of burnt memories of EVMs and VVPATs
 - up to 5% of machines in an Assembly constituency or Assembly segment of a Lok Sabha constituency.
- The court said that candidates or their representatives “shall identify the EVMs by the polling station or serial number”, and “shall have an option to remain present at the time of verification”.
- Requests for verification have to be made within seven days of the declaration of the result.
- The actual cost or expenses for the said verification will be notified by the ECI, and the candidate making the said request will pay for such expenses.
- The expenses will be refunded, in case the EVM is found to be tampered

Process to be followed for the verification

- The ECI is yet to finalize the technical standard operating procedure (SOP).
- However on June 1, the ECI released the administrative SOP for checking and verification of the burnt memory of EVMs and VVPATs.
 - The **District Election Officer (DEO)** will be responsible for the process

219. Bihar quota struck down: what is the 50% ceiling that court relied upon?- The Indian Express

Context:

- Patna High Court on Thursday set aside notifications by the Bihar government increasing reservation in government jobs and educational institutions from 50% to 65%.

History of the 50% ceiling for quotas

- The 50% ceiling was introduced by the Supreme Court in its landmark 1992 decision in **Indra Sawhney v Union of India** in order to ensure “efficiency” in administration.
- The 6-3 majority verdict that upheld the 27% quota for **socially and economically backward classes (SEBC)** set two important precedents
 - first, it said that the criteria to qualify for reservation is **social and educational backwardness**
 - Second, it reiterated the 50% limit to vertical quotas that the court had laid down in earlier judgments:-
 - M R Balaji v State of Mysore, 1963, and Devadasan v Union of India, 1964.**
 - The 50% limit would apply unless in “exceptional circumstances”
- The Indra Sawhney ruling has been re-affirmed in a host of cases since then.
- But efforts to breach the 50% limit have also continued, in Bihar and other states, and gained significant political currency.

Legal challenge to ceiling

- The **50% limit is under challenge** before the Supreme Court. Despite the pending challenge, laws that could breach the limit have been set aside by the courts.
- The **only exception has been the 10% quota for the Economically Weaker Section (EWS)** introduced in 2019.
- In November 2022, a five-judge Bench of the Supreme Court upheld the EWS quota, by stating that 50% ceiling applied only to SC/ ST and OBC quotas, and not to a separate quota that operated outside the ‘backwardness’ framework which was an entirely different class
- This observation has led to questions on whether the SC might reopen the Indra Sawhney question itself.
- Critics of the 50% ceiling argue that it is an arbitrary line drawn by the court, even as the legislature has consistently attempted to push back.

Principle of Equality

- An argument is made that breaching 50% would be antithetical to the **principle of equality** since reservations are an exception to the rule.
- Dr B R Ambedkar's speech in the Constituent Assembly is often quoted as caution that reservations without qualifiers could “**eat up the rule of equality**”
- However, there is also a view that reservations are a feature of the **fundamental right to equality**, and part of the **basic structure of the Constitution**.
- In its ruling of 2022 upholding the 27% OBC quota in NEET, the SC had said that reservation is not at odds with merit but furthers its distributive consequences.
- This reframing of the question on substantive equality rather than formal equality will be tested when the SC takes up the Indra Sawhney question once again.

Reservation in other states

- The 76th constitutional amendment in 1994 inserted the Tamil Nadu reservation law breaching the 50% limit into the **Ninth Schedule of the Constitution**.
- The Ninth Schedule provides the law with a “safe harbour” from judicial review under **Article 31A of the Constitution**.
- Laws placed in the Ninth Schedule cannot be challenged for reasons of violating any fundamental right protected under the Constitution.
- In May 2021, a five-judge SC Bench unanimously struck down a Maharashtra law that provided reservation to the Maratha community as unconstitutional, holding that the quota limit could not exceed 50%.
- With the implementation of the Maratha quota, reservation in the state could have gone up to 68%.
- Similar to the Maratha issue are the cases of Patels in Gujarat, Jats in Haryana, and Kapus in Andhra Pradesh.

220. Explained: Bail in money laundering cases, and the 'twin test' under PMLA - Indian Express

Context:

- A day after a trial court granted bail to Delhi Chief Minister Arvind Kejriwal who is in jail on charges under the Prevention of Money Laundering Act (PMLA), the Delhi High Court stayed the order.
- The ED challenged the trial court's order on the ground that the court had failed to apply the 'twin test' for granting bail under PMLA.

What is the Twin Test

- Section 45 of the PMLA, which deals with bail, first states that no court can grant bail for offenses under this law, and then proceeds to mention a few exceptions.
- The negative language in the provision itself shows that **bail is not the rule but the exception under PMLA.**
- The provision makes it mandatory to hear the public prosecutor in all bail applications, and when the prosecutor opposes bail, the court is required to apply a twin test.
- These two conditions are: (i) that there are "reasonable grounds for believing that the accused is not guilty of such offence" (ii) that "he is not likely to commit any offence while on bail".

Legal challenges to twin test

- The first blow to the constitutional validity of the twin test came in a 2017 ruling, **Nikesh Tarachand Shah v Union of India.**
 - A two-judge Bench comprising struck down the bail provision as unconstitutional on the ground that the onerous conditions were not a reasonable classification.
- '**Reasonable classification**' is a feature of the right to equality, which is a fundamental right.
- However, by a subsequent amendment, Parliament put these provisions back in the law through the **Finance Act, 2018.**
- This re-insertion was challenged before various High Courts and eventually before the Supreme Court, culminating in a batch of petitions that were heard in 2022 as **Vijay Madanlal Choudhary v Union of India.**

Current position in law

- One key aspect of the challenge to the amendment on bail conditions still remains open even after the **Vijay Madanlal Choudhary ruling: the passing of these amendments through the Money Bill route.**
- Although the Supreme Court has agreed to review its Vijay Madanlal Choudhary ruling itself, it is still valid law since no stay is operating on the judgment.
- **As per the ruling,** the twin test has to be rigorously applied by all courts special courts trying money laundering offences as well as constitutional courts.
- It would also apply in the same way for both regular bail and anticipatory bail.
- However, an accused can still get the benefit available under **Section 436A of the Code of Criminal Procedure (CrPC),** under which he is entitled to bail after serving half of the maximum sentence as an undertrial.
- This means that in most money laundering cases, if the Enforcement Directorate is not able to finish the trial within three and a half years, the accused is entitled to bail, irrespective of the twin test.

221. Yoga based intervention can reduce opioid dependence-PIB

Context:

- Yoga, which is being promoted all over the world through the observance of the International Yoga Day today, has the potential to reduce problems like Opioid Dependence.
- A yoga module has been developed which can be used as a low-cost and low-risk adjunct therapy to reduce substance use among Opioid Use Disorder (OUD) patients.

Opioids:

- Opioids are natural, semi-synthetic, or synthetic chemicals that interact with opioid receptors in the body and brain and reduce perception of pain.
- While the terms opioids and opiates are sometimes used interchangeably.
- Opiate refers specifically to natural compounds derived from the poppy plant, such as heroin or morphine, while opioids may be natural or derived in a lab.
- Opioid use disorder is a severe substance use disorder.
- Dependence may be on prescription opioids (drugs such as codeine, morphine) often given to ameliorate pain or street opioids (such as heroin, brown sugar).
- The body becomes used to opioids and it can lead to severe withdrawal symptoms such as watering through eyes and nose, severe body aches, flu-like symptoms, sleeplessness, anxiety and irritability. With chronic use, it can cause impairment in cognition, sexual dysfunction, severe impairment of social and occupational functions and adds to the financial burden.
- In order to find an alternative to opioids for pain control, a study to develop a yoga module to reduce opioid use was carried out by National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore.
- The yoga for substance use module developed with support from Science and Technology of Yoga and Meditation (**SATYAM**) programme of DST was tested for feasibility of application through tele-mode and inter-therapist reliability was established.
- In the initial clinical case study with 9-month follow-up, the module was found suitable for bringing relief to patients suffering from opioid dependence.
- The study suggested that yoga can be a useful add-on tool to enhance abstinence and reduce substance use severity in the people with opioid dependence.
- Besides, the yoga had significantly better reduction in pain, craving, anxiety and depression and better improvement in quality of life and quality of sleep
- Thus, yoga may be used as a low-cost and low-risk adjunct therapy to reduce substance use

222. What are the duties of a Speaker? - The Hindu

Context:

- In the 18th Lok Sabha, Bhartruhari Mahtab of the Bharatiya Janata Party (BJP) has been appointed as Speaker pro tem.

Speaker pro tem

- **Article 94** of the Constitution states that the Speaker of the Lok Sabha shall not vacate his/her office until immediately before the first meeting of the Lok Sabha after its dissolution.
 - This is to ensure that the office of the Speaker is never left vacant.
- **Article 95(1)** of the Constitution provides that when the post of Speaker and Deputy Speaker is vacant, the President shall appoint a member of the Lok Sabha to perform the duties of the Speaker.
- This term is **not found in the Constitution or rules of Lok Sabha** but is a conventional term which finds mention in the '**Handbook on the working of Ministry of Parliamentary affairs.**'
- As per tradition, one of the senior-most members of the Lok Sabha is selected by the government, who is then administered oath by the President.
- The Speaker pro tem administers oath of office to other MPs and presides over the election of full-time Speaker.

How are the Speaker and Deputy Speaker elected

- **Article 93** of the Constitution states that the Lok Sabha shall choose two members to be its Speaker and Deputy Speaker.
- The election of the Speaker is held on a date fixed by the President.
- All the Speakers in independent India have been elected unopposed.
- The election of Deputy Speaker is held on a date fixed by the Speaker.

Role of the Speaker

- Apart from the conduct of business, the Speakers perform two important constitutional functions of **certifying a Bill to be a Money Bill**, and deciding on disqualification under the Tenth Schedule for defection.
- The Lok Sabha rules provide the Speaker with the powers of referral of Bills introduced to Standing Committees and suspension of members for grave disorder up to a maximum of five days.
- Referral of Bills to committees have declined from 71% during 2009-14 to 16% during 2019-24.
- With the return of a coalition government, it is expected that the Speaker would refer important Bills to Standing committees for scrutiny.
- There were also large-scale suspensions of Opposition MPs during the winter session of 2023.

Conventions

- In Britain, the Speaker once elected to his/her office, **resigns** from the political party to which he/she belonged.
- In subsequent elections to the House of Commons, he/she seeks election not as a member of any political party but as 'The Speaker seeking re-election'.
- This is to reflect his/her impartiality while presiding over the House.
- Somnath Chatterjee, who was the Speaker of the 14th Lok Sabha acted independently by not resigning from the post despite his party's (CPM) direction after it had withdrawn support from the United Progressive Alliance (UPA) government during a confidence vote in 2008.
- While the Tenth Schedule allows a Speaker to resign from their political party on being elected to their office, it has **never been done by any Speaker till date.**
- Resignation from their political parties on being elected as Speaker could be a first step towards demonstrating independence.

Deputy Speaker

- The Deputy Speaker is an important constitutional officer who steps in during the vacancy or absence of the Speaker.
- The convention of offering the post of Deputy Speaker to the Opposition started in the year 1991.
- Thereafter, till the 16th Lok Sabha this has been followed without a break.
- It was a travesty of the Constitution that no Deputy Speaker was elected in the 17th Lok Sabha.

223. Create the space for governance with a green heart- The Hindu

Context:

- As a new term begins for the government and the Lok Sabha, it must have green concerns close to the heart.
- While we have never had a government that truly put the environment first,
- Indian Environment Ministers have been concerned primarily with the welfare of mining, oil, coal, highways, and power industries.
- India stands on the cusp of severe environmental degradation, which can only be arrested by the conscious adoption of green policies even as the country pursues the goal of becoming a middle-income economy.

<p>Greater vulnerability</p> <ul style="list-style-type: none"> • Climate change is something India's leadership mentions often but does little to engage with (with the exception of promoting the solar energy industry). <ul style="list-style-type: none"> ◦ Even as energy consumption soars, no steps have been taken to consciously pursue an agenda of cutting down emissions. • More importantly, the remedial aspects of climate change which include building resilience, food security, and access to essentials have fallen far behind in priorities. • As floods, famines, heatwaves, wildfires, water shortages and droughts become increasingly common, contingency plans must be put in place to protect vulnerable populations and diminish harm. • From updating building guidelines to preserving natural storm barriers such as mangrove forests, to establishing funds for evacuation and rehabilitation, are the tasks that the MOEFCC has had no time for recently. • India has one of the world's lowest levels of green cover per capita. <ul style="list-style-type: none"> ◦ It has only 28 trees per headcount of the populace, ◦ Qualitatively important forest cover has decreased significantly in the last 20 years. ◦ Recent legislation such as the Forest (Conservation) Amendment Bill, 2023, needs to be rolled back and robust new protections put in place. • The metropolitan centers of Delhi, Mumbai and the tier 2 and tier 3 cities across the Gangetic belt now have unacceptable levels of air pollution. <ul style="list-style-type: none"> ◦ Bengaluru and Delhi are running out of water, and the poor have to queue for hours to have access to the bare minimum. ◦ The rivers that brought life to cities, such as the Adyar in Chennai or the Yamuna in Delhi, have become open sewers. • Smaller cities have more manageable problems, but without timely intervention, will reach the same crisis levels as the metros. • Sewage treatment specifically requires a major national overhaul as Indian cities treat only approximately 28% of the sewage they generate. 	<p>Destruction in the Himalayas</p> <ul style="list-style-type: none"> • Climate change has had outsize repercussions in the mountains of India. <ul style="list-style-type: none"> ◦ Glaciers are rapidly receding, and in some places, have disappeared. ◦ Up to 80% of their volume is forecast to disappear in this century. • Rainfall and temperature patterns have changed beyond recognition. • This impacts the water and food security of not just the people of the mountains but also of much of North India. When thousands of Ladakhis fasted and protested to demand governmental action they were ignored perhaps because they held no votes. • Similar concerns arise for wetlands whose importance has never been greater and other marginal landscapes which are critical for biodiversity as well. • At the root of many of these problems is the Indian government's age-old refusal to listen to stakeholders and affected persons. • Environmental Impact Assessment (EIA) mechanisms have become ineffective. Protests are swept aside, criticism is ignored, resulting in rapid, ill-considered steps being taken. • The Char Dham Highway project is an example. <ul style="list-style-type: none"> ◦ Passed through amidst a barrage of small EIAs, the grandiose scheme has caused irreparable harm to the river valleys of Uttarakhand. <p>Restore genuine conservation</p> <ul style="list-style-type: none"> • Ill-advised policies, driven by commercial interest, such as green credits and compensatory afforestation, have taken the place of genuine conservation efforts. <ul style="list-style-type: none"> ◦ Sustainable development does not mean that only commercially profitable steps may be taken by the government. ◦ Enforcement mechanisms and bodies also need more teeth so as to ensure genuine environmental rule of law. • The absence of these issues from the election manifestos of the major political parties was bitterly disappointing. • If the government is to truly be the steward of the people, it must start by taking a hard look at the physical health of the country.
--	--

224. 18th Lok Sabha session begins today: How do MPs take oath? What happens if an MP is in jail?-INDIAN EXPRESS

News:

- The first session of the 18th Lok Sabha will start.
- Before the House can begin its legislative functioning, the newly elected members will have to take the oath of Members of Parliament (MP), which is provided in the Constitution.

