

PRAYAS4IAS

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INDEX

Contents

Prelims	3
NATIONAL	3
Rajasthan's amended law that makes misbehaviour with tourists a cognisable offence	3
Improved water management system for toxic textile effluents developed	4
Gupta era temple discovered in Etah	5
The new framework to share financial data	6
Punjab govt's anti-drug initiatives	7
Tarballs resurfaced on Mumbai's beaches	8
SCO Peaceful Mission 2021	9
T+1 settlement system	10
Govt. offers four-year moratorium AGR on dues.....	11
The Bill to scrap NEET in Tamil Nadu	12
Supreme Court judgment on rejecting withdrawal of resolution plan under IBC	13
Hybodont Shark of the Jurassic Age.....	14
Bad Bank.....	14
Rajasthan Tourism Trade (Facilitation and Regulation) Act, 2010	16
Shoonya Campaign	17
Black Tigers	18
INTERNATIONAL	21
General Sherman: world's largest tree threatened by California wildfires.....	21
The Taliban's controversial Ministry of Virtue and Vice?	22
AUKUS.....	23
Quad.....	25
What is the Freedom to Vote Act in the US?.....	26
Permafrost can cause another pandemic	27
North Korea's first 'strategic' cruise missile test	28
New tech based on CRISPR to control growth of mosquitoes	29
Mains	31
GS II	31
Hardly the India-China century Deng envisioned	31
In Manipur, a case for asymmetric federalism.....	33
Why is Nipah's return in Kerala a cause for concern?	35



Behind the great Indian Internet shutdown	36
A selective nuclear policy	38
GS III	40
PLI Scheme for textile industry	40
E-safety for kids	41
E-Shram needs some hard work to get going	42
Current Affairs Quiz	45



Prelims

NATIONAL

Rajasthan's amended law that makes misbehaviour with tourists a cognisable offence

(Source: [Indian Express](#))

Context: *The Rajasthan Assembly on Monday (September 13) passed a Bill to amend the Rajasthan Tourism Trade (Facilitation and Regulation) Act, 2010. Notably, it makes misbehaviour with tourists, especially by touts, a cognisable offence in Rajasthan with repeated offence being non-bailable.*

What is the new bill about?

- The Rajasthan Tourism Trade (Facilitation and Regulation) (Amendment) Bill, 2021, inserts a new section 27-A in the 2010 Act.
- The section is defined as “Offences to be cognizable: All the offences punishable under this Act shall be cognizable and bailable,” subject to the certain conditions, wherein the repeat offence will be non-bailable.
- Sub sections 3 and 4 under section 13 of the 2010 Act have been made cognisable and non-bailable.
- Section 13 deals with “prohibition of certain acts and activities in the tourist places, areas and destinations,” which prohibits touting, begging and hawking articles for sale in or around any tourist places. The sub sections 3 and 4 deal with habitual offenders.

What prompted the bill?

- Touts, known locally as lapka, are a persisting trouble at popular tourist sites in the state. They often mislead and force tourists to shop – usually at exorbitant prices in connivance with the establishments – to make money and get a commission.
- And tourism is a key industry in Rajasthan – it witnessed 5.2 crore domestic and 16 lakh foreign tourists in 2019.
- So, the Bill mainly seeks to prevent touts around the tourist sites.
- Since 2018, the police and the Tourism Department have taken action against close to a thousand touts.
- However, they are let off easily after paying a fine and subsequently return to touting and troubling the tourists.

What is the High Court order that led to the bill?

- Following the 2010 Act, the state had started tourist police stations in Jaipur and Udaipur. In one of the cases, an FIR was lodged in 2016 and a challan was filed.
- However, the accused Mohammad Hanif Qureshi and Kailash Saini went to court and in January 2017, the Rajasthan High Court quashed the FIR on the ground that offences punishable under sub-sections (1) and (2) of section 13 of the 2010 Act are not specifically provided in the Act as cognisable.
- Essentially, the 2010 Act was toothless in cracking down on the touts.
- Replying to the debate on the bill in the Assembly, Dotasra said that the 2010 Act was brought in to prevent misbehaviour with the tourists and ensure that they go back with good experiences.

Improved water management system for toxic textile effluents developed

(Source: [The Hindu](#))

Context: *Indian researchers have developed an improved water management system that can completely reuse dye wastewater from textile industries, eliminating its toxicity and making it suitable for domestic and industrial usage. It can reduce water treatment costs and facilitate reuse of water in dry regions, it added. The current three-stage treatment process for wastewater consisting of primary, secondary, and tertiary treatment is unable to treat toxic industrial wastewater.*

High cost

- The stand-alone advanced oxidation process (AOP) treatment technique for colour and odour properties in industrial effluents (dye-based) may be insufficient to meet the set government standards and is also limited due to the high cost of AOPs involving continuous supply of chemical reagents.
- It cannot remove the synthetic industrial dyes and the effervescent colour and odour, which have a long-lasting carcinogenic and toxic effect on the ecological balance, especially aquatic life.
- In order to remove this toxicity, an upgraded solution with the AOP technology is the need of the day, it added.
- Working towards this, researchers from Indian Institute of Technology (IIT) Kanpur along with Malaviya National Institute of Technology, Jaipur, and MBM College, Jodhpur, have developed a **modified AOP solution**.

Modified process

- This completely modified treatment process consisting of the primary dosing step, followed by the sand filtration step, another AOP and subsequent carbon filtration step.
- It eliminates the need for the conventional primary, secondary, and tertiary processes, resulting in maximum colour removal, and meets the inland water discharge standards.
- The DST – Water Technology Initiative (WTI), along with the Indian National Academy of Engineering (INAE) – supported the development of this technology at pilot-level in collaboration with Laxmi Textile Prints, Jaipur.
- The much-improved AOP technology targeting zero discharge water management system is being utilised for complete reuse of industrial dye wastewater for domestic and industrial usage at a rate of 10 kilo litres/day.
- The treatment of toxic and highly carcinogenic industrial dyes of textile effluents is performed using this AOP technology for degrading and mineralising recalcitrant organic matter from effluent wastewater.

Low-cost solution

- It is a direct replacement of the existing treatment plant processes and consists of a low-cost solution of dye adsorption on acid-modified soil, followed by a photochemical reaction step within a photocatalytic visible light filter and a unique carbon and PAN (polyacrylonitrile) nano-mat fibre filtration process.
- Having been set up on a pilot basis, it remediates industrial wastewater.
- The technology has resulted in the recuperation of 50% of the treatment cost incurred from conventional processes for water treatment (especially due to the high cost of sludge disposability) in the water-scarce regions of Rajasthan.
- Further, scaling up of this plant to 100 kilolitres/day capacity to meet the current industrial requirement is underway, it added.



Gupta era temple discovered in Etah

(Source: [Indian Express](#))

Context: Recently, the Archaeological Survey of India (ASI) discovered remains of an ancient temple dating back to the Gupta period (5th century) in a village in Uttar Pradesh's Etah district. The stairs of the temple had 'shankhalipi' inscriptions, which were deciphered by the archaeologists as saying, 'Sri Mahendraditya', the title of Kumaragupta I of the Gupta dynasty.

The archaeological findings

- The Bilsarh site was declared 'protected' in 1928. Every year, the ASI undertakes scrubbing work at the protected sites.
- This year, the team discovered "two decorative pillars close to one another, with human figurines.
- The inscription on the stairs possibly reads 'Sri Mahendraditya', which was the title of Kumaragupta I.
- As per the ASI, the stairs led to a structural temple built during the Gupta period. The discovery becomes significant since only two other structural temples from the Gupta age have been found so far — Dashavatara Temple (Deogarh) and Bhitargaon Temple (Kanpur Dehat).
- In the 5th century, Kumaragupta I ruled for 40 years over north-central India. The Guptas were the first to build structural temples, distinctly different from the ancient rock-cut temples.



What is the Shankhalipi script?

- Shankhalipi or "shell-script" is a term used by scholars to describe ornate spiral characters assumed to be Brahmi derivatives that look like conch shells or shankhas.
- They are found in inscriptions across north-central India and date to between the 4th and 8th centuries. A similar inscription was found on the back of a stone horse sculpture from that period that is at present in the State Museum at Lucknow.
- Both Shankhalipi and Brahmi are stylised scripts used primarily for names and signatures. The inscriptions consist of a small number of characters, suggesting that the shell inscriptions are names or auspicious symbols or a combination of the two.



Chronology and meaning

- The script was discovered in 1836 on a brass trident in Uttarakhand's Barahat by English scholar James Prinsep, who was the founding editor of the Journal of the Asiatic Society of Bengal.
- A year later, he came across two more similar scripts at Nagarjuna group of caves in the Barabar Hills near Gaya.



- Prominent sites with shell inscriptions include the Mundeshwari Temple in Bihar, the Udayagiri Caves in Madhya Pradesh, Mansar in Maharashtra and some of the cave sites of Gujarat and Maharashtra. In fact, shell inscriptions are also reported in Indonesia's Java and Borneo.
- Scholars have tried to decipher shell script but have not been successful. The first detailed study of shell inscriptions was undertaken by Professor Richard Salomon of the University of Washington.
- He said there are a sufficient number of shell characters to represent the syllables of the Sanskrit
- Shankhalipi is found to be engraved on temple pillars, columns and rock surfaces.
- No such inscriptions with dates or numbers have been reported so far even as their chronology can be determined by the objects on which they are written.

The new framework to share financial data

(Source: [The Hindu](#))

Context: *On September 2, the Reserve Bank of India launched the account aggregator framework aimed at making financial data more easily accessible. Under it, a number of fin-tech entities have been granted the licence to operate as account aggregators. Eight large banks have also agreed to share various financial data about their customers with account aggregators.*

How will an account aggregator work?

- The framework will allow financial data to be exchanged between the holders of data and its users. The RBI has allowed a number of companies like PhonePe to act as account aggregators to facilitate this process.
- Account aggregators will act as intermediaries who will collect data from one financial entity and exchange it with another.
- For example, a bank which is processing a loan application from a potential borrower may want to access a variety of financial data about the borrower. The lending bank can access details of the borrower's savings, past loan repayment record, mutual fund holdings and insurance holdings through an account aggregator. The borrower, however, will have to grant consent for the sharing of his data with the lending bank.

What are its benefits?

- At the moment, the various financial data of an individual is scattered across the databases of several financial institutions. So a person's savings and loans data may be with a bank, his investments data may be with a mutual fund, while his insurance data may be with another financial entity.
- Under the account aggregator framework, all this data can be easily collated and shared through account aggregators with the consent of the individual.
- Proponents of the framework believe that the easier availability of data will have significant benefits for the economy.
- They believe the framework will help financial institutions make better assessment of the creditworthiness of individuals, and thus make better loan decisions.
- Even though mechanisms such as CIBIL already exist to assess the creditworthiness of individual borrowers, their scope is limited.
- An individual's PAN number, for instance, captures only a limited number of transactions which are of value higher than a certain minimum threshold amount.
- It is said the framework will offer a wider array of data to financial firms, making them more willing to serve creditworthy populations that they earlier ignored.

- Account aggregators can also make life easier for creditworthy customers by allowing them to share their financial data digitally with ease, it is believed.
- The availability of wider financial data may also help financial institutions offer better products tailored to the needs of individual customers.

Punjab govt's anti-drug initiatives

(Source: [Indian Express](#))

Context: After a Covid-induced break and months ahead of assembly elections, the Punjab government is set to revive its two flagship initiatives — the Buddy, and Drug Abuse Prevention Officers (DAPOs) programmes — to check drug abuse in the state. Punjab Chief Minister Captain Amarinder Singh would soon hold video conference sessions with participants of the programs. Also on anvil is imparting training to master trainers and wall paintings on ill effects of drugs to take the initiatives further.

What is a Buddy programme and how many have enrolled for it?