Key Highlights

- The day will begin in Rashtrapati Bhavan, where Bhartruhari Mahtab — who has been elected for the seventh consecutive time from Cuttack, Odisha — will be the first one to take the oath of a Lok Sabha MP in front of President.
- The President has entrusted him with the duties of the Speaker (pro tem) under Article 95(1) of the Constitution till the election of the new Speaker. Mahtab will preside over the House as his colleagues take oath.

When does the term of an MP begin?

- The five-year term of a Lok Sabha MP begins when the Election Commission of India (ECI) declares the results according to Section 73 of the Representation of the People Act, 1951.
- From that day onward, MPs are eligible for certain rights as elected representatives. For example, they start receiving their salary and allowances from the date of ECI notification — after the 2024 general elections, the ECI declared results on June 6.

Oath-taking in Lok Sabha

- However, there is an exception to this rule. An individual can become a minister without being elected to Parliament.
- They have six months to secure a seat in either Lok Sabha or Rajya Sabha. During this time, they can participate but not vote in House proceedings.

What is the parliamentary oath?

- The Constitution's third schedule contains the text of the parliamentary oath.

How do MPs take the oath?

- Before being called upon to take the oath or affirmation, MPs must submit their election certificate to the Lok Sabha staff.

Can MPs in jail take the oath?

- The Constitution specifies that if an MP does not attend Parliament for 60 days, their seat can be declared vacant.
- Courts have used this ground to allow MPs in jail to take an oath in Parliament.
- For example, in June 2019, during the oath-taking for the last Lok Sabha, Atul Kumar Singh, MP from Ghosi in Uttar Pradesh, was in jail for serious criminal charges.

225. How the PESA has boosted forest conservation in India- The Hindu

Context:

- The policy approach to conservation in India has long grappled with two kinds of conflicts: conservation versus resource extraction by local communities, and conservation versus 'economic development'.
- It goes without saying that greater the centralisation of political power, the greater the say of the national and state elites, which would prioritize the interests of big capital over that of local communities.
 - Deforestation driven by mining, power projects, commercial timber, big dams etc. could prevail over conservation and/or livelihoods of forest communities, a noticeable phenomenon in India.
 - Conservation initiatives would follow a top-down approach, leading to local communities losing access to traditional forest lands.
- A policy approach providing political representation to marginalized communities boosts forest conservation while securing their economic interests
- The case for a combination of decentralization and democratization, where marginalized local communities enjoy not just token political representation but have actual say in both decision-making and resource management.

The methodology

- A data-driven study of political representation: the Panchayat (Extension to Scheduled Areas) Act (PESA).
- PESA extends local government councils to Scheduled Areas.
- Under the Fifth Schedule of the Constitution, regions with predominantly tribal populations are categorized as 'Scheduled Areas', a territorial designation that recognises the customary rights of the Scheduled Tribes (ST).
- The 73rd Amendment, passed in 1992, formalized local self-government Panchayati Raj Institutions (PRI) in the non-Scheduled Areas; it did so without "mandated representation for STs".
- PESA, 1996 however, took it a step further:
 - Introduced an electoral quota that requires all chairperson positions, as well as at least half the seats on each local government councils to be reserved for ST individuals."
 - Incidentally, in States where PESA has not been implemented well, as in Gujarat, for instance, the most common failure has been the absence of mandated ST representation in gram sabha committees.

Equitable representation

- Tracking the increase and decrease of tree and vegetation cover over time and across the forested areas,
 - It was found “boosting formal representation for ST led to an average increase in tree canopy by 3% per year as well as a reduction in the rate of deforestation.”
- The study also showed that the rise in tree canopy and fall in deforestation only began to happen “after the introduction of PESA elections that mandate quotas for ST.”
 - In other words, the mere presence of PRIs or local self-government which were introduced from 1993 “without mandated representation for the ST, had no conservation effects.”
 - The STs had an economic incentive to protect trees, which they needed for their livelihoods for non-timber forest produce, a dependency that made them hostile to commercial timber and mining.
- Qualitative and quantitative evidence finds that prior to PESA, areas close to mines experienced higher rates of deforestation. But the introduction of PESA elections led to a greater reduction in deforestation for PESA villages close to mines. .

On democratic decentralization

- PESA with that of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA), a legislation that aimed to bolster ST rights to forest lands.
 - It was found that FRA, 2006 had “no additional impacts” on conservation “beyond those caused by PESA.”
- In conclusion, mandated political representation for marginalized communities is one institutional mechanism that can yield better results in conservation,
- A single institution rather than multiple ones vested with different mandates is critical because it would be “better at recognising how to balance the dual policy objectives of development and conservation;
- Forest-dwelling ST communities are one of the most impoverished and politically marginalized populations in India.



226. What is Enemy Agents Ordinance, tough law applicable in Jammu and Kashmir?

Context:

- J&K DGP said those found assisting militants in J&K should be tried by investigating agencies under the Enemy Agents Ordinance, 2005.
- The law is more stringent than the Unlawful Activities (Prevention) Act (UAPA) and has the punishment of either a life term or a death sentence.
 - The fighters who can't be brought under investigation, are shot dead.
 - Those who support them, will be treated as enemy agents,.

What is the Enemy Agents Ordinance?

- The J&K Enemy Agents Ordinance was first issued in 1917 by the then Dogra Maharaja of J&K. It is referred to as an 'ordinance' since laws made during the Dogra rule were called ordinances.
- According to the ordinance,
 - "whosoever is an enemy agent or, with an intent to aid the enemy,
 - or impedes the military or air operations of Indian forces or endangers life shall be punishable with death or imprisonment for life or with rigorous imprisonment for a term which may extend to 10 years and shall also be liable to fine".
- After Partition in 1947, the ordinance was incorporated as a law in the erstwhile state and was also amended.
- In 2019, when Article 370 of the Constitution was repealed, J&K's legal framework also underwent several changes.
- The Jammu and Kashmir Reorganisation Act was passed, which listed out state laws that were to continue while several others were repealed and replaced with Indian laws.
- While the security laws such as Enemy Agents Ordinance and Public Safety Act remained;
 - The Ranbir Penal Code was replaced with the Indian Penal Code.
 - Other laws including Forest Act, 2006 and The SC ST (Prevention of Atrocities) Act, 1989 were extended to J&K as well.

How are trials conducted under the ordinance?

- The trial under the Enemy Agents Ordinance is conducted by a special judge who is appointed by the "government in consultation with the High Court".
- Under the ordinance, the accused cannot engage a lawyer to defend herself unless permitted by the court.
- There is no provision for appeal against the verdict, and the decision of the special judge can only be reviewed "by a person chosen by the Government from the judges of the High Court and the decision of that person shall be final".
- There are scores of Kashmiris who are or have been tried and sentenced under the Enemy Agents Ordinance.

227. The Indian government plans to set up the Mediation Council of India (MCI) by the end of this year to improve out-of-court dispute resolution and enhance ease of doing business.- THE PRINT

Context:

- The government is expected to establish a Mediation Council of India (MCI) by the end of this year to improve the ease of doing business.

Key Highlight

- The initiative aims to facilitate the resolution of disputes, especially those related to business, outside the court system.
- Earlier this year, a committee formed by the Insolvency and Bankruptcy Board of India (IBBI) suggested the introduction of a voluntary mediation framework to expedite the resolution of disputes out of court.
- This framework can also alleviate the burden on courts, similar to how the government's decriminalization of over 100 legal provisions aims to achieve the same goal.
- The proposed MCI will be established under the Mediation Act, which was enacted last year.
- According to a disclosure in the Rajya Sabha, this Act requires mediation proceedings to be completed within 180 days from their commencement, the business-daily claimed.
- The council will set the rules for mediation and empower mediators.
- The MCI will oversee the education, assessment, and certification of mediators through accredited institutes. It will also establish standards for mediator conduct and recognize mediation service providers.
- The council will consist of a chairperson and two members with expertise in mediation, as specified by the Act.
- It will also include a chief executive officer and a representative from a recognised body of commerce and industry appointed by the central government.

Why is mediation important in business?

- Mediation is a process where a mediator helps disputing parties to reach an agreement outside of court.
- Unlike other forms of out-of-court dispute resolution, mediation does not result in a binding award or judgement.
- Instead, the mediator assists the parties in reaching a mutually satisfactory settlement.
- The Mediation Act, passed last year, mandates the completion of mediation proceedings within 180 days of their initiation.
- The MCI will be established under this legislation.
- The council will also be responsible for the training and certification of mediators through accredited institutes, as reported.
- Currently, mediation is typically pursued only when required by law, such as under the Commercial Court Act of 2015, which mandates that parties attempt mediation before proceeding to court

—It's about quality—

228. What is the role of a Lok Sabha's Leader of Opposition? - Indian Express

Context:

- The position of Leader of Opposition which was vacant in Lok Sabha for 10 years has finally been occupied.

Leader of Opposition in Lok Sabha and Rajya Sabha

- The position of Leader of Opposition was officially described in The Salary and Allowances of Leaders of Opposition in Parliament Act, 1977.
- The Act describes the Leader of Opposition as a member of the Council of States or the House of the People, as the case may be, who is, for the time being, the Leader in that House of the party in opposition to the Government having the greatest numerical strength and recognised as such by the Chairman of the Council of States or the Speaker of the House of the People.
- A mysterious rule is often quoted by some self-styled experts, which requires a party to have at least 10 per cent of the members of the House for the Speaker to recognise someone as the Leader of the Opposition. .

Leader of Opposition in Lok Sabha: the position, role, responsibilities

- The Leader of Opposition sits in the front row to the left of the Chair, and enjoys certain privileges on ceremonial occasions like escorting the Speaker-elect to the rostrum.
- The Leader of Opposition is also entitled to a seat in the front row during the Address by the President to both Houses of Parliament.
- The main duty of the Leader of Opposition is to serve as the voice of the opposition in the House.
- An official booklet on Parliament published in 2012 says the Leader of Opposition in Lok Sabha "is considered as a shadow Prime Minister with a shadow Cabinet, ready to take over the administration if the Government resigns or is defeated on the floor of the House".
- The Leader of Opposition is the opposition's representative in the high-powered committees headed by the Prime Minister for appointment to key posts such as the Director of CBI, the Central Vigilance Commissioner and Chief Information Commissioner, the Chairperson and Members of the National Human Rights Commission, and the Lokpal.
- In order of precedence, the Leaders of Opposition in Lok Sabha and Rajya Sabha come at No. 7, along with Union Cabinet Ministers, the National Security Advisor, the Principal Secretary to the PM, the Vice-Chairperson of the NITI Aayog, former PMs, and Chief Ministers.

229. A progressive Indian policy on Myanmar outlined-THE HINDU

Context:

- Three years on, the military in Myanmar, which overthrew the elected civilian government in February 2021, continues to kill, maim and displace its own people.
- India has steadfastly maintained formal relations with this regime, which has so far murdered more than 5,000 people and displaced some 2.5 million people.

Key Highlights

- India, as a major democracy, should leverage its position to promote democracy and human rights in Myanmar.
- This approach, they argue, aligns better with India's long-term goals and strengthens its regional standing.

Recommendations for Change:

- Supporting Democracy:** India can utilize its democratic experience to assist Myanmar's pro-democracy movement.
- This could involve offering training and knowledge sharing to the National Unity Government and other resistance groups.
- Ending Military Support:** India should immediately stop selling weapons and providing any military aid to the junta, as these resources are used to suppress civilians.
- Humanitarian Aid:** India can establish humanitarian corridors across the border to deliver aid to conflict-affected civilians in Myanmar. This might involve reviving the Free Movement Regime (FMR) and working with local and international NGOs.
- Protecting Refugees:** India needs to stop detaining and deporting refugees fleeing Myanmar. International law and humanitarian principles dictate that they be treated as refugees seeking protection, not illegal immigrants.

- **Promoting Inclusive Refugee Policies:** The government should ensure humane treatment and shelter for refugees, drawing from best practices used in other countries and adhering to international standards.
- By adopting a more values-driven approach, India can better balance its strategic interests with its commitment to democracy and human rights.

230. The Court spells the way in Himalaya's development - The Hindu

Context:

- Despite the importance of the Indian Himalayan Region (IHR) there has always been dissonance between the special development needs and the development model being pursued in the IHR.
- **The Supreme Court of India, through** its recent judgments, seem to be headed towards a more robust rights-based regime where sustainable development would be a **fundamental right**.
- In **State of Telangana and Others vs Mohd. Abdul Qasim (Died) Per Lrs**, the Court had said that the need of the hour is to adopt an **ecocentric view of the environment**, where nature is at the core.

Current Development Model

- The current development model being pursued in the IHR is in total contravention of this approach.
 - Bumper crop of hydroelectric power stations without any care for the rights of these rivers and streams.
 - Reckless widening of existing hill roads to four lanes in the name of development
- A post-disaster need assessment report by the **National Disaster Management Authority on the floods in 2023** in Himachal Pradesh identified, unsurprisingly, rampant construction in violation of norms, regulations and even court orders in many cases
- The **Teesta dam breach in Sikkim** and the monsoon floods and landslides in Himachal Pradesh both events in 2023 are a stark reminder of the havoc our development model is causing to the environment in the mountains.

Rights

- In another matter of public interest litigation (PIL) titled **Ashok Kumar Raghav vs Union of India and Ors.**
 - The Supreme Court asked the central government and the petitioner to suggest a way forward so as to enable the Court to pass directions on the carrying capacity of the Himalayan States and towns.
- The Court is not only cognisant but also committed to the conservation of species and has underscored the importance of taking proactive measures "**not reactive**" to protect the Great Indian Bustard.
- In the case of the **Great Indian Bustard**, the Court has recognised the right of the people of this country to be free from the adverse impacts of climate change.
- The Court modified the previous order where a blanket ban was imposed on a very large area despite the report of the Wildlife Institute of India
- The Court has explained in the judgement the non-viability of underground power transmission lines.
- In fact, the Court has explained in detail, with examples of many international and national obligations, to explain the **intersectionality between the fundamental rights and human rights**
- The top court also stated without a clean environment which is stable and unimpacted by the vagaries of climate change, the right to life is not fully realised.

Sustainability

- It is a given that unless infrastructure is sustainable and dependable, it cannot become the foundation for people's pursuit of their developmental goals.
- Sustainability of infrastructure necessarily means that it is resilient to the adverse impacts of climate change and consequent disasters.
- This is essential to ensure equality, equity and equal access to people, to various opportunities all across the country as is the mandate of **Articles 14 and 21** of the Constitution.
- Disasters are also known to amplify social inequality as the poor are the worst hit and the most inadequately equipped to deal with the consequences.
- To pursue a path of sustainable development can also be said to be a fundamental right, as a natural corollary or an integral part or a subset of the right to be free from the adverse impacts of climate change.

Way Forward

- The interconnection between disasters and unregulated development has become increasingly pronounced and visible.
- The only way forward is for disaster management to be incorporated in development planning, both from a perspective of prevention and resilience.

- Our actions in the name of development, in total disregard of nature in most cases, is to be blamed for these unnatural disasters resulting from natural hazards.
- The development plans, policies and laws that underpin them too play a pivotal role in the making of these disasters.
- There is an urgent need for planning stage convergence of different authorities so that when there is a plan for any development, all concerns about disaster and climate resilience are also factored in
- We also need science, policy and action to be in conformity with each other, in an integrated approach with the involvement of all including policymakers, planners, the scientific fraternity and communities.

231. Analyzing Maharashtra's water crisis - The Hindu

Context:

- After the deficient monsoon last year, the Maharashtra government declared many parts of the State to be drought-hit.
- This situation is in sharp contrast with the State's coastal areas, where rainfall has often been in excess, leading to severe flooding.

Rain-shadow effect

- Marathwada lies in the rain-shadow region of the Western Ghats.
- When moist winds from the Arabian Sea encounter these mountains, they rise and cool, causing heavy rainfall (2,000-4,000 mm) on the western side.
- But by the time these winds cross the Ghats and descend into Western Maharashtra and Marathwada, they lose most of their moisture, leaving Marathwada much drier (600-800 mm).
- A **2016 study by IIT Gandhinagar** researchers said climate change is worsening the situation in central Maharashtra.
- The region has experienced an increasing trend in drought severity and frequency of late.
- As a result, Marathwada and North Karnataka have emerged as the second driest regions in India after Rajasthan.

Sugarcane Crop in Marathwada region

- Marathwada's agricultural practices are not well suited to its low rainfall.
- A major contributor to the region's water crisis is sugarcane cultivation.
- **Sugarcane requires 1,500-2,500 mm of water** in its growing season it also needs to be irrigated almost every day.
- The area under sugarcane increased steadily between the 1950s and the 2000s, plateauing in the last decade.
- Today, the crop occupies **4% of the total cropped area** in the region and consumes 61% of the irrigation water.
- As a result, the average river outflow in the upper Bhima basin has almost halved.
- Long-standing government support for sugarcane pricing and sales has expanded sugarcane irrigation, restricting the irrigation of more nutritious crops.
- Since December 2023, the government has been promoting sugarcane-juice-based **ethanol production**, which may be unwise for this water-starved area
 - 82% of the sugar grown in Maharashtra comes from low-rainfall areas.
- Marathwada has predominantly clayey black soil, locally called "regur".
- It is fertile and retains moisture well. However, it has a low infiltration rate: when it rains, the water is either logged or runs off, but doesn't percolate down to recharge groundwater.
- Even within Marathwada, water scarcity is not uniform.
 - This is because groundwater slowly moves underground from upland areas to the valleys.
 - The wells in upland areas dry up a few months after the monsoons, and is where the water scarcity is most acute.

Suggestive Measures

- **Classical watershed management work** (such as building water-conserving structures like contour trenches, earthen bunds, gully plugs, etc.).
- Funds under the **Mahatma Gandhi National Rural Employment Guarantee Scheme** could be used to design silt-trapping mechanisms and organise training programmes for farmers on periodic desilting.
- In a low-rainfall region, managing water demand includes practising **water-efficient irrigation**, cultivating drought-resistant crops, and diversifying livelihoods.
- Marathwada must also shift to other **high-value, low-water-using crops**, while sugarcane production must move to Uttar Pradesh, Bihar, and West Bengal.

232. How well is India tapping its rooftop solar potential? - The Hindu

Context:

- India's installed rooftop solar (RTS) capacity increased by 2.99 GW in 2023-2024, the highest growth in a year.
- As of March 31, the total installed RTS capacity in India was 11.87 GW, according to the Ministry of New and Renewable Energy.

<p>RTS programme</p> <ul style="list-style-type: none"> • India launched the Jawaharlal Nehru National Solar Mission in January 2010. • Its main objective was to produce 20 GW of solar energy (including RTS) in three phases • In 2015, the government revised this target to 100 GW by 2022. • In December 2022, India had an installed RTS capacity of 7.5 GW and extended the deadline for the 40-GW target to 2026. • India's overall RTS potential is approximately 796 GW. • To meet India's target of installing 500 GW of renewable energy capacity, with a solar component of 280 GW, by 2030, RTS alone needs to contribute about 100 GW by 2030. <p>How are States faring</p> <ul style="list-style-type: none"> • In 2024, the RTS capacities of Gujarat, Maharashtra, and Rajasthan had taken big strides while some others were behind the curve. • Rajasthan boasts of the highest RTS potential in the country. Its efforts to streamline approvals, provide financial incentives, and promote RTS through public-private partnerships have spurred this growth. • However, Uttar Pradesh, Bihar, and Jharkhand, among others, are yet to fully explore their RTS potential. • Their challenges include bureaucratic hurdles, inadequate infrastructure, and lack of public awareness. 	<p>'Pradhan Mantri Surya Ghar Muft Bijli Yojana'</p> <ul style="list-style-type: none"> • It is a flagship initiative to fit one crore households with RTS systems and help them get up to 300 units of free electricity every month. • An average system size of 2 kW for targeted households will result in a total RTS capacity addition of 20 GW. • The scheme also encourages the adoption of advanced solar technologies, energy storage solutions, and smart grid infrastructure. <p>How can RTS grow?</p> <ul style="list-style-type: none"> • Creating awareness is key to getting consumers on board. • In addition, RTS needs to be economically viable for households. • While government subsidies are helping, multiple low-cost financing options are required. • The number of banks and non-bank financial companies providing RTS loans has increased of late. • Access to low-cost RTS loans should be as easy as getting a bike or car loan. • Promoting R&D in solar technology, energy storage solutions, and smart-grid infrastructure can lower costs, improve performance, and enhance the reliability of RTS systems. • Investments in training programmes, (like the 'Suryamitra' solar PV technician programme initiated in 2015), vocational courses, and skill development initiatives will help build a skilled workforce. • As the scheme's implementation enters full swing, net-metering regulations, grid-integration standards, and building codes should be reviewed and updated to help address emerging challenges and facilitate smooth implementation.
---	--

233. Why India needs to build disaster resilience in its critical infrastructure - Indian Express

Context:

- This past month, amidst relentlessly high temperatures, electricity demand in Delhi repeatedly broke records.
- Several places in central and eastern India faced similar or worse situations.

Related Data

- While early warnings and quick response have significantly reduced human casualties in disasters, economic and other losses from extreme weather events and disasters have been rising.
- This is mainly due to the increase in frequency and intensity of such events.
- Government data show that in the five years between 2018 and 2023, states together spent more than Rs 1.5 lakh crore on dealing with the aftermath of disasters and natural calamities.
- Long-term costs, in terms of livelihood losses for example, or because of a reduction in the fertility of agricultural land, are much bigger and projected to worsen over time.
- A 2022 World Bank report projected that the decline in productivity due to heat-related stress could take away around 34 million jobs in India by 2030.
- The damage caused to critical infrastructure like transportation, telecommunications, and power supply by disasters and extreme weather events is often not counted in government figures, particularly when these services are privately owned.

Incorporating resilience

- Almost all the infrastructure sectors now have disaster management plans in place to prepare and respond to these events.
- For instance, hospitals in disaster-prone areas are equipping themselves with backup power supplies, airports and railways are taking steps to avoid, or quickly drain out, waterlogging, and telecommunication lines are being taken underground.
- But progress on this front has been slow and a bulk of India's infrastructure remains extremely vulnerable to disasters.
- In the first of its kind exercise in any Indian state, the **Coalition for Disaster Resilient Infrastructure (CDRI)**, carried out a study of the electricity transmission and distribution infrastructure in Odisha, a state at high risk from cyclones.
 - It found that the state's infrastructure was extremely fragile.
- India is still in the process of developing its infrastructure. Most of the infrastructure that has been proposed to stand in India by 2030 is still to be built.

CDRI

- Coalition for Disaster Resilient Infrastructure (CDRI), an international organisation set up on India's initiative in 2019.
 - With the objective of making critical infrastructure resilient to natural disasters.
- An international body headquartered in India, CDRI is supposed to develop into a knowledge hub for implementing these transitions.
- More than 30 countries are now part of this coalition and are working with CDRI to strengthen their infrastructure.
- But only a few states in India have so far sought the expertise and collaboration of CDRI.

Way Forward

- It is much easier, and cost-effective, to incorporate disaster resilience at the time of building than to retrofit these features at a later stage.
- All the upcoming infrastructure projects need to be climate smart, not just sustainable and energy efficient, but also resilient to disasters.
- Having taken the initiative to create CDRI to serve the entire world, India needs to build the right templates for the most resilient infrastructure, ones that can withstand multi-hazard disasters.

234. Capital changes, changing prices- THE HINDU

Context:

- The National Democratic Alliance (NDA)'s landslide victory in Andhra Pradesh is expected to give clarity to the real estate sector.

Key Highlights

- The realtors, who were awaiting the results on June 4, are now planning investments and businesses more in Visakhapatnam and Amaravati than in other parts of the State.
- A correction in investments in Visakhapatnam is likely, while the real estate sector in Amaravati is expected to witness a sudden surge.
- The realtors in Amaravati and Visakhapatnam invested hundreds of crores of rupees between 2014 and 2023.
- Soon after the bifurcation of combined Andhra Pradesh in 2014, the realtors and investors looked for greener pastures in residual Andhra Pradesh.
- They made huge investments in the expectation that there would be phenomenal demand for housing as the capital was to move to Amaravati from Hyderabad.
- However, there was an inordinate delay in constructing the capital of Amaravati.
- The foundation was laid in October 2015, but the real estate market failed to gain traction, and real estate players and investors returned to Hyderabad.
- During the same period, the government changed in Andhra Pradesh.
- New party floated a three-capital formula for the development of the State.
- Investments began flowing towards Visakhapatnam, which was touted as the executive capital.
- Many ventures on the outskirts of Visakhapatnam city, such as Madhurawada, Pendurthi, Naidu Thota, Sujatha Nagar, Vepagunta, Narava, and BHPV, have come up, even though they remain incomplete for various reasons
- Though the registration fee is one of the main revenue sources, the government should focus on the gradual development of the real estate sector for sustained development.

235. Why govt must create a buffer stock of all main food items- The Indian Express

Context:

- Inflation, based on the official consumer price index (CPI), stood at 8.69 % for cereals in May, and almost twice as much (17.14%) for pulses.
- These rates would probably have been higher, but for the sales from buffer stocks, especially of wheat and chana (chickpea), built by government agencies..

How buffer in chana helped

- Prices of pulses have been on fire, with retail inflation in double digits since June 2023.
- But things would have been worse had the National Agricultural Cooperative Marketing Federation of India (NAFED) not bought large quantities of the bumper 2021-22 and 2022-23 chana crops.
- These procurement operations enabled chana farmers to reap the benefits of MSP when open market prices were low, and, more recently, insulate consumers from dal inflation
- Since July 2023, NAFED has sold 14.06 lt of chana through open market e-auctions

Unpredictability in food prices

- Overall CPI inflation, at 4.75% year-on-year in May, was the lowest in 12 months. It would have been lower had retail food inflation not stayed elevated at 8.69%.
- The inherently volatility and unpredictability of food prices, exacerbated by climate change, fewer rainy days and extended dry spells, interspersed with intense precipitation, and also shorter winters and heat waves has made it difficult for the Reserve Bank of India (RBI) to consider any monetary easing or cutting interest rates.
- The government, too, is forced to resort to undesirable measures such as restricting exports, or imposing produce stock limits on traders and processors.
- One possible way out of the conundrum would be to build a buffer stock of all essential food items, by procuring these from farmers during years of surplus production, and offloading the same in times of crop failures to moderate market prices.
- There's scope to not only expand procurement of pulses and oilseeds, but extend it to staple vegetables and even skimmed milk powder (SMP).
- The onion, potato and tomato procured can be stored in dehydrated/processed form such as paste, flakes and puree for sales to hotels, restaurants, canteens, and other institutional buyers.
- This would ensure that both households and bulk buyers do not compete to drive up prices during shortages.
- The fiscal cost of maintaining buffer stocks of essential food items may not be that much; the stocked commodities are not meant to be given out free and, instead, offloaded during scarcity/inflationary periods at near-market prices.
- Buffer stocking can be an instrument for curbing excessive volatility in food prices, similar to the RBI's foreign exchange reserves vis-à-vis the currency market.
- Increasing climate-driven price volatility ultimately helping neither consumers nor producers only strengthens the case for a food buffer policy.

236. With new budget, chance for new vision for India- The Indian Express

Context:

- In most advanced economies, the annual budget is a non-event.
- In emerging markets, on the other hand, the budget presentation has special significance.

Key Highlights

- In the case of India, the budget is a legacy inherited from colonial times to the extent that the timing of the presentation was also aligned with British time.
- While the budget was primarily meant for accounting in the British empire, it has since Independence meant to lay out the administration's vision for the economy.