- The Buddy programme is aimed at identifying vulnerable adolescents to prevent them from falling into the trap of drugs. It is basically focused on early identification.
- Under the programme, Buddy groups have been formed in educational institutions – both government and private. Generally, a Buddy group comprises five classmates, selected by a teacher, who has been named as senior buddy.
- The role of a buddy, as per the programme, is to identify signs of drug/intoxicant use, regularly discuss positive activities, assist in co-curricular activities and discuss harmful effects of drugs from time to time
- The focus of the Buddy program is also to verify if drug use is reported, and also to communicate with the child, collect maximum details, try to find out history and source of drug use, counsel as a guide, inform the school principal and contact parents.
- The program envisages that members of buddy groups should not be sarcastic, accusatory, hostile and biased.
- Under the programme, 9.51 lakh groups in various educational institutions have been formed and more than 43.5 lakh students have enrolled as buddies.

What is DAPOs' programme?

- Under this programme, a drug abuse prevention officer is supposed to raise awareness and identify users, high-risk people and vulnerable sections. DAPOs' role includes motivating drug users and their families to avail of treatment facilities, facilitate treatment and do counselling.
- DAPOs are entrusted with a locality/cluster of houses which will be his/her core jurisdictional area. However, a DAPO may spread the message against drugs in society at large irrespective of his/her allotted jurisdictional area.
- DAPOs have been categorised into two – official volunteer (OV) and citizen volunteer (CV). The roles and responsibilities of both are, however, same.
- An official volunteer is one who works under the Punjab government or any of its undertakings. A citizen volunteer should be above 18 years of age. The assignment is honorary.

What has been the scale of the drug problem in Punjab?

- During the previous Akali Dal government, 55,117 persons were arrested under NDPS cases and 1,683 kg of heroin recovered during the 51-month period.
- For the corresponding period under the current Congress rule, 60,025 arrests were made and 2,089 kg of heroin was recovered, registering an increase of 8.9 per cent and 24.1 per net, respectively.

- As per the official figures, as many as 46,746 cases under NDPS Act were registered by the district police, State Special Operations Cell (SSOC) and Government Railway Police in the 51-month-period between January 1, 2013 to March 31, 2017.
- In the current Congress rule, for the similar number of months, 46,273 cases were registered between April 1, 2017 to June 30, 2021 by the same agencies.

Tarballs resurfaced on Mumbai's beaches

(Source: [Indian Express](#))

Context: *Recently, Cuffe Parade shoreline, a tony business district in South Mumbai, saw black oil-emanating balls lying on the shore. On September 4, Juhu beach, one of the popular beaches, was covered in sticky tarballs that gave off a foul fuel smell. In this month alone, the Brihanmumbai Municipal Corporation (BMC) has removed over 20,000 kg of tarballs from Juhu and Versova beaches.*

What are tarballs?

- Tarballs are dark-coloured, sticky balls of oil that form when crude oil floats on the ocean surface. Tarballs are formed by weathering of crude oil in marine environments.
- They are transported from the open sea to the shores by sea currents and waves, according to a research paper titled, Diversity of bacteria and fungi associated with tarballs: Recent developments and prospects by Laxman Shinde, Varsha & Suneel, V & Shenoy, Belle Damodara (2017), National Institute of Oceanography (NIO).
- Some of the balls are as big as a basketball while others are smaller globules. Tarballs are usually coin-sized and are found strewn on the beaches.
- However, over the years, they have become as big as basketballs and can weigh as much as 6-7 kgs.
- BMC, which has cleared the beaches of the tarballs, said the tarballs stick to the cleaning machinery and are very difficult to wash off.

How are tarballs formed?

- The NIO study states that “wind and waves tear the oil slick into smaller patches that are scattered over a much wider area.
- Various physical, chemical and biological processes (weathering) change the appearance of the oil”.

Why are tarballs found on the beaches during the monsoon?

- It is suspected that the oil comes from the large cargo ships in the deep sea and gets pushed to the shore as tarballs during monsoon due to wind speed and direction.
- All the oil spilt in the Arabian sea eventually gets deposited on the western coast in the form of tarballs in the monsoon season when wind speed and circulation pattern favour transportation of these tarballs.
- The BMC appoints a clean-up contractor at various beaches to remove the tarballs post-high tide. The Maharashtra Pollution Control Board (MPCB) has,



however, said that most of the oil was coming from large cargo vessels, where they have no jurisdiction. It has also said that they do not have a solution or control over the management of ships/cargo.

SCO Peaceful Mission 2021

(Source: [PIB](#))

Context: *Indian Military Contingent participates in the 6th Edition of Exercise SCO Peaceful Mission 2021 at Orenburg, Russia.*

About SCO Peaceful Mission:

- Joint Counter Terrorism Exercise PEACEFUL MISSION is a Multilateral Exercise, which is conducted biennially as part of military diplomacy between Shanghai Cooperation Organisation (SCO) member states.
- The 6th edition of Exercise PEACEFUL MISSION is being hosted by Russia in the Orenburg Region of South West Russia in September 2021.
- The aim of the exercise is to foster close relations between SCO member states and to enhance abilities of the military leaders to command multi-national military contingents.
- The exercise will enable sharing of best practices between the Armed Forces of SCO nations.
- The exercise will also provide an opportunity to the Armed Forces of SCO Nations to train in Counter-Terrorism Operations in an urban scenario in a multinational and joint environment.
- The scope of the exercise includes professional interaction, mutual understanding of drills & procedures, establishment of joint command & control structures and elimination of terrorist threats.

What is SCO?

- SCO is a permanent intergovernmental international organisation.
- It's a Eurasian political, economic and military organisation aiming to maintain peace, security and stability in the region.
- It was created in 2001.
- The SCO Charter was signed in 2002, and entered into force in 2003.
- It is a statutory document which outlines the organisation's goals and principles, as well as its structure and core activities.
- The SCO's official languages are Russian and Chinese.

Membership

- Kazakhstan
- China
- Kyrgyzstan
- Russia
- Tajikistan
- Uzbekistan
- India
- Pakistan

Observer states

- Afghanistan
- Belarus
- Iran
- Mongolia

T+1 settlement system

(Source: [Indian Express](#))

Context: *If stock market exchanges agree to the proposal for the T+1 settlement system made by the Securities and Exchange Board of India (Sebi), investors will get money for shares they sold or bought in their accounts faster, and in a safer and risk-free environment.*

What has Sebi allowed?

- On September 7, Sebi allowed stock exchanges to start the T+1 system as an option in place of T+2.
- If it opts for the T+1 settlement cycle for a scrip, the stock exchange will have to mandatorily continue with it for a minimum 6 months.
- Thereafter, if it intends to switch back to T+2, it will do so by giving one month's advance notice to the market. Any subsequent switch (from T+1 to T+2 or vice versa) will be subject to a minimum period.
- A stock exchange may choose to offer the T+1 settlement cycle on any of the scrips, after giving at least one month's advance notice to all stakeholders, including the public at large.

Why T+1 settlement?

- According to a Sebi paper, a shortened cycle not only reduces settlement time but also reduces and frees up the capital required to collateralise that risk.
- T+1 also reduces the number of outstanding unsettled trades at any instant, and thus decreases the unsettled exposure to Clearing Corporation by 50%.
- The narrower the settlement cycle, the narrower the time window for a counterparty insolvency/bankruptcy to impact the settlement of a trade.
- Further, the capital blocked in the system to cover the risk of trades will get proportionately reduced with the number of outstanding unsettled trades at any point of time.
- Systemic risk depends on the number of outstanding trades and concentration of risk at critical institutions such as clearing corporations, and becomes critical when the magnitude of outstanding transactions increases. Thus, a shortened settlement cycle will help in reducing systemic risk, SEBI says.

How does T+2 work?

- If an investor sells shares on Tuesday, settlement of the trade takes place in two working days (T+2).
- The broker who handles the trade will get the money on Thursday, but will credit the amount in the investor's account only by Friday. In effect, the investor will get the money only after three days.
- In T+1, settlement of the trade takes place in one working day and the investor will get the money on the following day.
- The move to T+1 will not require large operational or technical changes by market participants, nor will it cause fragmentation and risk to the core clearance and settlement ecosystem.
- In April 2002, stock exchanges had introduced a T+3 rolling settlement cycle. This was shortened to T+2 from April 1, 2003.

Why are foreign investors opposing it?

- Foreign investors have written to SEBI and the Finance Ministry about operational issues they would face while operating from different geographies — time zones, information flow process, and foreign exchange problems. Foreign investors will also find it difficult to hedge their net India exposure in dollar terms at the end of the day under the T+1 system.
- In 2020, SEBI had deferred the plan to halve the trade settlement cycle to one day (T+1) following opposition from foreign investors.

- According to an earlier schedule, the Sebi board was to decide on the issue at one of its board meetings in 2020.

What's the global scenario?

- In February 2021, the US Depository Trust & Clearing Corporation (DTCC), the premier market infrastructure for the global financial services industry, released a two-year industry roadmap for shortening the settlement cycle for US equities to one business day after the trade is executed (T+1).
- DTCC highlighted the immediate benefits of moving to T+1, including cost savings, reduced market risk and lower margin requirements as well as the firm's plans for galvanising the necessary support for the project across a wide range of market participants.
- In order to move to T+1, industry participants must align and agree to shorten the settlement cycle by implementing the necessary operational and business changes, and regulators must be engaged, DTCC said.
- Based on extensive industry engagement conducted by DTCC throughout 2020, early indications suggest market participants favour the move to T+1, especially during times of high volatility and stressed markets.

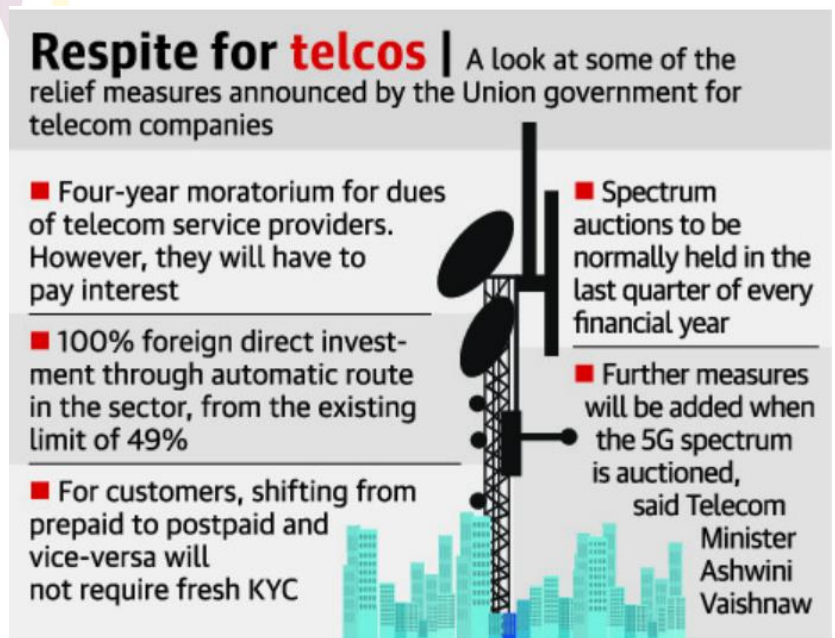
Govt. offers four-year moratorium AGR on dues

(Source: [The Hindu](https://www.thehindu.com))

Context: *The Cabinet recently approved several measures to extend a lifeline to the cash-strapped telecom sector, including a redefinition of the much-litigated concept of adjusted gross revenue (AGR) to exclude non-telecom revenue and a four-year moratorium on players' dues to the government.*

Details:

- Telecom Minister Ashwini Vaishnaw said the government was keen on ensuring that there were more players in the sector and consumers retained choices when asked about the fears of a duopoly emerging with just two major telecom players — Bharti Airtel and Reliance Jio.
- In all, Mr. Vaishnaw announced nine structural reforms and five procedural reforms for the sector, including a fixed calendar for spectrum auctions with an extended tenure of 30 years for future spectrum allocations, and a mechanism to surrender and share spectrum.
- Foreign direct investment (FDI) in the sector has also been allowed up to 100% under the automatic route, from the existing limit of 49%.
- Together, these measures would pave the way for largescale investments, including for 5G technology deployment, and generate more jobs, he said.
- Experts are, however, not sure the package would be enough to keep their troubled joint venture Vodafone Idea Limited (VIL) afloat as the moratorium on AGR dues, spectrum dues and interest payments would only provide temporary relief with these





deferred dues to be payable eventually with interest.