Expectations

- The 2024-25 budget is expected to present a long-term vision for the Indian economy.
- In my view, this vision must entail five key elements: (i) growth (ii) employment (iii) manufacturing (iv) public finance and (v) others.
- The government has already clearly laid out its vision for a "Viksit Bharat", to make India a developed economy by 2047.
- The question is what kind of growth rates are needed to increase India's per capita income from \$2,500 to \$14,000.
- In 2023, India's per capita income grew at 9.2 per cent in nominal dollar terms.
- If India were to sustain these growth rates, then it will become an upper middle-income country by 2030 and higher income by 2042.
- The relevant question to ask then is what would take India to 10 percent real GDP growth to enable a quicker catch up.
- It turns out if we really want to catch up rapidly, we need to fire all those cylinders. comprising private consumption, investment, exports, and imports. The budget plays a catalytic role to firepower each of these components.
- Second is employment and related to it is the third component, manufacturing with scaling up trade and competitiveness.
- There is no tradeoff between services and manufacturing.
- Undoubtedly, we need both — a boost to labor-intensive manufacturing to enable seizing the demographic dividend. For a labor-abundant economy like India, the capital to labor ratio has increased at a rapid pace.
- Factor market reforms are possibly an important driver. The government in previous terms has initiated several reforms, but the job here is extremely difficult and intricate in a democracy.
- In public finance, across the world, monetary policy decisions tend to be based on systematic analysis of alternative policy choices and their associated macroeconomic impacts.

FRBM

- On the institutional side, the FRBM review committee recommended setting up an independent Fiscal Council.
- The idea was for the Council was to serve both an ex-ante role providing independent forecasts on key macro variables like real and nominal GDP growth, tax buoyancy, commodity prices as well as an ex-post monitoring role, and serve as the institution to advise on triggering the escape clause and specify a path of return.
- The introduction of a Fiscal Council could perhaps be revisited. Another important question is how to integrate market discipline into rules

Conclusion

- Finally, I leave the fifth element as broad, but equally crucial: further development of agriculture markets, renewed emphasis on cleaning up of higher education, improving health outcomes, and meeting the carbon limits.
- The time is ripe for another big push to important reforms.
- The 2024-25 budget is an opportune moment to signal the direction and vision.
- A commitment and enthusiasm to fire on all fronts with renewed vigor and enthusiasm is what economic agents, market participants, and citizens would be looking for in this budget.

237. Delhi Airport roof collapse: A reality check for the state of India's infrastructure- INDIAN EXPRESS

Context:

- Recently, a portion of the roof at Delhi Airport's Terminal 1 collapsed due to heavy rains, resulting in one fatality and six injuries.

<p>Key highlights</p> <ul style="list-style-type: none"> This incident highlights the fragile state of public infrastructure in India and raises critical questions about the safety and integrity of such structures. An airport, especially in the capital city, is a symbol of modern engineering excellence and safety. It should not become the site of a tragedy. A structure from 2008 is not old by any standard. On the point related to private contractors, questions about accountability and government oversight persist. The real concern is why infrastructure audits, essential for maintaining the safety and integrity of such structures, were not being conducted regularly. Regular audits and maintenance checks are crucial to prevent such disasters, yet they appear to have been neglected. 	<p>Safety is non-negotiable</p> <ul style="list-style-type: none"> A thorough investigation is essential to identify those responsible for this tragedy and hold them accountable. the approach to state investment in infrastructure seem to be just about construction, not sustenance There is an urgent need for stricter regulations and better oversight of infrastructure projects to prevent such incidents. Regular safety audits should be conducted, construction standards should be adhered to, and clear accountability mechanisms that prioritise public safety must be in place. There should be an emphasis on quality control and adherence to international safety norms. It is crucial to address the gaps in planning and execution. Infrastructure is not just about concrete and steel — it is about the people who use it. The failure to ensure safety reflects a deeper societal issue where human life is not given the priority it deserves. This incident should serve as a wake-up call to re-evaluate our policies and practices and ensure that the design of infrastructure does not imperil human lives and well-being.
--	--

238. Apple, Foxconn and married, working women — where's the imaginary support system? - Indian Express

Context:

- A Reuters investigation of Apple iPhone maker Foxconn's assembly headquarters in Tamil Nadu has thrown up anomalies in the hiring process. Married women are apparently rejected on grounds of pregnancy, family commitments, and a greater number of leaves.

<p>Scrutiny</p> <ul style="list-style-type: none"> In India, where political parties have focused on women as a constituency and where the PM has repeatedly reiterated his government's commitment to gender parity, equality <ul style="list-style-type: none"> labor force participation stood at 32.7 per cent in 2023 vis-a-vis 76.8 per cent for men. The loopholes are many and the struggle to enforce it on the ground is bogged down by an inhibiting process perpetuated by a profound lack of imagination. It is a failure of the imagination that refuses to consider alternatives, that will not ensure creches at workplaces, beneficial for both male and female employees, or consider the disproportionate care burden on women. 	<p>Whose fault is it?</p> <ul style="list-style-type: none"> This failure is not that of the government or of the political parties alone. It begins with individuals and families and seeps into organisations, from society into governments. Far too many women are told that they are "fortunate" to have families that "allow" them to work outside or have partners who help around the house. The Progress on the Sustainable Development Goals: The Gender Snapshot 2023 report by UN Women and UNDESA warned that unless measures were taken, an entire generation of women would end up spending a disproportionate amount of time on housework in comparison to men, hemmed in by prejudicial norms. Earlier this year, in Union of India and Others vs Ex. Lt. Selina John case, the Supreme Court of India observed that rules which penalise working women on the grounds of marriage are unconstitutional. For India to emerge as the third-largest economy in the world that puts women at the centre of change, it will need to reorient its metrics of assessment.
---	---

239. A fresh start : The GST Council must not lose sight of broader reforms- THE HINDU

Context:

- The Goods and Services Tax (GST) Council was convened last week for the first time in nearly nine months.

Key Highlights

- Apart from several industry-specific measures, a few of which will kick in with retrospective effect
- the Council also opted to waive interest and penalty on tax dues for the first three years of GST, provided they are paid by March 2025.
- Moreover, it lowered the stipulated pre-deposits for filing appeals, including those that will be filed with the upcoming GST Appellate Tribunals
 - and approved a new form for taxpayers to correct errors or oversights in previous returns.
- Beyond nitty-gritties, the Council also signed off on ending the anti-profiteering clause that required firms to pass on any tax cut gains to customers
 - and mandating biometric-based Aadhaar authentication for all GST registrations in a phased manner across India.
- It is refreshing that the Council also plans to take stock of the 2021 plan to rationalise the multiple-rate GST structure, that has been in cold storage for a while, when it meets next.
- The apex GST body must not only revive and expedite GST rate reforms but also incorporate a road map to bring excluded items such as petroleum and electricity into the GST net while rejigging tax rates.

240. Half of Indians physically unfit, says Lancet study - Indian Express

News:

- According to new data published in the Lancet Global Health half the adult Indian population does not meet the World Health Organisation's (WHO) guidelines on sufficient physical activity.

Highlights:

- Most alarmingly, the prevalence of insufficient physical activity among Indian adults has risen sharply from 22.3 per cent in 2000 to 49.4 per cent in 2022.
 - More women than men are physically inactive.
- This means unchecked, 60 percent of our population would be unfit by 2030 and at risk of disease from not doing enough physical activity.

WHO Recommendations

- WHO recommends at least 150 to 300 minutes of moderate aerobic activity per week for all adults.
- Insufficient physical activity is defined as not doing 150 minutes of moderate-intensity activity, 75 minutes of vigorous-intensity activity, or an equivalent combination per week.
- According to the WHO, physical inactivity puts adults at greater risk of cardiovascular diseases such as heart attacks and strokes, Type 2 diabetes, dementia and cancers of the breast and colon.

Key Findings of Study

- Estimates indicate that India has the 12th highest prevalence of insufficient physical activity among 195 countries.
- Worldwide, nearly one third of adults did not meet the recommended levels of physical activity in 2022.
- The highest rates of physical inactivity were observed in the high-income Asia-Pacific region and South Asia
- Physical inactivity is increasing globally because of many factors, including changes in work patterns, changes in the environment, making active transport more difficult and changes in leisure time activities

Physical Inactivity in India

- The status sheet is of particular concern in India as people here are genetically more prone to developing non-communicable diseases like heart disease and diabetes at least a decade earlier than others.
- Several studies in India had shown low levels of physical activity at the population level, particularly women, who wrongly believe that household chores are a good form of physical exercise.
- Inactivity is most evident in middle aged urban women, even though it is manifest to some degree across all age and gender groups.
- Insufficient physical activity among women in India, Pakistan, Afghanistan is a worry as they lag behind men by over 14-20 percentage points.

Suggestive Measures

- While **Fit India and Let's Move India** have been launched in recent years, we need settings-based group activity promotion efforts at school, worksite and community settings.
- Protected cycling lanes, safe pedestrian pathways, green community spaces and reduced air pollution will enable safe and pleasurable outdoor activity

241. The myth of India's Muslim population 'explosion- INDIAN EXPRESS

Context:

- Recently, the Supreme Court of India stayed the release of the film Hamare Baarah (Our Twelve), and directed the Bombay High Court to take a final decision.

The myth Of India's Muslim population 'explosion

- The latest National Family Health Survey, 2019–20 (NFHS-5), conducted by the Ministry of Health and Family Welfare (MoHFW), shows that
 - Many states have already attained a replacement level of fertility, and there is a steady decline in India's total fertility rates (TFR).
 - According to the NHFS-5 data, the TFR in India is 2.0 children per woman up until 2021, which is slightly lower than the replacement level of fertility of 2.1 children per woman.
- The Economic Survey 2018-19 and the Sample Registration System (SRS) data from 2017 also had similar findings about the deceleration of India's population growth.
- According to the 2011 Census of India, the growth rate of the Muslim population was higher than the Hindu population.
- The controversy surrounding this single interpretation obscured the fact that the gap between the two growth rates had significantly reduced between 2001 and 2011
- When comparing the fertility differentials between the two communities using the 2001 and 2011 data, this convergence of fertility between Hindus and Muslims is evident.
 - It comes with the caveat that since different states and groups are at different points in this transition
 - there are variations between regions in this process of convergence — a fact evidenced by earlier studies.
- Another recent analysis taking into account the drop in fertility and the rate of decline in population growth found that the drop in Hindu fertility was five per cent less than the drop in Muslim fertility in the last two decades
 - Where Muslim population growth declined at a faster rate than that of Hindus. This analysis suggested that there may be "absolute convergence" in Hindu-Muslim fertility rates by 2030.
- Data from the NFHS shows that the fertility rates of all religious communities have declined over the past two decades.
- The sharply decreasing family size of Muslims, particularly, is evident since the fertility rate for Muslims has decreased by almost half from 4.4 in 1992–93 to 2.4 in 2020–21.
- The Population Foundation of India observed that education, healthcare, and socio-economic development significantly impact fertility rates, with states like Kerala and Tamil Nadu showing lower TFRs than Bihar
 - which had less access to these resources. Thus, what influenced levels of fertility rates was not religion, but rather better socio-economic status and development.

Challenging misinformation

- The NFHS 5 data also shows that the higher the level of the mother's education, the lower the fertility.
- Across religious groups, Muslims are the most disadvantaged economically, with poorer education and health levels — evident from their lower enrollment levels in higher education.
- The Sachar Committee Report in 2006 emphasised such socio-economic disparity among Muslims.
- Thus, the population growth debate should focus on investments in education, economic development, livelihoods, food, nutrition, healthcare, sexual and reproductive health services, and gender justice.
- Furthermore, women, particularly from marginalised communities, have limited freedom to make fertility decisions and controlled access to contraception and reproductive care.
- The rhetoric about the fertility of the Muslim community directly affects Muslim women's right to have or not have children.
- This not only violates Muslim women's right to life and dignity but also affects their subjectivities.
- Hence, the discussion concerning population growth and fertility must shift focus and centre on sexual and reproductive health rights, individual choice, and resist attempts at co-optation for politically motivated propaganda.

Quick Look

1. OPEC+

- It is a group of oil-exporting countries which meets regularly to decide how much crude oil to sell on the world market.
- These nations aim to work together on adjusting crude oil production to bring stability to the oil market.
- OPEC+ controls about 40% of global oil supplies and more than 80% of proven oil reserves.
- Opec+ countries agreed to extend the cuts of 3.66 million barrels per day by a year until the end of 2025, to increase the global oil demand

2. Razia Sultan

- Razia Sultan was the daughter of Delhi sultan Mamluk Sultan Shamsuddin Iltutmish.
- Iltutmish nominated the Razia sultan as an heir apparent of the Delhi sultanate.
- In 1236, she became the ruler of the Delhi sultanate. After ruling for less than four years in Delhi, she was removed

3. PPF

- The PPF Scheme is a very popular long-term savings scheme in India because of its combination of tax savings, returns, and safety.
- To help individuals make small savings and provide returns on the savings.
- It is one of the safest investment products. i.e., the government of India guarantees your investments in the fund
- Tenure: 15 years (Can be renewed in blocks of 5 years).
- Interest rate: Interest rates currently payable on such accounts stand at 7.1%.
- Investment Amount: Minimum Rs.500, Maximum Rs.1.5 lakh p.a.

4. H5N1

- H5N1 is a type of influenza virus that causes a highly infectious, severe respiratory disease in birds called avian influenza (or "bird flu").
- From time to time, a form of the flu virus jumps from wild birds to poultry farms, and replicates in cramped warehouses of farmed birds.
- Human cases of H5N1 avian influenza occur occasionally, but it is difficult to transmit the infection from person to person.
- When people become infected, the mortality rate is about 60%.

5. Mutual Fund

- A mutual fund is a pool of money managed by a professional Fund Manager.
- It is a trust that collects money from a number of investors who share a common investment objective and invests in equities, bonds, money market instruments and/or other securities.
- The income / gains generated from this collective investment is distributed proportionately amongst the investors after deducting applicable expenses and levies.

6. Swiss Peace Summit

- The Swiss Peace Summit is an annual gathering held in Switzerland, bringing together global leaders, policymakers, activists, and scholars to discuss pressing issues related to peacebuilding, conflict resolution, and humanitarian efforts.

- The Summit attracts a diverse range of participants, including heads of state, diplomats, representatives from international organizations such as the United Nations, civil society leaders, academics, and grassroots activists.
- This diversity fosters inclusive discussions and innovative approaches to peacebuilding.
- The Summit serves as a platform for exchanging ideas, sharing best practices, and forging partnerships to advance peace and stability globally.