- The tariff regime still needs a reboot for players to sustain operations, they said, echoing Bharti Airtel top brass.
- The earlier definition of AGR, backed by the Telecom Department and upheld by the Supreme Court in 2019, had made telcos liable to pay ₹1.6 lakh crore.
- Last September, the top court granted players 10 years to pay up, starting April 2021. The change in definition that will reduce the burden on telcos, applies only prospectively, so past dues remain payable.
- Interest on those dues will now be compounded annually instead of monthly and the Minister said interest would be charged at a 'reasonable' rate of MCLR plus 2%. MCLR refers to the lowest lending rate banks are permitted to offer.
- Rating agency ICRA assessed that the moratorium on AGR dues provides an annual cash flow breather of around ₹14,000 crore for the industry while the moratorium on spectrum dues gives another ₹32,000 crore of annual cash flow relief as a whole.

The Bill to scrap NEET in Tamil Nadu

(Source: [Indian Express](#))

Context: *The Tamil Nadu Assembly passed a Bill to dispense with the National Entrance cum Eligibility Test (NEET) and allow admission to medical courses based on Class 12 marks to "ensure social justice".*

The provisions of Permanent Exemption Bill for NEET in Tamil Nadu

- The Permanent Exemption Bill for NEET exempts medical aspirants in Tamil Nadu from taking NEET examination for admission to UG degree courses in Indian medicine, dentistry and homeopathy.
- Instead, it seeks to provide admission to such courses on the basis of marks obtained in the qualifying examination, through "Normalisation methods".
- The aim of the Bill is to ensure social justice, uphold equality and equal opportunity, protect all vulnerable student communities from being discriminated.
- The Bill seeks to bring vulnerable student communities to the "mainstream of medical and dental education and in turn ensure a robust public health care across the state, particularly the rural areas".
- The Bill opposes NEET because it undermined the diverse societal representation in MBBS and higher medical studies, favouring mainly the affordable and affluent sections of the society and thwarting the dreams of underprivileged social groups.
- NEET is not a fair or equitable method of admission since it favoured the rich and elite sections of society, the preamble of the Bill to override NEET said.
- The preamble added that the high-level committee making a detailed study on NEET concluded that if it continued for a few more years, the health care system of Tamil Nadu would be severely affected and there may not be enough doctors for Primary Health Centres or state-run hospitals and that the rural and urban poor may not be able to pursue medical courses.
- Admissions to medical courses are traceable to entry 25 of List III, Schedule VII of the Constitution and therefore the state legislature is competent to regulate the same, the Statement of Objects and Reasons (SoOAR) of the Bill.



Supreme Court judgment on rejecting withdrawal of resolution plan under IBC

(Source: [Indian Express](#))

Context: *The Supreme Court's ruling that an insolvency resolution plan, once approved by the Committee of Creditors (CoC), **cannot be allowed to be withdrawn or modified** comes in the wake of separate appeals filed by three different companies. They had all sought to either withdraw their plans after approval, or sought to modify the same.*

Why did the companies want to withdraw their resolution plan after CoC approval?

- Of the three, the first appeal was moved by Ebix Singapore, which had filed a resolution plan for Educomp.
- The said resolution plan was approved by the CoC in February 2018, but failed to pass the muster of 75 per cent creditors approving the plan.
- However, the plan was later approved and passed after a creditor, who had initially abstained from voting, wrote to the Resolution Professional (RP) that they could not participate in the voting due to a technical error, and that their vote should be considered in affirmative for the plan.
- Before the plan could be approved by the NCLT, some creditors of Educomp moved the NCLT seeking an investigation into the affairs of the company since there were reports of mismanagement and money laundering against the company.
- Based on these reports and other concerns, Ebix too filed a withdrawal application, stating that the approval application had been pending before the NCLT for far too long.
- Similarly, Kundan Care, a resolution applicant for Astonfield had sought to withdraw its plan after reports of Gujarat Urja Vikas Nigam Limited terminating a power purchase agreement (PPA) signed with Astonfield surfaced.
- Though the termination on the PPA was turned down even by the Supreme Court, Kundan Care cited it as a reason for withdrawal.

What does NCLT and NCLAT say on withdrawal on CoC approved resolution plans?

- Though the NCLT had twice rejected the withdrawal application filed by Ebix, it had approved the same the third time, which was subsequently overturned by the National Company Law Appellate Tribunal (NCLAT).
- In its third order, allowing the withdrawal, the NCLT had held that though a resolution plan becomes binding after it is approved, since Ebix was a “unwilling successful resolution applicant”, it would be unable to effectively implement the said resolution plan.
- The NCLAT, however, overturned this order and said that NCLT did not have the jurisdiction to permit withdrawal after the plan had been approved by the CoC. Further, it also said that the financial wisdom of the CoC was final, and that NCLT should not have entered into that area.
- The NCLAT further held that since Section 32A of Insolvency and Bankruptcy Code (IBC) grants full immunity to the resolution applicant from any offences of the corporate debtor, Ebix had no grounds to withdraw.

What did the Supreme Court say on the various withdrawal appeals filed by companies?

- In its judgment, the SC has categorically said that the only process of withdrawal from IBC is by following the procedure detailed in Section 12A, which says that the corporate debtor must get approval of more than 90 per cent of creditors to take the company out of the resolution plan.
- “Enabling withdrawals or modifications of the Resolution Plan at the behest of the successful Resolution Applicant, once it has been submitted to the Adjudicating Authority after due compliance with the procedural requirements and timelines, would create another tier of negotiations which will be wholly unregulated by the statute,” the SC said in the judgment.

Hybodont Shark of the Jurassic Age

(Source: [PIB](#))

Context: *Teeth of the Hybodont Shark from Jurassic Age unearthed in Rajasthan.*

Details:

- In a rare discovery, teeth of new species of hybodont shark of the Jurassic age have been reported for the first time from Jaisalmer by a team of the Geological Survey of India (GSI).
- Hybodont sharks have been reported for the first time from the Jurassic rocks (approximately between 160 and 168 million-years-old) of the Jaisalmer region of Rajasthan.

Hybodonts:

- Hybodonts, an extinct group of sharks, was a dominant group of fishes in both marine and fluvial environments during the Triassic and early Jurassic time.
- However, hybodont sharks started to decline in marine environments from the Middle Jurassic onwards until they formed a relatively minor component of open-marine shark assemblages.
- Hybodonts finally became extinct at the end of the Cretaceous time 65 million years ago.

Significance of the discovery:

- The newly discovered crushing teeth from Jaisalmer represents a new species named by the research team as *Strophodus jaisalmerensis*.
- The genus *Strophodus* has been identified for the first time from the Indian subcontinent and is only the third such record from Asia, the other two being from Japan and Thailand.
- This discovery marks an important milestone in the study of Jurassic vertebrate fossils in the Jaisalmer region of Rajasthan, and it opens a new window for further research in the domain of vertebrate fossils.

Bad Bank

(Source: [The Hindu](#))

Context: *Paving the way for a major clean-up of bad loans in the banking system, the Cabinet cleared a ₹30,600 crore guarantee programme for securities to be issued by the newly incorporated 'bad bank' for taking over and resolving non-performing assets (NPAs) amounting to ₹2 lakh crore.*

Details:

- The Reserve Bank of India is in the process of granting a licence for the National Asset Reconstruction Company Limited (NARCL), following which toxic assets worth ₹90,000 crore that banks have already fully provided for will move to the NARCL, Financial Services Secretary Debashish Panda said.
- Finance Minister Nirmala Sitharaman said the Cabinet's decision, to extend a five-year guarantee for NARCL-issued security receipts to banks, completed the entire cycle of cleaning up India's banking system that began with the recognition of the extent of bad loans in 2015.
- Under the mechanism, the NARCL will acquire assets by making an offer to the lead bank. Private sector asset reconstruction firms (ARCs) may also be allowed to outbid the NARCL.
- Separately, public and private lenders would combine forces to set up an India Debt Resolution Company (IDRC) that would manage these assets and try to raise their value for final resolution.



- Once the NARCL and the IDRC have finally resolved the asset, preferably as a going concern and not through liquidation proceedings, the Minister said the balance 85% held as security receipts would be given to the banks.
- While there are 28 ARCs in the private sector, she said there was a need for government-backed receipts for big ticket resolutions.

What is a bad bank? Why was it needed?

- In every country, commercial banks accept deposits and extend loans.
- The deposits are a bank's "liability" because that is the money it has taken from a common man, and it will have to return that money when the depositor asks for it. Moreover, in the interim, it has to pay the depositor an interest rate on those deposits.
- In contrast, the loans that banks give out are their "assets" because this is where the banks earn interest and this is money that the borrower has to return to the bank.
- The whole business model is premised on the idea that a bank will earn more money from extending loans to borrowers than what it would have to pay back to the depositors.
- Imagine, then, a scenario where a bank finds a huge loan not being repaid because, say, the firm that took the loan has failed in its business and is not in a position to pay back either the interest or the principal amount.
- Every bank can take a few such knocks. But what if such "bad loans" (or the loans that will not be paid back) rise alarmingly? In such a case, the bank could sink.
- Now imagine a scenario where several banks in an economy face high levels of bad loans and all at the same time. That will threaten the stability of the whole economy.
- In normal functioning, as the proportion of bad loans — they are typically calculated as a percentage of the total advances (loans) — rise, two things happen.
 - One, the concerned bank becomes less profitable because it has to use some of its profits from other loans to make up for the loss on the bad loans.
 - Two, it becomes more risk-averse. In other words, its officials hesitate from extending loans to business ventures that may remotely appear risky for the fear of aggravating an already high level of non-performing assets (or NPAs).

CHART 1

SLIPPAGE RATIO, MARCH FISCAL YEAR-ENDS (%)

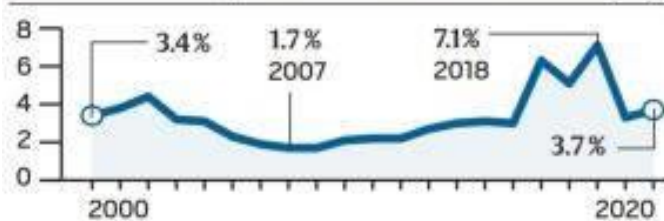
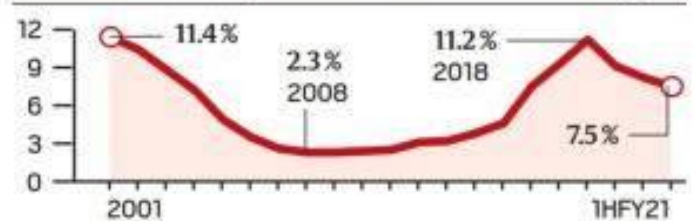


CHART 2

GROSS NPL RATIO, MARCH FISCAL YEAR-ENDS (%)



- In India, as can be seen from Charts 1 and 2, the level of NPAs rose alarmingly since 2016. In a big way, this was a result of the RBI requiring banks to clearly recognise the bad loans on their books. The fact is several banks had witnessed progressive souring of their loans portfolio since the global financial crisis of 2008-09.
- From the taxpayer's perspective, the most worrisome fact was that an overwhelming proportion of NPAs was with the public sector banks, which were owned by the government and hence by the Indian public.
- To keep such PSBs in business, the government was forced to recapitalise them — that is, use taxpayers' money to improve the financial health of PSBs so that they could carry on with the business of lending and funding economic activity.
- But with each passing year, NPAs continued to mount — not helped by the fact that the economy itself started to lose its growth momentum since the start of 2017.



- It was argued by many that the government needs to create a bad bank — that is, an entity where all the bad loans from all the banks can be parked — thus, relieving the commercial banks of their “stressed assets” and allowing them to focus on resuming normal banking operations, especially lending.
- While commercial banks resume lending, the so-called bad bank, or a bank of bad loans, would try to sell these “assets” in the market.

TABLE 1

ASSET MANAGEMENT COMPANIES IN VARIOUS COUNTRIES

AMC	RTC	Danaharta	NAMA	AMCON
Country	US	Malaysia	Ireland	Nigeria
Date established	1989	1998	2009	2010
Ownership	State	State	51% private, 49% state	State
Official mandate	Resolve thrifts	Purchase, manage, and dispose of NPLs; receiver of two failed banks	Purchase, manage and dispose of NPLs	Purchase, manage and dispose of NPLs, recapitalise failed banks, and invest in equities
Life span	7 years	7 years	Anticipated to be 15 years	None specified
Recovery rate (face value)	87% (on assets only)	58%	~33% (end 2014)	N/A

Source: Kotak Institutional Equities Research

How will the NARCL-IDRCL work?