7. BSE PSU Index

- Bombay Stock Exchange Limited launched 'BSE PSU Index' on 4 June 2001. This index consists of major Public Sector Undertakings listed on BSE.
- An Index to track the performance of listed equity of PSU companies
- A suitable benchmark for the Central Government to monitor its wealth on the bourses.
- The Base Date for the BSE PSU Index is 1st February 1999, the date when the BSE-500 was launched.

8. Preston curve

- The Preston curve refers to a certain empirical relationship that is witnessed between life expectancy and per capita income in a country.
- It was first proposed by American sociologist Samuel H. Preston in his 1975 paper.
- Preston found that people living in richer countries generally had longer life spans when compared with people living in poorer countries.
- This is likely because people in wealthier countries have better access to healthcare, are better educated, live in cleaner surroundings, enjoy better nutrition etc.

9. PM- SHRI Schools

- On Teacher's Day 2022, the Prime Minister of India had announced PM SHRI Schools (PM Schools for Rising India).
- It will implement the National Education Policy (NEP) and under the first phase, 14,500 schools will be upgraded under a Centrally Sponsored scheme
- A School Quality Assessment Framework (SQA) is being developed, specifying the key performance indicators to measure outcomes.
- The focus will be on the learning outcomes of every child in every grade.
- Assessment at all levels will be based on conceptual understanding and application of knowledge to real-life situations and will be competency-based.

10. National Accreditation Board for Hospitals & Healthcare Providers (NABH)

- It is a constituent board of Quality Council of India, set up to establish and operate accreditation programmes for healthcare organizations.
- Scope of NABH /Objectives: Accreditation of healthcare facilities, Quality promotion: Nursing Excellence, Laboratory certification programs
- Education and Training for Quality & Patient Safety
- Recognition: Endorsement of various healthcare quality courses/ workshops

11. Canlaon Volcano

- Also spelled Kanlaon, the most active of the central Philippines, forms the highest point on the island of Negros.
- The massive 2435-m-high stratovolcano is dotted with fissure-controlled pyroclastic cones and craters, many of which are filled by lakes.
- The summit of Canlaon contains a broad elongated northern caldera with a crater lake and a smaller, but higher, historically active crater to the south.

12. Five Eyes

- The Five Eyes is an intelligence alliance composed of Australia, Canada, New Zealand, the United Kingdom and the United States.
- These partner countries share a broad range of intelligence with one another in one of the world's most unified multilateral arrangements
- The alliance's origins can be traced back to the Second World War. The UK and the US decided to share intelligence after successfully breaking German and Japanese codes.
- In 1943, the Britain-USA (BRUSA) agreement laid the foundations
- BRUSA was signed to share intelligence information between the two countries to support US forces in Europe
- Canada joined it in 1949, and New Zealand and Australia did so in 1956, forming the alliance.

13. NCLT

- It is a quasi-judicial authority incorporated for dealing with corporate disputes that are of civil nature arising under the Companies Act, 2013.
- It was constituted on 1 June 2016 under the Companies Act, 2013.
- NCLT was formed based on the recommendation of the Balakrishna Eradi committee on law relating to the insolvency and the winding up of companies.
- The NCLT shall consist of a President and such number of Judicial and Technical Members as may be required.
- It is not limited or bound by the rules laid down in the Code of Civil Procedure and is guided by the principles of natural justice

14. Palm Oil

- Palm oil is an edible vegetable oil derived from the mesocarp (reddish pulp) of the fruit of the oil palms.
- It is used as cooking oil, and in everything from cosmetics, processed foods, cakes, chocolates, spreads, soaps, shampoo, and cleaning products to biofuel.
- The use of crude palm oil in making biodiesel is being branded as 'green diesel'.
- Indonesia and Malaysia together account for almost 90% of the global palm oil production, with Indonesia producing the largest quantity at over 45 million tonnes in 2021.

15. Volatility Index

- Volatility Index is a measure of the market's expectation of volatility over the near term. Volatility is often described as the 'rate and magnitude of changes in prices' and in finance often referred to as risk.
- India VIX is a volatility index based on the NIFTY Index Option prices.
- From the best bid-ask prices of NIFTY Options contracts, a volatility figure (%) is calculated which indicates the expected market volatility over the next 30 calendar days.

16. Center for the Study of Developing Societies

- Since its inception in 1963, the Centre for the Study of Developing Societies has been recognised as one of the leading intellectual institutions of the global south.
- It has accomplished a generational transition by reinventing itself in the 21st century,
- A fresh commitment to forging links between the social sciences and the humanities, and to discovering non-European lineages of political and ethical thought in Indian languages.
- CSDS has been supported by the Indian Council for Social Science Research (ICSSR), New Delhi under the Ministry of Education, Government of India since 1969.

17. Cassini Spacecraft

- Cassini-Huygens was a joint NASA/European Space Agency (ESA)/Italian Space Agency (ASI) space mission to Saturn.
- It was launched on October 15, 1997.
- The mission consisted of NASA's Cassini orbiter, which was the first space probe to orbit Saturn, and the ESA's Huygens probe, which landed on Titan, Saturn's largest moon.
- It was one of the largest interplanetary spacecraft.
- It orbited Saturn from 2004 to 2017, circling the planet 294 times and teaching us almost everything we know about Saturn.

18. Chief Economic Advisor

- The Chief Economic Adviser (CEA) is a post in the Government of India and is equivalent to the rank of Secretary to the Government of India.
- The CEA reports directly to the Minister of Finance.
- The CEA is head of the Economic Division of the Department of Economic Affairs, Ministry of Finance, Government of India.
- The key roles of India's chief economic advisor are to determine the government's overall strategy in managing the economy.
- The Chief Economic Advisor (CEA) advises the Government of India on matters related to finance, commerce, trade, economy.

19. Commission for Air Quality Management

- CAQM is a statutory body to restrict, investigate & issue directions on matters influencing air quality.
- The Commission has been set up for Air Quality Management in the National Capital Region and Adjoining Areas for better coordination, research, identification and resolution of problems surrounding the air quality index.
- All thermal power plants located within 300 kilometer radius of Delhi will have to ensure compliance with emission standards

20. Software Technology Parks of India (STPI)

- A premier S&T organization under Ministry of Electronics and Information Technology (MeitY) engaged in promoting IT/ITES Industry, innovation, R&D, start-ups, product/IP creation in the field of emerging technologies like IoT, Blockchain, Artificial Intelligence (AI), Machine Learning (ML),
- STPI is establishing Technology incubators for building India's leadership software technology areas across the country in a collaborative manner.
- Till date, STPI has launched the following 24 Centres of Entrepreneurship (CoEs)

21. International Energy Agency (IEA)

- The IEA was created in 1974 by member countries of the Organisation for Economic Co-operation and Development (OECD) to help industrialized countries respond to major 1973-1974 oil crisis.
- The IEA has four main areas of focus: energy security, economic development, environmental awareness and engagement worldwide.
- The IEA is an autonomous forum that provides analysis, data, and policy recommendations to help countries provide secure and sustainable energy.
- The IEA family is made up of 31 member countries, 13 association countries including India, and 4 accession countries. A candidate country to the IEA must be a member country of the OECD.

22. EFTA

- It is an intergovernmental organization set up for the promotion of free trade and economic integration to the benefit of its four Member States – Iceland, Liechtenstein, Norway and Switzerland – and the benefit of their trading partners around the globe.
- It was established by a Convention signed in Stockholm on 4th January 1960.
- It aimed to serve as an alternative trade bloc for those European states that were unable or unwilling to join the then European Economic Community (EEC), the main predecessor of the European Union (EU).
- Maintaining and developing the EFTA Convention, which regulates economic relations between the four EFTA States.

23. Directorate General of Foreign Trade

- It is a government organization in India responsible for the formulation of exim guidelines and principles for Indian importers and Indian exporters of the country.
- It is an attached office of the Ministry of Commerce and Industry and is headed by the Director General of Foreign Trade.
- It has been assigned the role of "facilitator".
- It is responsible for implementing the Foreign Trade Policy or Exim Policy with the main objective of promoting Indian exports.
- The DGFT also issues scripts/authorization to exporters and monitors their corresponding obligations through a network of 24 regional offices.

24. National Statistical Office (NSO)

- NSO acts as the nodal agency under the Ministry of Statistics and Programme Implementation for planned development of the statistical system in the country.
- lays down and maintains norms and standards in the field of statistics, involving concepts and definitions, methodology of data collection, processing of data and dissemination of results.
- The National Statistical Office (NSO) consists of the Central Statistical Office (CSO), the Computer center and the National Sample Survey Office (NSSO).
- It compiles and releases the Index of Industrial Production (IIP) every month in the form of 'quick estimates'; conducts the Annual Survey of Industries (ASI); and provides statistical information to assess and evaluate the changes in the growth, composition and structure of the organized manufacturing sector.

25. ICJ

- The ICJ, also known as the World Court, is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the UN and began work in April 1946.
- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- Of the six principal organs of the UN, it is the only one not located in New York, United States. The hearings of the ICJ are always public. Official Languages: French and English
- The Court may entertain two types of cases:
- First, it can act as a dispute settlement body between two member States in what are called "contentious cases."
- Second, it can accept requests to issue an advisory opinion on a legal question referred to it by a UN body or specialized agency.

26. Quality Control Orders

- Quality Control Orders (QCOs) are regulatory mandates issued by the government, typically through a designated authority, to ensure that products meet specified standards of quality, safety, and performance.
- These orders are often part of a broader regulatory framework aimed at protecting consumers, maintaining fair trade practices, and enhancing the overall quality of products in the market.
- QCOs cannot be challenged at the World Trade Organization (WTO) if they are imposed on the grounds of environment, health, safety, and deceptive trade practices, or national security.

27. Central Hall

- Central Hall was originally used as the library for the members of the legislature.
- The Constituent Assembly met at this venue for about three years between 1946 and 1949.
- It was primarily used for formal occasions such as the annual President's Address to Members of both Lok Sabha and Rajya Sabha, and swearing-in ceremony of the President.
- It was also the venue for farewells of the President, and Parliamentary events like the outstanding Parliamentarian award ceremony.
- Central Hall was used for addresses by Heads of State of other countries.
- The last address was by Inter-Parliamentary Union (IPU) President Duarte Pacheco in March 2021

28. SEBI

- The SEBI, or Securities and Exchange Board of India is the regulatory body handling the securities and commodity market in India.
- It functions under the Ministry of Finance.
- The Securities and Exchange Board of India was established as a statutory body in the year 1992 under the Securities and Exchange Board of India Act, 1992.
- It's main function involves
 - Safeguarding investors and other market players interests.
 - Preventing insider trading,
 - Increasing investor education and awareness.
 - Monitoring for price manipulation.

29. IPEF

- The United States launched the Indo-Pacific Economic Framework for Prosperity (IPEF) with Australia, Brunei Darussalam, Fiji India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam.
- This framework was aimed to advance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness for economies.
- Through this initiative, the IPEF partners aim to contribute to cooperation, stability, prosperity, development, and peace within the region.
- This framework offers tangible benefits that fuel economic activity and investment, promote sustainable and inclusive economic growth, and benefit workers and consumers across the region.
- The 14 IPEF partners represent 40 percent of global GDP and 28 percent of global goods and services trade.

30. CPI Industrial Workers

- The Consumer Price Index (CPI) for Industrial Workers is an important economic indicator that measures changes in the price level of a basket of consumer goods and services purchased by industrial workers.
- This index is crucial for understanding inflationary trends and making adjustments to wages and benefits.
- Government and private sector often use CPI-IW to calculate DA, which compensates workers for inflation.
- The Labour Bureau has been compiling and maintaining the Consumer Price Index for Industrial Workers since 1944.

31. IRDAI

- Insurance Regulatory and Development Authority of India (IRDAI), founded in 1999, is a regulatory body created with the aim of protecting the interests of insurance customers.
- It is a statutory body under the IRDA Act 1999 and is under the jurisdiction of the Ministry of Finance.
- It regulates and sees to the development of the insurance industry while monitoring insurance-related activities.
- The powers and functions of the Authority are laid down in the IRDAI Act, 1999 and Insurance Act, 1938.

32. Atal Incubation Centers

- AIM is a flagship initiative to promote the culture of innovation and entrepreneurship in India.
- It is an umbrella structure that has been mandated to promote innovation and revolutionize the entrepreneurial ecosystem in the country.
- Initiative of the NITI Aayog to foster innovation and entrepreneurial spirit while creating a supportive ecosystem for start-ups and entrepreneurs in India.
- Each AIC is supported with a grant of up to INR 10 crores over a period of 5 years.
- Since 2016, AIM has established 68 Atal Incubation Centres across 18 states and 3 UTs which have supported more than 2700 startups.

33. Deepor Boal Wildlife Sanctuary

- Deepor Boal is a permanent freshwater lake and also a bird sanctuary in Kamrup district, Assam.
- It is a riverine wetland, lying in a former channel of the Brahmaputra River, it lies to the south of the main river channel.
- It was designated as a Ramsar site in 2002
- In 2021, the Environment Ministry notified it as an Eco-sensitive zone.

34. Magnetic Resonance Imaging (MRI)

- MRI is a non-invasive diagnostic procedure used to obtain images of soft tissues within the body.
- Soft tissue is any tissue that hasn't become harder through calcification.
- It is widely utilised for imaging various body parts such as the brain, cardiovascular system, spinal cord, joints, muscles, liver, and arteries.
- Unlike X-rays, which use radiation, MRI scans leverage powerful magnets and radio waves to create detailed images of soft tissues within the body.

35. Indo-Pacific Economic Framework (IPEF)

- It is a US-led initiative that aims to strengthen economic partnership among participating countries to enhance resilience, sustainability, inclusiveness, economic growth, fairness, and competitiveness in the Indo-Pacific region.
- The IPEF was launched in 2021 with a dozen initial partners who together represent 40% of the world GDP.
- The IPEF is not a Free Trade Agreement (FTA) but allows members to negotiate the parts they want to. The negotiations will be along four main “pillars”.
 - Supply-chain resilience
 - Clean energy, decarbonisation & infrastructure
 - Taxation & anti-corruption
 - Fair & resilient trade.
- Currently, India and 13 countries located in the Pacific Ocean are its members,
 - Australia, Brunei, Fiji, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, United States, and Vietnam.