- The NARCL will first purchase bad loans from banks. It will pay 15% of the agreed price in cash and the remaining 85% will be in the form of “Security Receipts”.
- When the assets are sold, with the help of IDRCL, the commercial banks will be paid back the rest.
- If the bad bank is unable to sell the bad loan, or has to sell it at a loss, then the government guarantee will be invoked and the difference between what the commercial bank was supposed to get and what the bad bank was able to raise will be paid from the Rs 30,600 crore that has been provided by the government.

Will a bad bank resolve matters?

- From the perspective of a commercial bank saddled with high NPA levels, it will help. That’s because such a bank will get rid of all its toxic assets, which were eating up its profits, in one quick move.
- When the recovery money is paid back, it will further improve the bank’s position. Meanwhile, it can start lending again.
- From the perspective of the government and the taxpayer, the situation is a little more muddled.
- After all, whether it is recapitalising PSBs laden with bad loans or giving guarantees for security receipts, the money is coming from the taxpayers’ pocket.
- While recapitalisation and such guarantees are often designated as “reforms”, they are band aids at best. The only sustainable solution is to improve the lending operation in PSBs.
- Lastly, the plan of bailing out commercial banks will collapse if the bad bank is unable to sell such impaired assets in the market. If that happens, guess who will have to bail out the bad bank itself? Indeed, the taxpayer.

Rajasthan Tourism Trade (Facilitation and Regulation) Act, 2010

(Source: [Indian Express](http://www.indianexpress.com))



Context: *The Rajasthan Assembly on Monday (September 13) passed a Bill to amend the Rajasthan Tourism Trade (Facilitation and Regulation) Act, 2010. Notably, it makes misbehaviour with tourists, especially by touts, a cognisable offence in Rajasthan with repeated offence being non-bailable.*

What is the new bill about?

- The Rajasthan Tourism Trade (Facilitation and Regulation) (Amendment) Bill, 2021, inserts a new section 27-A in the 2010 Act. The section is defined as “Offences to be cognizable: All the offences punishable under this Act shall be cognizable and bailable,” subject to the certain conditions, wherein the repeat offence will be non-bailable.
- Sub sections 3 and 4 under section 13 of the 2010 Act have been made cognisable and non-bailable. Section 13 deals with “prohibition of certain acts and activities in the tourist places, areas and destinations,” which prohibits touting, begging and hawking articles for sale in or around any tourist places. The sub sections 3 and 4 deal with habitual offenders.

What prompted the bill?

- Touts, known locally as lapka, are a persisting trouble at popular tourist sites in the state.
- They often mislead and force tourists to shop – usually at exorbitant prices in connivance with the establishments – to make money and get a commission. And tourism is a key industry in Rajasthan – it witnessed 5.2 crore domestic and 16 lakh foreign tourists in 2019.
- So, the Bill mainly seeks to prevent touts around the tourist sites, with Minister of state for Tourism Govind Singh Dotasra saying that the “earlier law wasn’t for troubling beggars, and nor is it now,” referring to the 2010 law and the current amendment.
- Since 2018, the police and the Tourism Department have taken action against close to a thousand touts. However, they are let off easily after paying a fine and subsequently return to touting and troubling the tourists.

Shoonya Campaign

(Source: [PIB](#))

Context: *NITI Aayog launched ‘Shoonya’ Campaign.*

Details:

- It is an initiative to promote zero-pollution delivery vehicles by working with consumers and industry.
- The campaign aims to accelerate the adoption of electric vehicles (EVs) in the urban deliveries segment and create consumer awareness about the benefits of zero-pollution delivery.
- Industry stakeholders such as e-commerce companies, fleet aggregators, original equipment manufacturers (OEMs) and logistics companies have been scaling up their efforts towards final-mile delivery electrification.
- As part of the campaign, a corporate branding and certification programme is being launched to recognise and promote industry’s efforts towards transitioning to EVs for final-mile deliveries.
- An online tracking platform will share the campaign’s impact through data such as vehicle kilometres electrified, carbon savings, criteria pollutant savings and other benefits from clean delivery vehicles.

Background:

- Urban freight vehicles account for 10 percent of freight transportation-related CO2 emissions in India, and these emissions are expected to grow by 114 percent by 2030.
- EVs emit no tailpipe emissions, which can contribute immensely to an improved air quality.
- Even when accounting for their manufacture, they emit 15-40 percent less CO2 compared to their internal combustion engine counterparts and have lower operational cost.

Black Tigers

(Source: [Indian Express](#))

Context: *A team of scientists has resolved the genetic mystery of Simlipal's so-called black tigers. Led by Uma Ramakrishnan and her student Vinay Sagar from the National Centre for Biological Sciences (NCBS), Bangalore, the study found that a single genetic mutation in these tigers caused black stripes to broaden or spread into the tawny background.*

Details:

- Tigers have a distinctive dark stripe pattern on a light background of white or golden.
- A rare pattern variant, distinguished by stripes that are broadened and fused together, is also observed in both wild and captive populations.
- This is known as pseudo-melanism, which is different from true melanism, a condition characterised by unusually high deposition of melanin, a dark pigment.
- While truly melanistic tigers are yet to be recorded, pseudo-melanistic ones have been camera-trapped repeatedly, and only, in Simlipal, a 2,750-km tiger reserve in Odisha, since 2007. Launched in 2017, the study was the first attempt to investigate the genetic basis for this unusual phenotype (appearance).
- Through whole-genome data and pedigree-based association analyses from zoo tigers, the study found that pseudo-melanism is linked to a single mutation in Transmembrane Aminopeptidase Q (Taqpep), a gene responsible for similar traits in other cat species.

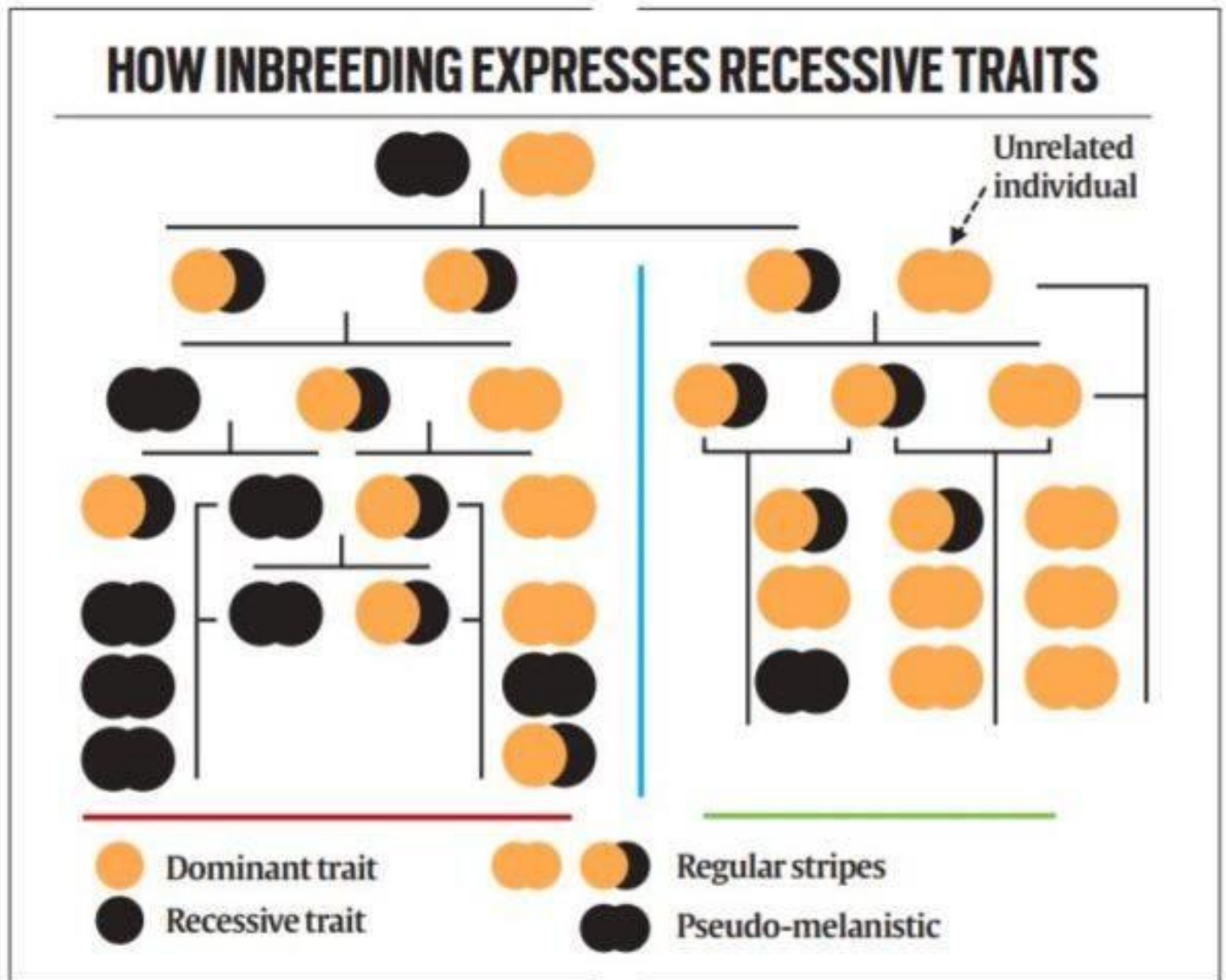
Why black tigers are rare

- Mutants are genetic variations which may occur spontaneously, but not frequently, in nature. Black tiger sightings have been claimed sporadically at least since 1773 when artist James Forbes painted a watercolour of one shot in Kerala.
- Similar claims were made from Myanmar (1913) and China (1950s). In 1993, a confiscated black tiger skin of unknown origin was displayed at Delhi's National Museum of Natural History.
- Unfortunately, individuals of unusual appearance were sought out as a novelty by trophy hunters until recently, and probably few survived long enough to establish bloodlines.
- Besides, pseudo-melanism is caused by a recessive (hidden) gene. A cub gets two copies of each gene from both parents, and a recessive gene can show up only in the absence of the dominant one.
- So, two normal-pattern tigers carrying the recessive pseudo-melanism gene will have to breed together for a one-in-four probability of giving birth to a black cub.





- But recessive genes are rare and it is unlikely that two unrelated tigers will carry the same one and pass it on together to a cub. In an ideal tiger world, where far-ranging individuals are never short of choices for partners, that makes succession of black tigers a rarity.
- Under exceptional circumstances, a black tiger may succeed as part of a very small (say, up to five individuals) founding population that is forced to inbreed in isolation for generations, offering the recessive gene frequent chances to show up. As it turned out, that is what happened at Simlipal.



The Simlipal mutants

- Long before three black tigers were camera-trapped in 2007, Simlipal furnished the first confirmed record of the mutant in 1993 when a tribal youth killed a pseudo-melanistic tigress in self-defence. In 2018, three of Simlipal's eight tigers turned out black.
- Pseudo-melanistic tigers are also present in three zoos in India — Nandankanan (Bhubaneswar), Arignar Anna Zoological Park (Chennai) and Bhagwan Birsa Biological Park (Ranchi) — where they were born in captivity. All of them have ancestral links to one individual from Simlipal.
- The closest breeding tiger population to Simlipal is around 800 km away, a distance much longer than the average home range of Bengal tigers (20-110 km) and their average dispersal distance (78-124 km). Dispersals longer than 500 km have been documented, the study noted, but they are very rare.
- While previous studies detected three major genetic clusters within Indian tigers—Central India, South India, and Northwest India — the present one found that Simlipal tigers are genetically distinct from other central Indian populations and disconnected at a dispersal threshold of 200 km.



- The conclusion: Simlipal's small and isolated tiger population led to inbreeding and the anomalous phenotype characterised by wide, merged stripes. The loss of genetic diversity is evident from the low heterozygosity — chances of inheriting different forms of a particular gene from each parent — in Simlipal (28%) compared to Central India (36%). Consequently, mean relatedness between Simlipal individuals (38%) is higher than those in Central (9%) or South India (13%).

What about natural selection

- Natural selection eliminates the weakest from a gene pool, and the traits of the more successful get passed on.
- Niche modelling, the study said, shows higher frequency of melanistic leopards in darker tropical and subtropical forests than in drier open habitats.
- Likewise, darker coats may confer a selective advantage in both hunting and avoiding hunters in Simlipal's tropical moist deciduous and semi-evergreen closed-canopy forest, with a relatively darker understory.
- While the present study did not have enough data to test the hypothesis, it observed that the disappearance of black tigers from across India, where populations may be larger and hence selection more effective, backed the possible deleterious effects of the mutation.

The takeaway

- Simlipal is not the only example of “intense founding bottlenecks” in endangered tiger populations due to human-induced habitat fragmentation. While the dangers of this isolated, depleting population manifest dramatically in phenotypic evolution, invisible time bombs may be ticking in other island reserves.
- While tigers have recovered in some parts of India, several populations remain small and isolated. We predict that such populations will be subject to genetic drift (chance events), inbreeding and inbreeding depression (decreased survival).
- Overall, such populations have a high chance of extinction. It has been a fascinating journey to understand pseudo-melanism in Simlipal. Hopefully, such studies and the insights they provide will help safeguard the futures of endangered species.
- Fortunately, introduction of fresh genes in an isolated pool, depending on the number of migrants, frequency of influx and population size, can reverse the damage over time.
- While airlifting tigers appears to be the solution of convenience these days, there is no alternative to restoring or maintaining natural connectivity between tiger forests in the long term.
- Meanwhile, India's northwestern tiger population shows higher mean relatedness between individuals (46%) and lower heterozygosity (22%) than even Simlipal (38% and 28%).
- While Ranthambhore has been a genetic island for decades, tiger siblings were handpicked from this inbred population for repopulating Sariska. That is another study in the offing.

INTERNATIONAL

General Sherman: world's largest tree threatened by California wildfires

(Source: [Indian Express](#))

Context: Two wildfires in California – one called the Colony fire and the other called Paradise – are burning through the Sequoia National Park in the Sierra Nevada that is home to some of the largest trees in the world.

Among these trees is the world's largest tree popularly known as General Sherman, which firefighters are now trying to protect from the blaze. While these sequoia trees are fairly fire-resistant, the “extraordinary intensity” of some of the wildfires can be overwhelming for the trees.

How is General Sherman the world's largest tree?

- The General Sherman tree is the world's largest in terms of volume and exists in the Giant Forest sequoia grove of the national park. As per recent estimates, General Sherman is about 2,200 years old.
- It stands at a height of 275 feet (taller than the leaning tower of Pisa) and has a diameter of 36 feet at the base. Even 60 feet above the base, the tree has a diameter of 17.5 feet.



Wildfires at the Sequoia National Park

- The National Park Service (NPS) notes that historically, low to moderate severity fires burn every 6 to 35 years in the giant sequoia groves.
- Further, occasional patches of higher severity fires have opened up gaps in the forest canopy where seedlings can then grow.
- Significantly, the park staff has estimated that less than 10 per cent of the large sequoias have died due to low severity and about 34 per cent have died in moderate severity fire areas.
- According to NPS, the Castle fire that started in August last year in a remote part of the national forest burned about 171,000 acres including more than 9,530 acres of giant sequoia groves on US Forest Service, National Park Service, State of California, Tulare County and private lands.
- Significantly, this burned area represents a third of all sequoia grove area across the Sierra Nevada, the only area in the world where giant sequoias occur naturally, NPS notes.
- Giant sequoia trees have existed in the national park for thousands of years and there are an estimated 2,000 such trees in the park. Firefighters are now trying to save the world's largest tree and some other large trees in the area by wrapping fire-resistant aluminium blankets onto the bases of the trees.

The Taliban's controversial Ministry of Virtue and Vice?

(Source: [Indian Express](#))

Context: *As media reports confirm that the Taliban's newly appointed interim government is set to bring back its controversial Ministry for Propagation of Virtue and Prevention of Vice, there's a renewed concern for human rights in the country, especially those of women.*

What is the Ministry of Virtue and Vice?

- The Washington Post reported that the all-male government had appointed a cleric, Mohamad Khalid, as the head of the restored ministry.
- Historically, the ministry is known for its patrol vans which enforced a harsh interpretation of the Sharia law while roaming the streets of Afghanistan. It banned music, carried out public executions, whipped and publicly humiliated women, and insisted upon a strict dress code.
- However “this time it's not the same” and the government is aiming to be a guiding factor. It will only use force if people indulge in repeated violations, Yousuf said.
- A 1998 media report from a leading UK newspaper states that the ministry had ordered the people of Kabul to black-out the ground floor windows of their houses to prevent passing men from seeing the women within. The ministry had also threatened a house-to-house search for television sets, after outlawing them.
- Other reports outline horrific punishments for women found guilty of different “crimes”. The ministry ensured that girls stayed out of educational institutes, while women accused of adultery were stoned to death. In other cases, if their ankles were showing or if they were unaccompanied by a male guardian, they would be beaten with batons.
- Men weren't allowed to sport thin beards and flying kites or playing cards, too, were outlawed. Homosexuality was punishable by death.
- The ministry enforced strict prayer times, during which all businesses were required to be shut.

Do other countries have a ‘moral police’?

- The Taliban-led Afghanistan isn't the only Islamic country to institute a ministry for moral policing. Saudi Arabia has a Committee for the Promotion of Virtue and the Prevention of Vice (CPVPV), which follows a similar method of policing with patrol vans and emphasis on strict dress codes for women.
- It was only in 2016, that the government of Saudi Arabia curbed CPVPV's powers following much criticism for its strict moral code. It was no longer allowed to pursue, question, request identification from or arrest suspects, according to news agency Reuters. They would instead be required to report the incidents to the authorities concerned who would then enforce the law.
- In effect, the religious police had similar rules as that of the Taliban's. They imposed restrictions on film and music, banned alcohol and mixing of men and women, and forced stores to shut down during prayer times.
- According to a leading Arab daily, the CPVPV was known for raiding beauty salons and burning books, and doling out punishments like shaving heads and whipping. However, 2016 ushered in a much-needed change, making room for the rights of women.
- Iran, too, imposes moral policing through the Gasht-e Ershad or the “guidance patrol”. The patrol is infamous for its harassment of women and enforcing a strict dress code. It can detain women while patrolling the streets if they are found to be wearing the hijab improperly, without a headscarf or talking to unrelated men. They were once fined for painted fingernails, under former President Mahmoud Ahmadinejad. Men aren't allowed to have improper haircuts and barbers giving ‘western haircuts’ are shut down.
- According to the *Times of Israel*, violators can be fined and sentenced to up to two months in prison.

- Former President Hassan Rouhani had a moderate view of the Islamic law and always insisted on reining in the powers of the guidance patrol. However, the statement has been continually met by opposition from the conservatives in the country.
- In 2016, Rouhani had criticised the use of 7,000 undercover morality police in Tehran, who weren't authorised to arrest anyone but could send reports of violations of hijab to the police. In 2018, he had condemned violence by the guidance patrol, after videos of guards beating up women for improper hijab went viral on social media.
- However, the guidance patrol remains out of the President's control and is supervised by Supreme Leader Ayatollah Ali Khamenei. According to *Reuters*, the government has a say in their policies through the Interior Ministry.
- However, the guidance patrol in recent years has faced public opposition as women in Iran have been protesting against the strict modesty code.
- In a pushback, Iran in 2019 launched a text-messaging service in Tehran, allowing neighborhood self-appointed guardians to report violations of public conduct to the police. It also added 2,000 new morality police units, the *Telegraph* reported, in the Gilan province to address defiance to the hijab rule. Cameras were installed on highways to surveil any female drivers removing their hijabs in their cars.

AUKUS

(Source: [The Hindu](#))

Context: *Australia, the U.K. and the U.S. (AUKUS) have announced they're forming a new security alliance that will help equip Australia with nuclear-powered submarines. The alliance will see a reshaping of relations in the Indo-Pacific region and beyond.*

18-month plan

- A central feature of the partnership would involve a trilateral 18-month effort to help Australia acquire nuclear-powered submarines which are quieter, more capable (than their conventional counterparts) and can be deployed for longer periods, needing to surface less frequently.
- The partnership would also involve a new architecture of meetings and engagements between the three countries and also cooperation across emerging technologies (applied AI, quantum technologies and undersea capabilities).
- Australia has felt increasing pressure from an assertive China, like other countries in the region, and has sought to strengthen its partnerships with India, the U.S. and the U.K., including through 'plurilateral' forums. However, as in the case of the Quad, the U.S. officials denied the partnership was a response to China.

United States

- Ten years ago under President Barack Obama, the U.S. began discussing the need to focus more attention on the Indo-Pacific region while pivoting away from conflicts in West Asia.
- Under President Joe Biden, the U.S. has now withdrawn its troops from Afghanistan while finding that tensions with China have only grown.
- In the Pacific, the U.S. and others have been concerned about China's actions in the South China Sea and its antipathy toward Japan, Taiwan and Australia.

Britain

- In announcing the deal, none of the three leaders mentioned China. The U.S. had previously only shared the nuclear propulsion technology with Britain.

- Mr. Biden said it was about ensuring peace and stability in the Indo-Pacific over the long term. Leaving the EU under Brexit has left Britain seeking to reassert its global position. Part of that has been an increased focus — or tilt — towards the Indo-Pacific.
- British Prime Minister Boris Johnson said the new alliance would allow the three nations to sharpen their focus on an increasingly complicated part of the world.

Australia

- Under the arrangement, Australia will build at least eight nuclear-powered submarines using U.S. expertise, while dumping a contract with France for diesel-electric submarines.
- Experts say the nuclear submarines will allow Australia to conduct longer patrols and give the alliance a stronger military presence in the region.
- Australian Prime Minister Scott Morrison said he had called the leaders of Japan and India to explain the new alliance.
- Japan, India, Australia and the U.S. already have a strategic dialogue known as ‘the Quad’. Mr. Biden is set to host fellow Quad leaders at the White House next week.

France

- Australia told France it would end its contract with state majority-owned DCNS to build 12 of the world’s largest conventional submarines. The contract was worth tens of billions of dollars.
- France is furious, demanding explanations from all sides.

New Zealand

- Left out of the new alliance is Australia’s neighbour New Zealand. It has a long-standing nuclear-free policy that includes a ban on nuclear-powered ships entering its ports.
- That stance has sometimes been a sticking point in otherwise close relations with the U.S.
- Prime Minister Jacinda Ardern said New Zealand wasn’t asked to be part of the alliance and wouldn’t have expected an invitation. Still, it leaves New Zealand out of a deal to share a range of information, including artificial intelligence, cyber and underwater defence capabilities.

What makes nuclear submarines so important?

- A nuclear-powered submarine is classified as an “SSN” under the US Navy hull classification system, wherein ‘SS’ is the symbol for submarine, and ‘N’ stands for nuclear. A nuclear-powered submarine that can launch ballistic missiles is called “SSBN”.
- Conventional diesel-engine submarines have batteries that keep and propel — though not very fast — the vessel underwater. The life of these batteries can vary from a few hours to a few days.
- The newer Air-Independent Propulsion (AIP) submarines have additional fuel cells that allow them to stay underwater for longer and move faster than the conventional vessels. However, the fuel cells are used only at strategic times, when the endurance to remain submerged is required.
- Both conventional and AIP subs need to come to the surface to recharge their batteries using the diesel engine. The diesel engine also propels the vessel on the surface. However, the fuel cells of AIP can only be charged at on-land stations, not while at sea.
- The great advantage of an SSN is that its nuclear-powered propulsion gives the submarine a near infinite capacity to stay dived. Since it is propelled by a nuclear-powered engine rather than by batteries, it does not have to emerge on the surface at all, except to replenish supplies for the crew.
- SSNs are also able to move faster underwater than the conventional submarines. Added together, these advantages allow a navy to deploy these submarines quicker and at farther distances.

Does India have nuclear-powered submarines?

- Yes, India is among the six nations that have SSNs. The other five are the US, the UK, Russia, France and China.