36. New Caledonia

- It is a French overseas collectivity with significant autonomy under the terms of the 1998 Nouméa Accord.
- It is located in the southwestern Pacific Ocean, east of Australia.
- Unlike many Pacific islands that are of relatively recent volcanic origin, New Caledonia is an ancient fragment of the Gondwana supercontinent.
- New Caledonians are French and European citizens with the right to live anywhere in France. They are entitled to vote in territorial and French national elections.

37. INS Vikramaditya

- It is a modified Kiev-class aircraft carrier which entered into service with the Indian Navy in 2013.
- It has been renamed in honour of Vikramaditya, a legendary emperor of Ujjain, India.
- The carrier served with the Russian Navy (as Admiral Gorshkov) before being decommissioned in 1996.
- It was later bought by India in 2004 for \$2.33bn.
- It can endure up to 45 days at sea.
- It is powered by 08 new-generation steam boilers.

38. Lokniti-CSDS

- Lokniti is a research programme of the Centre for the Study of Developing Societies (CSDS) established in 1997.
- It houses a cluster of research initiatives that seeks to engage with national and global debates on democratic politics by initiating empirically grounded yet theoretically oriented studies.
- By bringing various projects of the CSDS on elections, democratic politics and party politics together under a single programme, Lokniti seeks to engage with global debates on democracy.
- Electoral patterns and voting behaviour are the key focus areas of Lokniti’s research.

39. International Labour Organisation

- The International Labour Organization (ILO) is the United Nations agency.
- Its mandate is to advance social and economic justice through setting international labour standards.
- ILO’s mandate as the basis for peace is expressed today as Decent Work for all.

- It was created in 1919, as part of the Treaty of Versailles that ended World War I, to reflect the belief that universal principles on social justice.
- In 1946, the ILO became a specialized agency of the newly formed United Nations.
- The ILO has 187 member states: 186 out of 193 UN member states plus the Cook Islands.

40. Steppe Grasslands

- Steppes are expansive flat grassland areas located in moderate climates, positioned between the tropical and polar regions.
- Steppes are situated in moderate climate zones between the tropics and the poles, where noticeable seasonal temperature fluctuations occur.
- These regions are semi-arid, receiving an annual rainfall ranging from 25 to 50 centimeters (10-20 inches).
- Steppes are primarily situated deep within continents, positioned in the Westerly Wind Belt, which corresponds to the middle latitudes or temperate zone.
- The confidentiality of their location, shielded from rain-bearing winds, contributes to the characteristic treeless nature of these grasslands.

41. International Organisation for Migration (IOM)

- Established in 1951, IOM is the leading inter-governmental organization of migration.
- defines the term migrant as: "a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons."
- IOM works to ensure the orderly and humane management of migration, to promote international cooperation on migration issues, to assist in the search for practical solutions to the challenges of migration, to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.
- In 2016, IOM entered into an agreement with the United Nations, becoming a related organization.

42. Alternative Dispute Resolution

- ADR is a mechanism instrumental in reducing the burden of litigation on courts, while delivering a well-rounded and satisfying experience for the parties involved.
- It provides the opportunity to "expand the pie" through creative, collaborative bargaining, and fulfill the interests driving their demands.
- The system of dispensing justice in India has come under great stress mainly because of the huge pendency of cases in courts.
- In India, the number of cases filed in the courts has shown a tremendous increase in recent years resulting in pendency and delays underlining the need for ADR methods.

43. Nagarhole Tiger Reserve

- Nagarhole is an important Tiger Reserve in Karnataka and is a major hub for conservation under Project Tiger and Project Elephant.
- Nagarhole Tiger Reserve previously known as Rajiv Gandhi National Park was named after the river Nagarhole.
- This tiger reserve forms a critical connecting habitat for tigers and elephants to other areas of the Western Ghats through the Brahmagiri wildlife sanctuary and to the Eastern Ghats through the Bandipur Tiger reserve.

- It consists mainly of moist deciduous forests with predominating trees of teak and rosewood.
- Tiger, Leopard Asiatic, Wild Dog, Sloth Bear, Asiatic Elephant, Gaur, Sambar Chital Muntjac, Four Horned Antelope etc.

44. Competition Commission of India

- CCI, a statutory body of the Government of India, established in 2009 under the Competition Act, 2002.
- The goal of CCI is to create fair competition in the economy that will provide a 'level playing field' to the producers and make the markets work for the welfare of consumers.
- It prohibits anti-competitive agreements and abuse of dominant position by enterprises;
- Regulates mergers and acquisitions (M&A), which can have an adverse effect on competition within India.
- Thus, deals beyond a certain threshold are required to get clearance from CCI.

45. Council of Scientific and Industrial Research

- It is the largest research and development (R&D) organization in India.
- CSIR has a pan-India presence and a network of 37 national laboratories, 39 outreach centers, 3 Innovation Complexes and 5 units.
- Established in September 1942
- CSIR is funded by the Ministry of Science and Technology and it operates as an autonomous body through the Societies Registration Act, 1860.
- It provides significant technological intervention in many areas with regard to societal efforts which include the environment, health, drinking water, food, housing, energy, farm and non-farm sectors.
- Prime Minister of India is the Ex-officio President of the Organisation

46. Microfinance Institutions

- MFI is an organization that offers financial services to low income populations.
- These services include microloans, microsavings and microinsurance.
- MFIs are financial companies that provide small loans to people who do not have any access to banking facilities.
- The definition of "small loans" varies between countries. In India, all loans that are below Rs.1 lakh can be considered as microloans.
- the interest rates are lower than those charged by normal banks, certain rivals of this concept accuse microfinance entities of creating gain by manipulating the poor people's money.

47. Index of Industrial Production:

- IIP is an indicator that measures the changes in the volume of production of industrial products during a given period.
- It is compiled and published monthly by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
- It is a composite indicator that measures the growth rate of industry groups
- Base Year for IIP is 2011-2012.
- Used by government agencies for policy-making purposes.
- IIP is important for the calculation of the quarterly and advance GDP (Gross Domestic Product) estimates.

48. European Parliament

- It is the only parliamentary institution of the European Union (EU) that is directly elected by EU citizens aged 18 years or older.
- Together with the Council of the European Union (also known as the 'Council'), it exercises the legislative function of the EU.
- The Parliament comprises 720 Members (MEPs) elected every five years.
- The elected members then elect their president for a term of two and a half years.
- The European Parliament does not possess as much legislative power as its member countries' parliaments do.

49. The Hala'ib Triangle

- is an area of land of just on the Egyptian-Sudanese border
- Both countries have claimed it since Sudan gained independence from Britain in 1956.
- In the 1990s, Egypt deployed its military in the territory, but, in the following two decades, the dispute was somewhat frozen.
- In 2016, it flared up again as it is important territory with opening on the Red Sea

50. The Global Carbon Project

- formed in 2001 to help the international science community to establish a common, mutually agreed knowledge base that supports policy and action to decrease the greenhouse gases in the atmosphere.
- It is a Project of Future Earth, formed to work with the international science community to establish a common and mutually agreed knowledge base.
- The Global Carbon Project works collaboratively with the International Geosphere-Biosphere Programme, the World Climate Programme, the International Human Dimensions Programme on Global Environmental Change and Diversitas, under the Earth System Science Partnership.

51. EPFO

- It is a Statutory government organization that manages provident fund and pension accounts
- The Employees' Provident Fund and Miscellaneous Provisions Act, 1952 provides for the institution of provident funds for employees in factories and other establishments.
- It is administered by the Ministry of Labour & Employment, Government of India.
- It is one of the World's largest Social Security Organisations in terms of clientele and the volume of financial transactions undertaken.

52. Grey zone warfare

- Grey-zone warfare refers to a form of conflict characterised by actions that fall below the threshold of conventional war but are intended to achieve strategic objectives through ambiguity, deniability, and coercion.
- In grey-zone warfare, adversaries employ tactics such as cyberattacks, economic coercion, and proxy conflicts to achieve their goals without directly engaging in open warfare.
- It blurs the lines between peace and conflict, posing significant challenges to international security and stability.

53. Defense Acquisition Council

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

54. The Indira Gandhi National Centre for the Arts (IGNCA)

- The Indira Gandhi National Centre for the Arts (IGNCA) was established in 1987 as an autonomous institution under the Ministry of Culture, as a centre for research, academic pursuit and dissemination in the field of the arts
- It was established in memory of Smt. Indira Gandhi in 1985.
- IGNCA's principal goal is to become a prominent reference center for India's oral and visual art forms.
- IGNCA has six functional units: Kala Nidhi, Kala Kosa, Janapada Sampada, Cultural Informatics, Sutradhara, Kala Darsana

55. Namami Gange Programme

- Integrated Conservation Mission, of the Union Government to accomplish the twin objectives of effective abatement of pollution and conservation and rejuvenation of National River Ganga.
- It is being operated under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti.
- In phase 2 of Namami Gange Programme (2021-26), the states will focus on expeditious completion of projects and preparation of bankable Detailed Project Report (DPR) for projects in Ganga tributary towns, cutting down delays.
- Focus is also being given to the revival of small rivers and wetlands.
- Each Ganga district is to develop scientific plan and health card for at least 10 wetlands and adopt policies for reuse of treated water and other by products.

56. G7

- The G7 (Group of Seven) is an organization of the world's seven largest so-called advanced economies, which dominate global trade and the international financial system.
- They are Canada, France, Germany, Italy, Japan, the UK and the United States.
- Russia joined in 1998, creating the G8, but was excluded in 2014 for its takeover of Crimea.
- The EU is not a member of the G7, but attends the annual summits.
- Italy has the G7 presidency in 2024.

57. Gati Shakti

- PM Gati Shakti is an approach for growth accelerating trustworthy infrastructure through synchronized, holistic, integrated, and comprehensive planning based on knowledge, technology and innovation.
- This requires ministries to facilitate the relevant stakeholders including public and private entities which need various central/state approvals and NOCs (No Objection Certificates) to set up infrastructure projects.
- Under the vision for Gati Shakti, these approvals and NOCs should be available on a common portal for investors without any need to go to separate platforms to avail such approvals.
- As such the National Single Window System has been entrusted with the task of onboarding critical approvals and NOCs from a set of 9 ministries for end-to-end application and subsequent approval.

58. Kavli Prize

- The Kavli Prize is a prestigious international award established to recognize and honor scientists for pioneering advances in three areas: astrophysics, nanoscience, and neuroscience.
- It was initiated in 2008 by the Kavli Foundation, in partnership with the Norwegian Academy of Science and Letters and the Norwegian Ministry of Education and Research.

- The Kavli Prize aims to advance science for the benefit of humanity, promote public understanding of scientific research, and support the scientists who push the boundaries of human knowledge.

59. CIC

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

60. NATO

- The North Atlantic Treaty Organization was created in 1949 by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.
- NATO was the first peacetime military alliance the United States entered into outside of the Western Hemisphere.
- After the destruction of the Second World War, the nations of Europe struggled to rebuild their economies and ensure their security.
- The United States viewed an economically strong, rearmed, and integrated Europe as vital to the prevention of communist expansion across the continent.
- As a result, the idea of shared interests and cooperation between the United States and Europe was promoted in the form of NATO

61. Narcotics Control Bureau

- It was constituted by the Government of India in 1986 under the Narcotic Drugs and Psychotropic Substances Act, 1985.
- It is the apex coordinating agency under the Ministry of Home Affairs.
- The National Policy on Narcotic Drugs and Psychotropic Substances is based on Article 47 of the Indian Constitution which directs the State to bring about prohibition of the consumption, except for medicinal purposes, of intoxicating drugs injurious to health.
- Drug abuse control is the responsibility of the central government.

62. Unique Identification Authority of India (UIDAI)

- It is a statutory authority established under the provisions of the Aadhaar Act 2016 by the Govt. of India under the Ministry of Electronics & Information Technology.
- Empowers residents of India with a unique identity and a digital platform to authenticate anytime, anywhere.
- It is created to issue Unique Identification Numbers (UID), which is also known as 'Aadhaar number' to all the residents of India.
- Under the Aadhaar Act 2016, UIDAI is responsible for Aadhaar enrolment and authentication, including operation and management of all stages of the Aadhaar life cycle and the system for issuing Aadhaar numbers to individuals.
- UIDAI consists of a Chairperson, two part-time Members and the Chief Executive Officer (CEO), who is also the Member-Secretary of the Authority.

63. National Medical Commission (NMC)

- The NMC has been constituted by an act of Parliament known as National Medical Commission Act, 2019.
- The NMC acts as India's top regulator of medical education and practice.
- Committed to upholding the highest standards in healthcare education,
- NMC also ensures the delivery of quality medical education and training across the nation.

64. Gandhi Sagar Wildlife Sanctuary:

- Situated in northwestern Madhya Pradesh, with one of its boundaries running along the border of Rajasthan.
- A major part of the sanctuary consists of vast open landscapes with sparse vegetation and rocky terrain, with small patches of dense forests.
- River Chambal flows through the sanctuary, dividing it into two parts.
- Northern tropical dry deciduous forest, Northern tropical dry mixed deciduous forest and Dry deciduous scrub.
- Chinkara, Nilgai and Spotted Deer, Indian Leopard, Striped Hyena and Jackal are found in good numbers in the region.
- It also has a good population of crocodiles, fish, otters and turtles.

65. Mission LiFE

- LiFE or Lifestyle for Environment, is an India-led global mass movement to nudge individual and community action to protect and preserve the environment.
- It was launched by the Indian Prime Minister at the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow in 2021.
- The program hopes to “mobilize one billion Indians as well as people in other countries to become individuals who practice sustainable lifestyles.
- The global movement will showcase sustainable goals and climate actions taken by countries and individuals around the world.

66. NATO

- North Atlantic Treaty Organization (NATO) is a military alliance established by the North Atlantic Treaty (also called the Washington Treaty) of April, 1949, by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.
- There are currently 30 member states.
- original members were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.
- NATO's essential and enduring purpose is to safeguard the freedom and security of all its members by political and military means.
- Its Headquarters is in Brussels, Belgium.

67. Kavach

- Kavach is an indigenously developed Automatic Train Protection (ATP) system.
- Developed by the Research Design and Standards Organisation (RDSO) under Indian Railway (IR)
- It is a set of electronic devices and Radio Frequency Identification devices installed in locomotives, in the signalling system as well the tracks, that talk to each other using ultra-high radio frequencies to control the brakes of trains and also alert drivers, all based on the logic programmed into them.
- Since 2016, the railways have been carrying out field tests for Kavach on passenger trains.