- India has had the capacity since it got the Soviet-built K-43 Charlie-class SSN in 1987. Commissioned with the Red Fleet of the USSR in 1967, it was leased to the Indian Navy, and was rechristened INS Chakra. The submarine was decommissioned in 1991.
- In 2012 India got another Russian SSN on a 10-year lease, called INS Chakra 2.
- In the mean time, India was working on building its own SSN, and the first Indian nuclear submarine, the INS Arihant, was commissioned in 2016. A second Arihant-class submarine, INS Arighat, was secretly launched in 2017, and is likely to be commissioned soon.
- After it demonstrated the capability to launch nuclear weapons in 2018, the INS Arihant is now classified as a Strategic Strike Nuclear Submarine or SSBN, which means it is a nuclear-powered ballistic submarine.
- INS Arihant is important because it completes India's nuclear triad, which means that the country has the capacity to launch nuclear missiles from land, aircraft, and submarine.

Quad

(Source: [Indian Express](#))

Context: *The White House announced that US President Joe Biden will be hosting the first in-person meeting of the Quad countries on September 24. Prime Minister Narendra Modi, Australian PM Scott Morrison and Japanese PM Yoshihide Suga will be present at the meeting.*

Formation of the Quad

- Following the Indian Ocean tsunami, India, Japan, Australia, and the US created an informal alliance to collaborate on disaster relief efforts. In 2007, then PM of Japan, Shinzo Abe, formalised the alliance, as the Quadrilateral Security Dialogue or the Quad.
- The Quad was supposed to establish an Asian Arc of Democracy but was hampered by a lack of cohesion amongst its members and accusations that the group was nothing more than an anti-China bloc. The early iteration of the Quad, largely based around maritime security, eventually dissipated.
- In 2017, faced again with the rising threat of China, the four countries revived the Quad, broadening its objectives and creating a mechanism that aimed to slowly establish a rules-based international order. \
- However, despite its lofty ambitions, the Quad is not structured like a typical multilateral organisation and lacks a secretariat and any permanent decision-making body.
- Instead of creating policy along the lines of the European Union or United Nations, the Quad has focused on expanding existing agreements between member countries and highlighting their shared values.
- Additionally, unlike NATO, the Quad does not include provisions for collective defence, instead choosing to conduct joint military exercises as a show of unity and diplomatic cohesion.
- In 2020, the trilateral India-US-Japan Malabar naval exercises expanded to include Australia, marking the first official grouping of the Quad since its resurgence in 2017 and the first joint military exercises among the four countries in over a decade.
- In March 2021, the Quad leaders met virtually and later released a joint statement titled 'The Spirit of the Quad,' which outlined the group's approach and objectives.

Objectives of the Quad

- According to the Spirit of the Quad, the group's primary objectives include maritime security, combating the Covid-19 crisis, especially vis-à-vis vaccine diplomacy, addressing the risks of climate change, creating an ecosystem for investment in the region and boosting technological innovation.
- Quad members have also indicated a willingness to expand the partnership through a so-called Quad Plus that would include South Korea, New Zealand, and Vietnam amongst others.

- In a March 2021 opinion piece in the Washington Post, the leaders of all four member nations described the need for the alliance and its intentions for the future. They wrote:
- However, despite the Quad's seeming commitment to a broad range of issues, its raison d'être is still considered to be the threat of China.
- Each of the Quad's member states have their own reasons to fear the rise of China and curbing Beijing's regional advances is in all of their national interests.

China

- China initially opposed the formation of the Quad and in the 13 years since, Beijing's position has not changed.
- In 2018, the Chinese Foreign Minister referred to the Quad as a "headline-grabbing idea" and after the joint statement was issued earlier this year, the Chinese foreign ministry accused the group of openly inciting discord among regional powers in Asia.
- Beijing sees the existence of the Quad as part of a larger strategy to encircle China and has pressured countries like Bangladesh to avoid cooperating with the group.
- Each of the Quad members are threatened by China's actions in the South China Sea and its attempts to extend its sphere of influence through initiatives such as the One Belt One Road Project.
- The US has long been concerned about the global competition with China and successive US presidents have maintained that China aims to subvert the international rules-based order. Japan and Australia are likewise both concerned about China's expanding presence in the South and East China Seas.
- For Australia in particular, relations with Beijing are at a considerable low after Australia passed foreign interference laws in 2018 which China responded to by restricting trade to Canberra. As the only Quad country to share a land border with China, India is also suitably wary of Beijing but also reluctant to allow tensions to spill over.
- However, although the Quad is perceived to be anti-China, there is no direct reference to China or military security in either the joint statement or the Washington Post op-ed. This in turn has led experts to speculate that the Quad will refrain from addressing the military threat posed by China and instead focus on its economic and technological influence.
- The Quad's decision to establish working groups on vaccine development and critical technologies can then be viewed as an attempt to constrain China but more importantly, to create a democratic, inclusive blueprint that will encourage other states to work with the Quad.

What is the Freedom to Vote Act in the US?

(Source: [Indian Express](#))

Context: *The Democrats introduced a new "Freedom to Vote" act in the Senate. When passed, it will replace the For the People Act and broadly talks about voting rights, voters' access, voting registrations, restrictions, funds for election campaigning, etc.*

What is the Freedom to Vote Act?

- The bill plans to "expand Americans' access to the ballot box and reduce the influence of big money in politics, and for other purposes".
- The bill is being introduced in the place of, earlier introduced, For the People Act, which was also a bill to introduce new voting rights legislation.
- The bill is broadly divided into Voters' Access, Election Integrity, and Civic Participation and Empowerment. It moves to standardise the voting procedures in all the states, even the ones governed by Republicans, and give equal access to the citizens to ballot boxes.

The key changes that the bill would bring in the US elections are:



- Provide automatic voter registration for all citizens using 21st-century technologies and ensure all eligible citizens are registered to vote.
- Make Election Day in the US, which is “the Tuesday next after the first Monday in November”, a legal public holiday.
- Avail and access the internet to register and update voter information and receive e-mail on voting information.
- Permit voter registration application form to serve as an application for an absentee ballot.
- Allow every eligible individual to register for voting on the day that the voting is taking place.
- Provide greater access to voter registration and voting by people with disabilities by ensuring that electronically available absentee registration forms, absentee ballot applications, and absentee ballots and accessible to them, along with websites and assistance.
- Every State to offer a 15-day early voting period, including two weekends, for no less than 10-hours every day during the period.
- Let eligible voters vote without any restrictions imposed on them, even for mail ballots.
- Clear and process ballots on the same day on which they are received along with providing secured drop boxes for voted ballots.
- Preventing election subversion.
- Along with these, the bill also talks about the protection of poll officials, workers and the privacy of citizens. It further talks about the monetary influence in elections and lays out details for transparency of funds during campaigning.

Why wasn't For the People Act passed?

- For the People Act was first introduced in 2019. It was then, and also on March 3, passed by the House of Representatives, although when a Senate version of the bill was presented, it was opposed not just by Republicans but also by Democrat and West Virginia Representative Senator Joe Manchin.
- While For the People Act was also a voting rights bill, the Freedom to Vote Act is broader and inclusive of a lot more things, like preventing election subversion — which was an issue raised by former President Donald Trump in the last elections.
- For a bill to be passed, there have to be 60 votes in favour of legislation for it to overcome a filibuster. So, while Democrats, other than Manchin, had supported the bill, it fell short to reach the 60-vote mark.

Permafrost can cause another pandemic

(Source: [Indian Express](#))

Context: *The latest IPCC report has warned that increasing global warming will result in reductions in Arctic permafrost and the thawing of the ground is expected to release greenhouse gases like methane and carbon dioxide. Defined as ground (soil, rock and any included ice or organic material) that remains at or below zero degree Celsius for at least two consecutive years, permafrost is spread across an area of over 23 million square kilometers, covering about 15% of the land area of the globe.*

What will be the immediate effects as permafrost melts due to increasing global temperatures?

- The first impacts that are very rapid will affect countries where roads or buildings were constructed on permafrost.
- The Russian railways are an example. In the northwest of Canada, now we have a short section of the road where it has been necessary to chill the ground to make the foundation of the road colder than it is, in order to preserve the permafrost.
- And for the 500 metres of road, the expense was \$4 million. Now, this is a large amount of money for a short length of road.



- But the biggest international problem is to do with the potential for organic material, which is now entombed and frozen in the ground. If the ground begins to thaw, this material will become available for microbiota to break down.
- In some environments, the biota will release carbon dioxide, and in others release methane which is about 25 to 30 times more potent as a greenhouse gas than carbon dioxide. So there is a considerable concern.
- The total quantity of carbon that is now buried in the permafrost is estimated at about 1500 billion tonnes and the top three meters of the ground has about 1000 billion tonnes.
- The world currently emits into the atmosphere, approximately 10 billion tonnes of carbon a year. So, if the permafrost thaws and releases even only one per cent of the frozen carbon in any one year, it can nullify anything that we do about industrial emissions.

If thawing permafrost can release new bacteria or viruses? Can it cause another pandemic?

- The answer is that permafrost has many secrets. We recently found mammoths in the permafrost in Russia. And some of these mammoth carcasses when they begin to degrade again may reveal bacteria that were frozen thousands of years ago. So there will be surprises. But whether they will be lethal surprises is just not possible to say.
- Let's also remember that when the permafrost was formed thousands of years ago, there weren't many humans who lived in that region which was necessarily very cold.
- And as you know, the number of diseases that you can find in India is much greater than the number of diseases you find in Greenland. The environment now is so much more suitable than during the Ice Age for not just human life, but also the evolution or development of viruses and bacteria.

North Korea's first 'strategic' cruise missile test

(Source: [Indian Express](#))

Context: *Following the test, Joseph Dempsey, research associate at the International Institute for Strategic Studies wrote on Twitter that the DPRK “technically already had cruise missiles – albeit a shorter range anti-ship system – the Kumsong-3 (KN-SS-N-2 Stormpetrel) based on the Soviet Kh-35.*

What are cruise missiles?

- According to a *Popular Science* report from 2013, cruise missiles “are fast-moving, guided bombs that soar at a very low trajectory, parallel to the ground. They are distinct from regular (non-cruise) missiles primarily because they go really far” and all such missiles have an internal guidance system.
- These missiles differ from ballistic missiles in that they are “designed to travel within the earth's atmosphere and aerodynamically maneuver for most of their flight time.
- Most cruise missiles use a small, solid- propellant rocket booster, which allows them to gain enough altitude and speed for the onboard sustainer engine to take over.”
- Some analysts say these types of missiles are also slightly difficult to detect and in this case, it is still not clear where the DPRK has managed to attach a nuclear warhead on them.

What about UN sanctions?

- These cruise missiles don't come under UNSC sanctions that were placed on the DPRK in an attempt to curb its nuclear development programme, said Dr Jagannath Panda.
- It is also more indication that despite the enforcement of these sanctions, the country has been consistently developing its nuclear programme, much to the consternation of its neighbours- South Korea, Japan, China- and the US.

New tech based on CRISPR to control growth of mosquitoes

(Source: [Indian Express](#))

Context: *Leveraging advancements in CRISPR-based genetic engineering, researchers have created a system that restrains populations of mosquitoes that infect millions each year with debilitating diseases.*

Details:

- The “precision-guided sterile insect technique” (pgSIT), alters genes linked to male fertility—creating sterile offspring—and female flight in *Aedes aegypti*, the mosquito species responsible for spreading diseases including dengue fever, chikungunya and Zika, the University of California, San Diego said in a press release.
- Details of the pgSIT have been described in Nature Communications.
- The pgSIT uses CRISPR to sterilise male mosquitoes and render female mosquitoes (which spread disease) flightless. The system is self-limiting and is not predicted to persist or spread in the environment, two safety features that should enable acceptance for this technology, the release said.
- The scientists say pgSIT eggs can be shipped to a location threatened by mosquito-borne disease or developed at an on-site facility that could produce the eggs for nearby deployment.
- Once the pgSIT eggs are released in the wild, sterile pgSIT males will emerge and eventually mate with females, driving down the wild population as needed.

What is CRISPR/Cas?

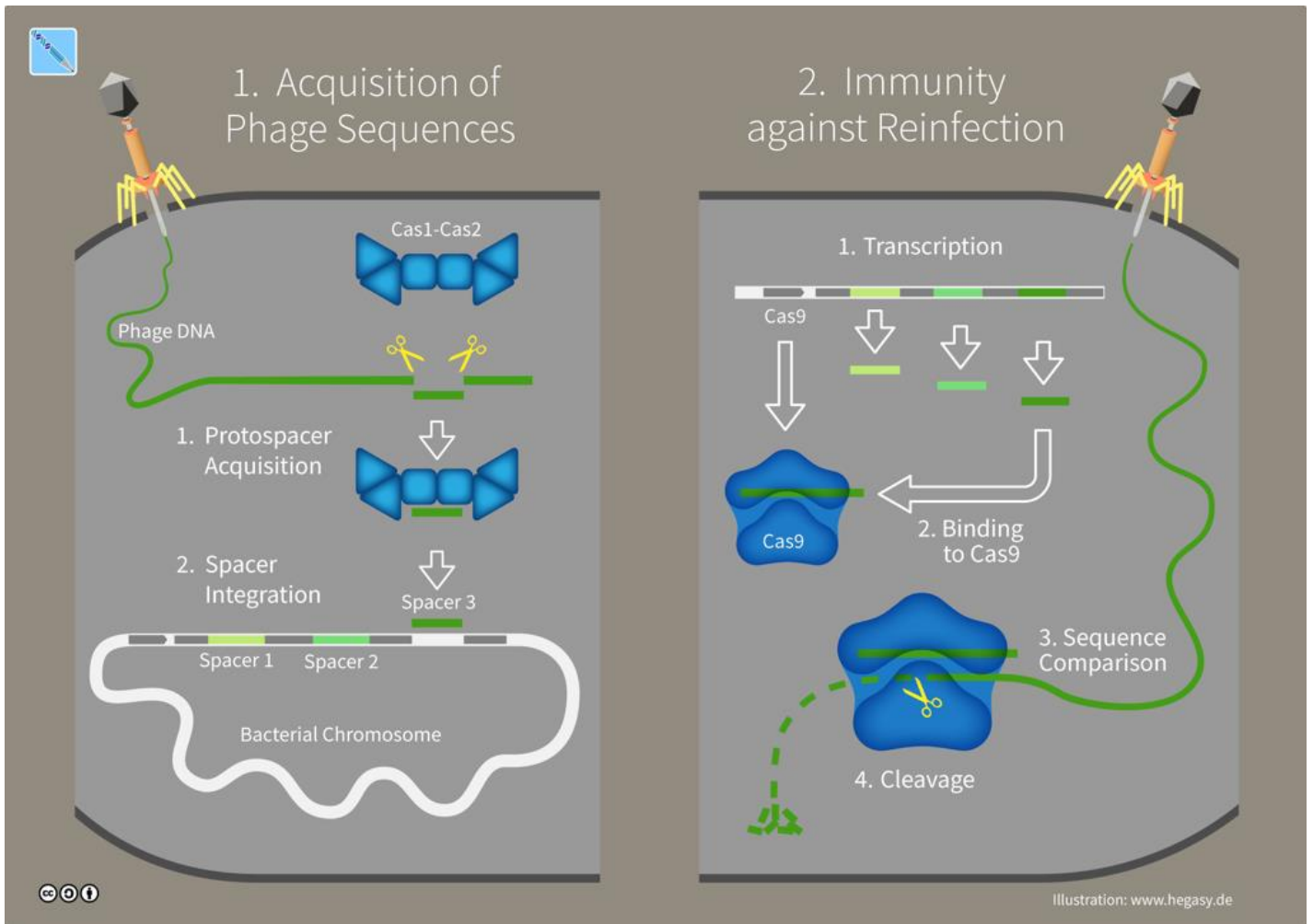
- CRISPR stands for 'Clustered Regularly Interspaced Short Palindromic Repeats', a sequence of chemical letters in DNA. Cas means 'CRISPR-associated protein'.
- There are numerous Cas proteins with various functions: Cas9 is an enzyme that cuts specific sites in DNA, for example.
- CRISPR sequences and Cas proteins work in combination as a CRISPR-Cas system, which is often abbreviated to just CRISPR and pronounced "crisper".

Why is CRISPR important?

- CRISPR-Cas is a natural defence system used by microbes that scientists have turned into tools for molecular biology.
- The most famous application is CRISPR genome editing -- targeting a specific DNA sequence to delete or insert genetic material such as new genes at that precise location.
- One CRISPR definition is 'A segment of DNA containing short repetitions of base sequences, involved in the defence mechanisms of prokaryotic organisms to viruses.'
- The CRISPR acronym is also short for CRISPR gene editing ('A genetic engineering tool that uses a CRISPR sequence of DNA and its associated protein to edit the base pairs of a gene') and so artificial CRISPR-Cas systems are also known simply as 'CRISPR'.

How does CRISPR work?

- In bacteria and archaea -- single-celled microorganisms without a nucleus collectively named prokaryotes -- CRISPR-Cas is an adaptive immune system.
- CRISPR-Cas systems provide antiviral defences that remember and adapt to viruses or 'phages'. After a phage invades a microbe and injects its genome, that virus' genetic material is chopped-up by enzymes in the cell.
- Cas proteins such as Cas1 and Cas2 then paste bits of viral genes into the microbe's DNA, which leaves a genetic memory called a 'spacer' sequence.
- If another virus attacks, the microbe can quickly copy that DNA spacer into an RNA molecule which a protein like Cas9 will use as a guide to recognize and destroy the invader's genome.



Mains

GS II

Hardly the India-China century Deng envisioned

(Source: [The Hindu](#))

Context: Fifteen months after the clashes between Chinese and Indian soldiers in the Galwan Valley, India-China relations are at their lowest ebb in living memory. To be sure, there have always been political tensions even before, both over each country's territorial claims over land controlled by the other, and over such long-term problems as China's "all-weather" alliance with our hostile separated sibling, Pakistan, and our hospitality to the Dalai Lama, who was granted refuge when he fled Tibet in 1959. But neither country had allowed these tensions to overwhelm them: China had declared that the border dispute could be left to "future generations" to resolve, and India had endorsed the "One China" policy, refusing to support Tibetan secessionism while limiting official reverence for the Dalai Lama to his status as a spiritual leader.

The line is no provocation

- India has usually shown no desire to rock the boat. Its actions and statements have usually been designed not to provoke our northern neighbour, but to relegate the border problem to the back burner while enabling trade relations with China (now worth close to \$100 billion) to flourish.
- India made it clear that it was unwilling to join in any United States-led "containment" of China; its traditional obsession with preserving its "strategic autonomy" after two centuries of colonial rule made it wary of the blandishments of the West.
- Ironically, before Galwan, 2020 was supposed to be a landmark year for the two countries' bilateral relations. In October 2019 in Mahabalipuram, at their 18th meeting in nine years, Chinese President Xi Jinping and Indian Prime Minister Narendra Modi had grandly pledged to take relations between their two countries to "greater heights".
- To mark the 70th anniversary of formal diplomatic relations between the two countries, they announced they would conduct 70 joint activities, including further improving their burgeoning trade, supporting scholarly research into their ancient civilizational links, and even exchanging military delegations, in a grand show of Sino-Indian cooperation.

There is much connect

- This wasn't just fluff. The two countries had indeed developed multiple avenues of engagement.
- From negligible levels till 1991, trade with China had grown to become one of India's largest trading relationships. Prime Minister Modi, an early enthusiast, had lifted residual restrictions on bilateral Chinese investment in strategic sectors of the Indian economy (notably ports, airports, power generation and telecoms technology), so that by 2020, Chinese investment (current and planned) stood at about \$26 billion with infrastructure projects accounting for about half the total.
- India engages with China diplomatically in the BRICS (an association of Brazil, Russia, India, China, and South Africa), as well as conducting annual summits of RIC (Russia-India-China).
- India is an enthusiastic partner in the Chinese-led Asian Infrastructure Investment Bank and the New Development Bank (NDB), formerly referred to as the BRICS Development Bank.
- But it has become increasingly apparent that the policy of side-stepping contentious issues and encouraging bilateral economic relations has played into Chinese hands. The People's Liberation Army



has used the seemingly benign situation to repeatedly undertake “minor” military incursions, inflict small-scale military setbacks on India, take a few square kilometres of territory along the Line of Actual Control (LAC) for local tactical purposes, and then declare peace. Mutual disengagements are duly announced, both sides claim the crisis is over, but China establishes and fortifies its new deployment.

- These mini-crises always end with the Chinese in a better position on the ground than before. Each incident establishes a new “normal” on the LAC.

The Chinese strategy

- In the Galwan clash, the Chinese troops seem to have been engaged in a tactical move to advance their positions along areas of the LAC that it covets, in order to threaten Indian positions and interdict patrols. After the recent incursions, the Chinese now reportedly control over 900 square kilometres of area in Ladakh along the LAC.
- They are threatening India’s construction of roads, bridges and similar infrastructure on undisputed Indian territory, a belated effort to mirror similar Chinese efforts near the LAC in Tibet. Rather than merely patrolling, they have established a fixed presence in these areas well beyond China’s own ‘Claim Line’, occupied the “Finger Heights” near Pangong Tso Lake, pitched hundreds of tents, constructed concrete structures and built additional kilometres of road along the LAC.
- The objective seems to be to extend Chinese troop presence to the intersection of the Galwan river and the Shyok river, which would make the Galwan Valley off bounds to India. The Chinese have constructed permanent structures in the area of their intrusion and issued statements claiming that sovereignty over the Galwan valley has “always belonged” to China.
- China’s strategy seems to be to consolidate the LAC where it wants it, so that an eventual border settlement — that takes these new realities into account — will be in its favour. That is the longer-term plan: Beijing keeps saying the border should be left to future generations to settle, knowing full well that each passing year increases China’s relative economic, military and geopolitical strength vis-à-vis India, while shifting the LAC in its favour.
- In the meantime, border incidents keep the Indians off balance and demonstrate to the world that India is not capable of challenging China, let alone offering security to other nations.
- Whereas Deng Xiaoping had told then-Indian Prime Minister Rajiv Gandhi in 1988 (picture) that the 21st century would be “India and China’s century”, the current Chinese leadership has no patience for such pabulum. They believe — indeed believe they know — that it is destined to be China’s century alone, and are all too happy to show India its subsidiary place in the pecking order.

India’s options

- India’s tactical options are unenviable: it has reinforced its military assets on the LAC to prevent deeper incursions for now, and hopes to press the Chinese to restore the status quo ante through either diplomatic or military means.
- Chinese and Indian officials are currently engaged in diplomatic and military-to-military dialogue to ease tensions, but de-escalation has been stalled for months, with China behaving as if their disengagement is already complete.
- India has responded with largely symbolic acts of economic retaliation, banning Chinese apps in India on grounds of data security.
- It is likely that Chinese companies will be barred from various lucrative opportunities in the vast Indian market, as two of them, Huawei and ZTE, have been from the ongoing trials to be picked to build India’s 5G telecoms infrastructure.
- India has also reimposed tighter limits on Chinese investment in projects such as railways, motorways, public-sector construction projects, and telecoms, a reversal of the openness to China that the Modi administration had initially shown.

The economic angle

- Yet, India is far too dependent on China for other vital imports — such as pharmaceuticals, and even the active ingredients to make them, automotive parts and microchips, all needed by Indian manufacturers

— that many in New Delhi fear it would be shooting itself in the foot if it acted too strongly against China.

- Today, India's dependence on China for its non-consumption economy remains high; what is more, imports from China have become indispensable for India's exports to the rest of the world.
- Various manufacturing inputs, industrial equipment and components, and even some technological know-how come from China; eliminating them could have a seriously negative effect on India's economic growth at a time when, thanks mainly to the COVID-19 crisis, our GDP is estimated to have shrunk dramatically.
- And there are limits to the effectiveness of any Indian retaliation: trade with China may seem substantial from an Indian perspective, but it only represents 3% of China's exports. Drastically reducing it would not be enough to deter Beijing or cause it to change its behaviour.
- This range of considerations seems to leave only two strategic options for New Delhi: reconciling itself to playing second fiddle to an assertive China in the region, or seeking strength and leverage by aligning itself with a broader international coalition against Chinese ambitions.
- Since the first is indigestible for any democracy, is China de facto pushing India into doing something it has always resisted — allying with the West?