68. North Eastern Council

- North Eastern Council (NEC) is under the administrative purview of the Ministry of Development of the North-Eastern Region (MDoNER).
- NEC is not a constitutional body, but a statutory organization established under the North Eastern Council Act, 1971, as amended in 2002.
- It is the nodal agency for the economic and social development of the North Eastern Region which consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- The Council comprises Governors and Chief Ministers of constituent States and three members nominated by the President.

69. World Inequality Lab

- The World Inequality Lab (WIL) is a research center at the Paris School of Economics.
- The WIL aims to promote research on global inequality dynamics.
- It works in close coordination with a large international network of researchers (over one hundred researchers from seventy countries) contributing to the database.
- It publishes the World Inequality Report
- As per the report, in the year 2022-23, India's top 1% hold 40.1% wealth

70. International Organization for Migration (IOM)

- IOM is an intergovernmental organization that provides services and advice concerning migration to governments and migrants, including refugees, internally displaced persons, and migrant workers.
- It was granted Permanent Observer status to UN General Assembly in 1992. It is part of the UN now.
- The World Migration Report is published every year.
- It has 175 member states. India is a member of IOM.

71. Kudankulam Nuclear Power Plant

- It is being built in Tamil Nadu with Russia's technical assistance.
- The plant is expected to have an installed capacity of 6,000 MW of electricity.
- Since February 2016, the first power unit of the Kudankulam Nuclear Power Plant has been steadily operating at its design capacity of 1,000 MW.
- Water-water energetic reactor (WWER) is a water-cooled water-moderated energy reactor.
- The plant is expected to fully operate in 2027.
- Operators: Russian state company and Nuclear Power Corporation of India Limited

72. Scarborough Shoal

- The Scarborough Shoal is a series of small rocks and islands which are formed into a triangle shape in the South China Sea, located 220 kilometers from the Philippines.
- The largest island features a lagoon.
- The deep waters around the shoal make it a productive fishing area, rich in marine life and the lagoon also contains many commercially valuable shellfish and sea cucumbers.
- The shoal is the source of dispute between China and the Philippines, with both countries claiming that the shoal lies within their territory and saying they have exclusive rights to access its waters.

73. National Commission of Women

- The National Commission for Women (NCW) is an autonomous and statutory body established in 1992 under the National Commission for Women Act, 1990, to protect and promote women's rights in India.
- It is responsible for reviewing and addressing issues related to the rights of women and for making recommendations for the protection and promotion of these rights.
- The Commission shall consist of a Chairperson, 5 Members, and a Member-Secretary who are nominated by the Central Government.
- At least one Member shall be from amongst persons belonging to the Scheduled Castes and Scheduled Tribes, respectively.
- The Chairperson and every Member shall hold office for a period of three years.

74. Confederation of Indian Industry (CII)

- It is a non-government, not-for-profit, industry-led and industry-managed organization.
- It was founded in 1895, its headquarters is in New Delhi.
- It works to create and sustain an environment conducive to the development of India, partnering industry, Government and civil society, through advisory and consultative processes.
- CII has embarked on initiatives that enhance competitiveness of Indian industry by underlining the need for rapid up gradation on parameters like quality, corporate governance, knowledge management, energy efficiency and environment management.

75. National Centre for Disease Control (NCDC)

- The National Centre for Disease Control (NCDC), formerly National Institute of Communicable Diseases (NICD).
- NICD was transformed into the National Centre for Disease Control (NCDC) with a larger mandate of controlling emerging and re-emerging diseases in 2009.
- It functions as the nodal agency in the country for disease surveillance facilitating prevention and control of communicable diseases.
- It is also a national level institute for training specialized manpower for public health, laboratory sciences and entomological services and is involved in various applied research activities.
- The Institute is under administrative control of Health Services, Ministry of Health and Family Welfare. The Institute has its headquarters in Delhi.

76. CERT-In

- It is the national nodal agency for responding to computer security incidents as and when they occur.
- CERT-In was established in 2004 as a functional organization of the Ministry of Electronics and Information Technology.
- The Information Technology (Amendment) Act 2008 designated CERT-In to serve as the national agency
- Function: Collection, analysis and dissemination of information on cyber incidents; Forecast and alerts of cyber security incidents; Emergency measures for handling cyber security incidents; Issue guidelines, advisories, vulnerability notes and whitepapers

77. United Nations High Commissioner for Refugees (UNHCR)

- It is a UN agency mandated to aid and protect refugees, forcibly displaced communities, and stateless people, and to assist in their voluntary repatriation, local integration or resettlement to a third country.

- UNHCR headquarter is in Geneva, Switzerland,
- UNHCR was created in 1950 to address the refugee crisis that resulted from World War II.
- The 1951 UN Refugee Convention established the scope and legal framework of the agency's work, which initially focused on Europeans uprooted by the war.

78. e-Shram Portal

- The e-Shram portal is under The Ministry of Labour and Employment.
- Aims to register 38 crore unorganised workers such as construction labourers, migrant workforce, street vendors, and domestic workers, among others.
- The workers will be issued an e-Shram card containing a 12 digit unique number.
- If a worker is registered on the eSHRAM portal and meets with an accident, he will be eligible for Rs 2.0 Lakh on death or permanent disability and Rs 1.0 lakh on partial disability.
- The formation of e-Shram portal came after the Supreme Court directed the Government to complete the registration process of unorganized workers so that they can avail the welfare benefits given under various government schemes.

79. India Post Payments Bank (IPPB)

- Launched on September 1, 2018, with 100% equity owned by the Government of India.
- With a Vision to create an accessible, affordable, and trusted bank for all citizens.
- Aims to facilitate banking through innovative technology and secure transactions.
- Implements Biometrics integrated smartphones and biometric devices for seamless transactions.
- IPPB delivers simple and affordable banking solutions through intuitive interfaces available in 13 languages.
- Leveraging India's vast postal infrastructure with 1,55,000 Post Offices and 3,00,000 postal employees

80. The Household Consumption Expenditure Survey (HCES)

- Conducted by the National Statistical Office (NSO) every 5 years.
- It is designed to collect information on the consumption of goods and services by households.
- The data collected in HCES is also utilized for deriving various other macroeconomic indicators such as Gross Domestic Product (GDP), poverty rates, and Consumer Price Inflation (CPI).
- NITI Aayog has stated that the latest consumer expenditure survey indicated that poverty has come down to 5% in the country.

81. GSAT-20

- GSAT-20 is a high throughput Ka-band satellite that provides high-speed broadband internet connectivity, digital video transmission, and audio transmission.
- It is being launched to address the growing broadband communication needs of India.
- It is designed to provide comprehensive coverage across India, including remote regions like Andaman and Nicobar Islands and Lakshadweep Islands..
- Notably, it comprises 32 beams specifically designed to meet the demanding service needs of underserved areas, aiming to bridge the connectivity gap.

82. India-EU Trade and Technology Council:

- The Council was formed in 2022 with the objective of creating a High-level coordination platform
- Ministerial meetings will be held annually, ensuring regular high-level engagement between India and the EU.
- These meetings will alternate in terms of location, taking place in either India or the EU, to foster balanced participation and strengthen bilateral cooperation.

- The TTC consists of three Working Groups (WGs) that report on roadmaps for future cooperation: WG on Strategic Technologies, Digital Governance, and Digital Connectivity:
- It will work jointly on areas such as digital connectivity, Artificial Intelligence, 5G/6G, high performance and Quantum Computing, Semiconductors, cloud systems, Cybersecurity, digital skills and digital platforms

83. National Dairy Development Board (NDDB)

- It was founded to replace exploitation with empowerment, tradition with modernity, stagnation with growth, transforming dairying into an instrument for the development of India's rural people.
- The NDDB is an institute of national importance established by an act of the Indian Parliament (NDDB Act 1987) and thus is a statutory body.
- National Dairy Development Board located at- Anand, Gujarat (HQ)
- It is under the Ministry of Animal Husbandry, Dairying and Fisheries
- It was founded by Dr Verghese Kurien, often called 'India's milkman'.

84. Directorate General of Foreign Trade (DGFT)

- It is a government organization in India responsible for the formulation of Exim guidelines and principles for Indian importers and Indian exporters of the country.
- It is an attached office of the Ministry of Commerce and Industry and is headed by the Director General of Foreign Trade.
- It has been assigned the role of "facilitator".
- It is responsible for implementing the Foreign Trade Policy or Exim Policy with the main objective of promoting Indian exports.
- The DGFT also issues scripts/authorization to exporters and monitors their corresponding obligations through a network of 24 regional offices.

85. Diatoms

- Diatoms are a type of microscopic, golden-brown algae found in both freshwater and marine environments.
- play a crucial role in our everyday lives by producing 25 per cent of global oxygen, approximately every fourth breath of oxygen we inhale.
- Diatoms have proven to be indispensable in the study of past environmental conditions.
- These organisms are often preserved in the sediments of lakes, rivers, and oceans, similar to the way tree rings preserve historical climatic data.

86. INS SUNAYNA

- INS Sunayna is part of the Saryu-class of patrol vessels, which are designed for long-range operations.
- The primary role of these ships is to conduct naval surveillance, interdiction, and search and rescue operations.
- The ship was built by Goa Shipyard Limited and was commissioned into the Indian Navy on October 15, 2013.
- INS Sunayna is equipped with a range of weaponry.
- The ship is also fitted with advanced navigation and communication systems to enhance its operational capabilities.

87. Claude 3.5 Sonnet

- Claude 3.5 Sonnet is a large language model (LLM), and is part of the family of LLMs which is being developed by Anthropic.
- These models are known as generative pre-trained transformers, which means they have been pre-trained to predict the next word in large amounts of text.
- Claude 3.5 Sonnet is the predecessor to the Claude 3 Sonnet introduced in March of this year.
- Claude 3.5 Sonnet sets some new industry benchmarks in capabilities such as coding proficiency (HumanEval), graduate-level reasoning (GPQA), and undergraduate-level knowledge (MMLU).

88. Atal Setu

- Atal Setu is the longest sea bridge in India.
- It is a 22km long twin carriage way six lane bridge over the Thane Creek in the Arabian Sea.
- It will connect Sewri in the island city of Mumbai to Chirle in Raigad district on the mainland.
- The project is collaboration between MMRDA (Mumbai Metropolitan Region Development Authority) and Japan International Cooperation Agency (JICA), which is funding 80 per cent of the project cost, with the rest being borne by the state and central governments.

89. Monetary Policy Committee

- Section 45ZB of the amended RBI Act, 1934 provides for an empowered six-member monetary policy committee (MPC) to be constituted by the Central Government by notification in the Official Gazette.
- The first such MPC was constituted on September 29, 2016.
- The MPC determines the policy repo rate required to achieve the inflation target.
- The MPC is required to meet at least four times in a year.
- The quorum for the meeting of the MPC is four members.
- Each member of the MPC has one vote, and in the event of an equality of votes, the Governor has a second or casting vote.

90. NBFCs

- Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, 1956
- They are engaged in the business of loans and advances, acquisition of shares/ stocks/ bonds/ debentures/securities issued by Government or local authority or other marketable securities
- A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in one lump sum or in installments by way of contributions or in any other manner, is also a non-banking financial company

91. Rotavirus

- Rotavirus is a highly contagious diarrhea-causing virus.
- Prior to the development of the vaccine, the majority of the children were prone to infection by Rotavirus.
- Although the infections from rotavirus are unpleasant, they are usually treatable at home with proper medication and fluids to avoid dehydration.
- Severe dehydration may necessitate receiving fluids through veins.
- It is critical to practice good hygiene, by washing your hands on a regular basis. However, vaccination is the most effective way to avoid rotavirus infection.

92. Central Consumer Protection Authority

- Consumer Protection Act, 2019, established the Central Consumer Protection Authority.
- To promote, protect and enforce the rights of consumers as a class.
- It has a Chief Commissioner as head, and two other commissioners as members, one deals with matters relating to goods while the other deals with services.
- It conduct investigations into violation of consumer rights and institute complaints / prosecution,
- Orders recall of unsafe goods and services,
- Order discontinuation of unfair trade practices and misleading advertisements,
- Impose penalties on manufacturers/endorsers/publishers of misleading advertisements.
- The Ministry of Consumer Affairs, Food & Public Distribution, is the Nodal Ministry

93. Satnami Sect

- Satnamis (believes in God whose name is 'truth') are a predominant group within the 11% Scheduled Caste population in Chhattisgarh and who are believed to be an offshoot of the Ravidassia community.
- Udhodas, a disciple of Saint Ravidas, was the first priest or spiritual guru of the society.
- The community inhabits the plains of the state's central region, mostly the old districts of Bilaspur, Durg, Rajnandgaon and Raipur.
- The sect emphasizes on three principles - adorn the attire of a Satnami devotee, earn money through proper means and do not tolerate any injustice or oppression
- There is a belief that the Satnamis exert political influence by voting collectively.
- The majority of the 10 assembly segments allotted for SCs are occupied by community representatives.

94. Fast Breeder Reactor

- A fast breeder reactor is a type of nuclear reactor that is designed to produce more fissile material (such as Plutonium-239) than it consumes during operation.
- It achieves this by using fast neutrons to convert non-fissile isotopes (such as Uranium-238) into fissile isotopes (such as Plutonium-239).
- This process is known as "breeding" because it creates more fissile material than is initially loaded into the reactor.
- India's prototype fast breeder reactor (PFBR) in Tamil Nadu has a capacity of 500 Megawatt electric (MWe). It was designed by the Indira Gandhi Centre for Atomic Research and constructed by BHAVINI.
- Short for Bharatiya Nabhikiya Vidyut Nigam Limited, BHAVINI was established in 2003 to build and operate the PFBR.

95. SAMEER

- Society for Applied Microwave Electronics Engineering and Research (SAMEER) is an autonomous R&D institution under the Ministry of Electronics and Information Technology, Government of India.
- SAMEER was formed in 1984 as an R&D Laboratory then moved to its present location at Indian Institute of Technology, Bombay in 1988.
- While the primary focus of SAMEER is research and development, SAMEER is delivering solutions to the most advanced and complex mission critical programs of the nation. Many technologies of SAMEER have had societal and economic impacts.
- SAMEER is engaged in active research in the broad area of microwaves and undertakes various state-of-the-art and challenging projects.

96. Livestock Census

- The Livestock Census has been conducted in the country since 1919-20, once every 5 years.
- It covers all domesticated animals and their headcounts.
- So far 19 such censuses have been conducted by the Ministry of Fisheries, Animal Husbandry and Dairying, in participation with State Governments and UT Administrations.
- The census is beneficial not just for policymakers but also for agriculturists, traders, entrepreneurs, dairying industry and masses in general.

97. Jal Shakti Abhiyan

- launched by the Ministry of Jal Shakti in 2019.
- It is a campaign for water conservation and water security in the country through a collaborative effort of various ministries of the Government of India and state governments.
- The focus of the campaign is on water stressed districts and blocks.
- The important water conservation interventions are : Water conservation and rainwater harvesting, Renovation of traditional and other water bodies/tanks, Reuse of water and recharging of structures, Watershed development and Intensive afforestation.
- Jal Shakti Abhiyan covered 256 water stressed districts across the country.
- Around seventy- five lakh traditional and other water bodies and tanks were renovated and around a crore water conservation & rainwater harvesting structures were created.

98. Telecom Regulatory Authority of India

- It is a regulatory body set up by the Government of India under section 3 of the Telecom Regulatory Authority of India Act, 1997.
- It is the regulator of the telecommunications sector in India.
- It consists of a Chairperson and not more than two full-time members, and not more than two part-time members.
- The chairperson and the members of TRAI are appointed by the Central Government, and the duration for which they can hold their office is three years or until they attain the age of 65 years, whichever is earlier.

99. The Coffee Board of India

- It is a statutory organization that was constituted under Section (4) of the Coffee Act, 1942.
- It functions under the administrative control of the Ministry of Commerce and Industry, Government of India.
- The Board comprises 33 Members including the Chairperson, who is the Chief Executive and it functions from Bangalore.
- The Board mainly focuses its activities in the areas of research, extension, development, market intelligence, external & internal promotion for coffee.

100. SC, ST (Prevention of Atrocities) Act, 1989

- It is an Act of Parliament enacted to prohibit discrimination against SC & ST communities members and prevent atrocities against them.
- The Act is also a recognition of the depressing reality that despite undertaking several measures, the Scheduled Castes/Scheduled Tribes continue to be subjected to various atrocities at the hands of upper-castes.
- The Act has been enacted keeping in view the express constitutional safeguards enumerated in Articles 15 (Prohibition of Discrimination), 17 (Abolition of Untouchability) and 21 (Protection of Life and Personal Liberty) of the Constitution.

- In the amended SC/ST Act (2018), preliminary inquiry is not a must and no prior approval is also required to file FIRs in cases of atrocities on SC and ST.

101. Inland Waterways Authority of India

- The Inland Waterways Authority of India (IWAI) is a statutory body under the Ministry of Shipping established in 1986 for development and regulation of inland waterways for shipping and navigation.
- It is headquartered in Noida, Uttar Pradesh and its main function is to build necessary infrastructure in inland waterways, surveying economic feasibility of new projects and also carrying out administration and regulation.
- As per the National Waterways Act, 2016, 111 waterways have been declared as N.Ws.

102. SBM-U 2.0

- Aims to make Indian cities garbage free and all urban local bodies (ULBs) open defecation free.
- It will focus on source segregation of solid waste, utilizing the principles of 3Rs (reduce, reuse, recycle), scientific processing of municipal solid waste and remediation of legacy dumpsites.
- The scheme has an outlay of Rs. 1.41 lakh crore.
- It focuses on transitioning to a circular economy that treats solid and liquid waste as a resource.
- It also aims for 100% tap water supply in about 4,700 urban local bodies and sewerage and septage in 500 AMRUT cities.

103. The Federation of Indian Export Organisations (FIEO)

- The Federation of Indian Export Organisations represents the Indian entrepreneurs spirit of enterprise in the global market. It was set up in 1965.
- It is an Apex body of the export promotion councils, community boards and development authorities in India.
- It provides the crucial interface between the international trading community of India & the Central and State Governments, financial institutions, ports, railways and all engaged in export trade facilitation.
- It serves the interests of over 100000 exporters from every goods and services sector in the country.

104. All India Council for Technical Education (AICTE)

- Set up in November 1945 as a national-level Apex Advisory Body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner.
- AICTE attained statutory status in the year 1987 under the AICTE Act.
- AICTE under the Ministry of Education provides proper planning and development of the technical education system in India.
- It accredits graduate and postgraduate programs at Indian institutions.
- It is headquartered in New Delhi.

105. Central Council for Research in Ayurvedic Sciences (CCRAS)

- It is an autonomous body under Ministry of AYUSH, Govt. of India
- It is an apex body in India for undertaking, coordinating, formulating, developing and promoting research on scientific lines in Ayurvedic Sciences.
- Aims To develop scientific evidence in Ayurvedic Principles, drug therapies by way of integrating ancient wisdom with modern technology and to bring Ayurveda to the people through scientific innovations related to diagnostics, preventive, promotive as well as treatment methods
- Introduces scientific research for sustained availability of quality natural resources, to translate them into products and processes and in synergy with concerned organizations to introduce these innovations into public health systems

106. Gulf of Aden

- It is an extension of the Indian Ocean, located between the Arabian Peninsula and the African continent.
- It connects the Red Sea to the Arabian Sea and ultimately the Indian Ocean.
- The gulf is named after “Aden,” a port city on Yemen’s coast.
- It is bounded to the south by Somalia and the Socotra Islands (part of Yemen), north by Yemen, east by the Arabian Sea, and west by Djibouti.
- The gulf is connected to the Somali Sea, and to the Red Sea by the Strait of Bab el Mandeb.
- It is demarcated from the Arabian Sea by the Horn of Africa and the Socotra Islands.

107. Employees Provident Fund Organisation (EPFO)

- It is a statutory body under the Employees' Provident Funds and Miscellaneous Act, 1952.
- It is under the administrative control of the Union Ministry of Labor and Employment.
- Structure of EPFO:
- The Act and all its schemes are administered by a tripartite board called the Central Board of Trustees.
- The board comprises representatives of the Government (both Central and State), employers, and employees.
- The board is chaired by the Union Minister of Labour and Employment, Government of India.

108. The Biological Diversity Act, 2002

- The act was enacted in 2002, it aims at the conservation of biological resources, managing its sustainable use and enabling fair and equitable sharing benefits arising out of the use and knowledge of biological resources with the local communities.
- The act envisaged a three-tier structure to regulate the access to biological resources: The National Biodiversity Authority (NBA), The State Biodiversity Boards (SBBs), The Biodiversity Management Committees (BMCs) (at local level)
- Biological Diversity Act, 2002 was born out of India’s attempt to realize the objectives enshrined in the United Nations Convention on Biological Diversity (CBD) 1992

109. Commission for Air Quality Management

- The Commission is a statutory body which was first formed by an ordinance in 2020.
- To be chaired by a government official of the rank of Secretary or Chief Secretary.
- He will hold the post for three years or until s/he attains the age of 70 years.
- It will also have five ex officio members who are either Chief Secretaries or Secretaries in charge of the department dealing with environment protection in the States of Delhi, Punjab, Haryana, Rajasthan, and Uttar Pradesh.
- Technical members from CPCB, Indian Space Research Organisation, and NITI Aayog
- Investigating and conducting research related to environmental pollution impacting air quality, preparing codes and guidelines to prevent and control air pollution,
- Issuing directions on matters including inspections, or regulation which will be binding on the concerned person or authority.

110. Official Creditor Committee (OCC)

- It was formed in response to Sri Lanka’s request for debt treatment during last year’s economic crisis.
- It is co-chaired by India, Japan, and France, as chair of the Paris Club.
- China, Sri Lanka’s largest bilateral creditor, chose not to participate in the OCC but attended meetings as an observer
- The Official Creditor Committee (OCC) and Sri Lanka agreed on main parameters aligned with the Extended Fund Facility (EFF) arrangement with the IMF.

111. International Criminal Court (ICC)

- Governed by an international treaty called 'The Rome Statute', the ICC is the world's first permanent international criminal court.
- It investigates and, where warranted, tries individuals charged with the gravest crimes of concern to the international community: genocide, war crimes, crimes against humanity and the crime of aggression.
- Through international criminal justice, ICC aims to hold those responsible for their crimes and to help prevent these crimes from happening again.
- India is not a party to Rome Statute along with US and China.

112. Financial Stability Report

- The Financial Stability Report is released by the RBI twice a year.
- RBI details the state of financial stability in the country, and it is prepared after taking into account the contributions from all financial sector regulators.
- As part of the FSR, the RBI also conducts a Systemic Risk Survey (SRS), wherein it asks experts and market participants to assess the financial system on five different types of risks – Global, Financial, Macroeconomic, Institutional, General.

113. Sengol

- The Sengol derived from the Tamil word "Semmai", means "Righteousness".
- It was made of gold or silver and was often decorated with precious stones.
- A Sengol sceptre was carried by emperors on ceremonial occasions, and used to represent their authority.
- It is associated with the Chola Empire, one of the longest-ruling and most influential dynasties in South India.
- The Cholas had a tradition of handing over the Sengol sceptre from one king to another as a mark of succession and legitimacy.
- The Nandi, with its unyielding gaze as the beholder of "Nyaya", is hand-carved at the top.

114. ABHYAS

- It is a high-speed expendable aerial target (HEAT).
- It is designed by the DRDO's Aeronautical Development Establishment (ADE).
- ABHYAS offers a realistic threat scenario for the practice of weapon systems.
- It is the ideal platform for the validation of Armed Forces equipment waiting for induction (only those that require aerial engagement).
- It is designed for autonomous flying with the help of an autopilot indigenously made by the ADE.
- It has a radar cross-section and a visual and infrared augmentation system required for weapon practice.
- The target drone has a laptop-based Ground Control System with which the aircraft can be integrated and pre-flight checks, data recording during the flight, replays after the flight and post-flight analysis can be carried out.

115. Indian Council of Medical Research (ICMR)

- The Indian Council of Medical Research (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world.

- In 1911, the Government of India set up the Indian Research Fund Association (IRFA) with the specific objective of sponsoring and coordinating medical research in the country. After independence, it was redesignated the Indian Council of Medical Research (ICMR) in 1949.
- The Governing Body of ICMR is presided over by the Union Health Minister. It is assisted in scientific and technical matters by a Scientific Advisory Board comprising eminent experts in different biomedical disciplines.

116. Ways and Means Advances (WMA)

- It is a facility for both the Centre and states to borrow from the RBI.
- These borrowings are meant purely to help them to tide over temporary mismatches in cash flows of their receipts and expenditures.
- Section 17(5) of the RBI Act, 1934 authorises the central bank to lend to the Centre and state governments subject to their being repayable not later than three months from the date of the making of the advance
- The interest rate on WMA is the RBI's repo rate, which is basically the rate at which it lends short-term money to banks.

117. Shanghai Cooperation Organization

- The Shanghai Cooperation Organization is a permanent intergovernmental international organization established on June 15, 2001 in Shanghai
- In 2002, the Charter of the Shanghai Cooperation Organization was signed at the meeting of the Council of Heads of States in St. Petersburg, which entered into force on September 19, 2003.
- It is a statute that stipulates the goals, principles, structure and major areas of activities of the organization.
- The goals of the SCO are to strengthen mutual trust, friendship and good-neighborliness between the Member States
- The official languages of the SCO are Russian and Chinese.
- SCO currently has 9 members, India is also a member of SCO.

118. Financial Action Task Force (FATF)

- FATF is an international body formed in 1989 by the Group of Seven (G7) member states with an aim to prevent cases of Anti-money laundering and financing of terrorist activities.
- Its headquarters is located in Paris, France.
- FATF comprises 37 member jurisdictions and 2 regional organizations, including the European Commission and Gulf Cooperation Council (GCC).
 - India is a member of FATF
- It aims to generate the necessary political will to bring about reforms in the national legislative and regulatory reforms to prevent money laundering and financing of terrorist activities.
- Non-compliance with FATF standards can result in reputational damage, financial isolation, and increased scrutiny from the international community.

119. Index of Eight Core Industries (ICI)

- The Index of Eight Core Industries (ICI) is prepared every month and released by the Office of the Economic Adviser (OEA), Department for Promotion of Industry and Internal Trade (DPIIT), and Ministry of Commerce & Industry.
- The ICI measures the combined and individual performance of production of eight core industries viz. Cement, Coal, Crude Oil, Electricity, Fertilizers, Natural Gas, Refinery Products and Steel.

- The Eight Core Industries comprise 40.27 percent of the weight of items included in the Index of Industrial Production (IIP).
- The current weightage, of eight core industries is Petroleum Refinery Products (28.04%) > Electricity (19.85%) > Steel (17.92%) > Coal (10.33%) > Crude Oil (8.98%) > Natural Gas (6.88%) > Cement (5.37%) > Fertiliser (2.63%).
- The base year in the current series of ICI is 2011-12.

120. Ingenuity Mars Helicopter

- The Ingenuity Mars Helicopter is a small robotic helicopter that is part of NASA's Mars 2020 mission, which also includes the Perseverance rover.
- It is the first aircraft to attempt powered, controlled flight on another planet.
- Ingenuity's primary mission is to demonstrate the feasibility of flight in the thin atmosphere of Mars and to gather data to support future aerial exploration of the Red Planet.





ABOUT US

GEO IAS is the best institute for civil services in India for providing top quality teaching and materials, offering you most optimum path for your success in Civil Services exam. Our aim is to provide quality training with an affordable fee structure. Our uniquely designed course make us the best institute for UPSC to crack the exam in one go. We have a dedicated team of experienced and young teachers and counsellors who make sure that every student who joins the institute, must get customized way of preparation which matches with student's learning style. The only institute of UPSC in India which has 3 AI enabled Mobile apps. We believe in Smart way of teaching and learning. The classes are available in offline as well as in online mode. We take the help of animation so that you may visualize the lectures. Unlimited tests for prelims and mains with solution in both form (Hard copy and soft copy). We have the set of 15 lac mcqs on each topic. We provide daily news analysis, Highlighted news paper and links of important Sansad TV shows. The institute has best success rate with more than 230 students have cleared the exam. HIGHEST RATED INSTITUTE as per GOOGLE, SULEKHA and JUST DIAL and the magazine on civil services

 +91-9477560001 /002/005

 BRANCH: Delhi Kolkata, Raipur, Patna |
HEAD OFFICE: 641, Ramlal Kapoor Marg,
Mukherjee Nagar, Delhi, 110009

 info@geoias.com

 www.geoias.com