In Manipur, a case for asymmetric federalism

(Source: [The Hindu](#))

Context: *As a normative idea and an institutional arrangement which supports the recognition and provision of an expansive 'self-rule' for territorially concentrated minority groups, asymmetric federalism has recently received bad press in India. The dissolution of Article 370 in 2019 which gave Jammu and Kashmir a special constitutional status, and intermittent attempts to dilute and dissolve the omnibus Article 371 which, among others, gives expansive constitutional powers to Nagas over land and resources (Article 371A), and to Manipur's Hill Areas Committee (Article 371C) over tribal identity, culture, development and local administration, are exemplars.*

Details:

- Driven by the argument that giving distinctive constitutional status to territorially concentrated minorities fosters centrifugal tendencies which over time inhibit national/State integration, development, and peace, antagonists of asymmetric federalism increasingly rallied around the majoritarian idea of a monolith, homogenous nation.
- On close scrutiny, however, this argument is neither novel nor new. Charles Tarlton, the American political scientist who developed the idea of asymmetric federalism in the mid-1960s, was mindful about its destabilising potential, if not properly harnessed.
- In fact, the unsuccessful experience of east European communist states to 'hold together' in the 1990s spawned deep suspicion about asymmetric federalism.

An integrationist approach

- Indeed, the argument that asymmetric federalism fosters subversive institutions, political instability and breakup of States had also informed the minds of some of the founding fathers of the nation, when they participated in India's Constituent Assembly debates.
- For some, the question of envisioning distinctive rights and asymmetric constitutional provisions is considered inconsequential given that India has become a 'homogenous Hindu nation' after Partition.
- Such a majoritarian standpoint sits uneasy with the idea of 'autonomous' district councils proposed by the Gopinath Bordoloi Committee, a sub-committee of the Constituent Assembly which sought to



accommodate the distinctive identity, culture and way of life of tribal groups in the Northeast by envisioning 'self-rule'.

- While members like Jaipal Singh and B.R. Ambedkar recognised tribal distinctiveness and underscored the need for separate institutional accommodation, Kuladhar Chaliha, a prominent member from Assam, for example, broached an integrationist approach when he openly advocated assimilation of tribal groups.
- This approach is also informed by a deep suspicion over the ability of tribal groups to self-govern and institute a semblance of 'law and order' given — to wit Chaliha — their practice of "summary justice".
- Chaliha reinforced his integrationist push by contending that tribal "self-rule" would leverage "tribalstan" or "communistan" and would be inimical to India's territorial integrity and security.
- This integrationist approach has been conveniently invoked to delegitimise continuing demand for constitutional asymmetry in Jammu, Kashmir, Ladakh and in various other places in Northeast India.
- This integrationist approach resonates powerfully in two recent attempts by Manipur's government to (i) stall the introduction and passage of the Manipur (Hill Areas) Autonomous District Council (Amendment) Bill, 2021, and (ii) induct nine Assembly members from the valley areas into the Hill Areas Committee.
- While the Manipur government's standpoint that the Bill is a "sensitive" matter requiring legal vetting by the Department of Law and Advocate General of the State is plausible and can hardly be contested, the Speaker's order of September 1 to induct nine Assembly members from the valley areas is seen by Lorho S. Pfoze, the lone MP representing Outer Manipur constituency, as a "malicious" and "direct assault" on the Hill Areas Committee and the constitutional protection accorded to the Hill Areas of Manipur under Article 371C.
- Clearly, in his overenthusiastic drive to cave in to the growing pressure from powerful valley-based civil society organisations (CSOs), which actively mobilised to ramp up majoritarian support for dissolution of long-standing constitutional asymmetry enjoyed by the hill people, the Speaker was too clever by half in applying his mind as it amounts to transgression of a domain exclusively reserved for the President of India under the Manipur Legislative Assembly (Hill Areas Committee) Order, 1972.
- The Speaker dragged his feet until he was compelled to rescind the order on September 8 after Chief Minister Biren Singh was greeted with black flags and widespread call for boycott of his pet political project, 'Go to the hills', by various tribal CSOs during his tour to Churachandpur.
- Interestingly, this project is increasingly seen by these CSOs as a camouflage of the majoritarian state's attempt to transgress and snatch away tribal lands by stealth through legal manipulation and sacralisation projects.
- The recent attempts to declare areas around Chivu in the Indo-Myanmar border as a protected site and sacralise it by replacing one of the three controversial monoliths with that of Thangjing (a Meitei goddess), invoke the Forest Reserve Act, sacralise Koubru hills as a lai-pham (deity-place) and encourage ching-kaba (hill-climbing) to effectuate this are clear pointers.

A double-edged sword

- Although the timing chosen by the Hill Areas Committee to recommend, introduce and pass the Bill is questionable, it marks a calculated move to use this as a double-edged sword to simultaneously set apace electoral agenda for the upcoming Assembly elections in early 2022 and reclaim its agency to fortify state-level constitutional asymmetry.
- The attempt to increase membership of the six district councils to 31 members each and secure more powers to the councils by giving more developmental mandate are welcome.
- Yet, the reservation of one-fourth of the seats to socio-economically backward communities may complicate delimitation of constituencies. Earmarking merely three nominated members for unrepresented tribes/women is also simply not enough.
- If history is any guide, the task of reclaiming the Hill Areas Committee's agency is not going to be easy as its 20-odd members often leverage tribe/party loyalty over commitment to protect constitutional asymmetry and common tribals' cause.



- How the Hill Areas Committee and various tribal groups strategically navigate their politics to offset the majoritarian impulse to manipulate the legal and political process to dilute/dissolve extant constitutional asymmetry remains to be seen.
- A recent revelation by a tribal MLA in the Assembly that the hill areas attracted barely ₹419 crore (1.91%) out of the ₹21,900 crore budgetary expenditure of Manipur from 2017-18 to 2020-21 has unmasked Mr. Singh's sincerity to 'Go to the hills'.
- The lack of sincere commitment to promote tribal development, identity and culture that Article 371C seeks to bridge could not have come out starker.
- Recognising and institutionally accommodating tribal distinctiveness not just as a matter of political convenience, but as a valuable and enduring good will be key to promote the State's integrity, stability and peace in the long run.

Why is Nipah's return in Kerala a cause for concern?

(Source: [The Hindu](#))

Context: Kerala has reported a fatality from a case of infection by the Nipah virus in the northern district of Kozhikode. In May-June 2018, the district had reported 18 confirmed cases and 17 laboratory-confirmed deaths. This time, of the 274 people identified as being among the primary contacts of the 12-year-old boy who died, 68 have tested negative. Close to 15,000 people who live within a three-kilometre radius of the boy's family, too, are being surveyed for symptoms.

Have outbreaks been frequent?

- The Nipah virus is classified as an 'emerging zoonotic disease', meaning that it is caused by germs that spread between animals and people. It was first recognised in a large outbreak of 276 cases in Malaysia and Singapore from September 1998 to 1999.
- Prior to the Kerala outbreak of 2018, there have been several outbreaks in Bangladesh with spillovers into India, particularly in 2001 and 2007 at Siliguri and Nadia in West Bengal. During the outbreak in Siliguri, 33 health workers and hospital visitors became ill after exposure to patients hospitalised with the virus.
- At least 50 people died (there were 71 cases) in the outbreaks in these two districts. In the 2018 outbreak in Kerala, four from the family of the first person confirmed with the infection succumbed to the disease.

Where does the virus originate?

- The Nipah virus (NiV) is classified as a "highly pathogenic paramyxovirus", and handling it requires the highest grade of facilities called BS-4.
- The natural reservoir for the virus is large fruit bats of the Pteropus genus. From here the virus may pass on to pigs which may be infected after eating fruits that are bitten on by infected bats. It's also possible for the virus to have jumped to humans from bats without pigs being involved, as in previous outbreaks in Bangladesh, via direct contact or through fruits contaminated by bats.
- Kerala has several fruit plantations that host several species of bats. While investigations are on to determine if there are infected bats in the districts, so far no evidence has emerged. In 2018 too, the animal source of the virus wasn't established.
- The virus takes 6-21 days to incubate and manifest as disease. Unlike in the case of the coronavirus which is airborne and can spread across great distances, Nipah does not transmit efficiently.
- Contact with body fluids and an infected person's respiratory droplets are the most common ways to catch an infection which explains why those who share a house or hospital facilities harbouring the infected patients are at the greatest risk.

What are the symptoms and how is it diagnosed?

- Fever, delirium, severe weakness, headache, respiratory distress, cough, vomiting, muscle pain, convulsion and diarrhoea are the main symptoms. Inflammation of the brain (encephalitis) or respiratory diseases are common too, hence the 40%-75% fatality rate.
- Because of the lethality of the virus, very few Indian laboratories like the Pune-based National Institute of Virology are equipped to isolate the virus using cell culture methods.
- However, the virus's presence in blood or saliva samples can be determined — like coronavirus tests — in commercial antibody tests that detect the presence of antibodies in the serum. Tests like RT-PCR, undertaken by commercial laboratories, can also be used to detect the virus.

What is the treatment protocol?

- Currently, there is no known treatment or vaccine for either people or animals. Ribavirin, an antiviral, may have a role in reducing mortality among patients with encephalitis caused by the Nipah virus disease, according to a fact-sheet by the National Centre for Disease Control.
- The thrust of treatment relies on managing symptoms. There are, however, immunotherapeutic treatments (monoclonal antibody therapies) that are under development and evaluation. One such monoclonal antibody, m102.4, has completed Phase 1 clinical trials, and has been used on a compassionate use basis.
- In addition, the antiviral treatment Remdesivir has been effective in non-human primates when given as post-exposure prophylaxis, according to the U.S. Centers for Disease Control and Prevention.
- There are no approved vaccines but recent studies have shown that a Covishield-like vaccine fully protected a small group of primates (Green African monkeys). Another vaccine candidate has been in preliminary human trials, with the results expected later this year.

Behind the great Indian Internet shutdown

(Source: [The Hindu](https://www.thehindu.com))

Context: *On January 10, 2020, the Supreme Court of India held that access to information via the Internet is a fundamental right under the Indian Constitution. This was in the case of Anuradha Bhasin vs Union of India, where the top court also ruled that any restriction on Internet access by the Government must be temporary, limited in scope, lawful, necessary and proportionate. The Court reiterated that the Government's orders restricting Internet access are subject to review by Courts. The expectation was that this decision would limit the instances of Internet suspension to only those exceptional situations where there is a public emergency or a threat to public safety — the legislatively mandated prerequisites for restricting Internet access. Unfortunately, these promises have remained unfulfilled. The year following the decision, India saw more instances of Internet shutdown than the year preceding it. India's Internet restrictions also accounted for more than 70% of the total loss to the global economy in 2020, and India remains infamous as the Internet shutdown capital of the world.*

Recent restrictions

- As we write this, the Government of the Union Territory of Jammu and Kashmir (J&K) has restricted access to mobile data in the Valley of Kashmir.
- A few days ago, all Internet services had been shut down. These restrictions have been issued in the wake of the death of hardline separatist leader Syed Ali Shah Geelani. Similar restrictions have been ordered by the government of Haryana in five different districts following farmers' protests that were organised there.
- While in these instances, the governments have published the orders restricting access, such publication remains an exception and not the rule despite the decision in Anuradha Bhasin (the Haryana orders are on social media but have not been uploaded on government websites).



- According to an Internet shutdown tracker maintained by the Software Freedom Law Centre, in July and August, the government of J&K suspended Internet services on five separate occasions — in the districts of Baramulla, Pulwama and Shopian.
- The suspension orders for these instances have still not been uploaded on the government's websites. Even in May 2021, the government of J&K suspended Internet services on three occasions in these districts.
- In these instances, the orders were only published sometime in June 2021 after a significant delay. Although the J&K government is the most irreverent about Internet restriction, they are not the only culprits. Compliance with Anuradha Bhasin remains low in other parts of India as well.

Erodes trust

- The importance of the publication of Internet suspension orders cannot be understated. Those aggrieved with the restriction cannot approach a court of law to question an order's legality in the absence of the order.
- At best, if they do, the court may direct the Government to produce the order, but this will allow the Government to delay production of the order until after the restriction has subsided. This enables the Government to get away with illegal restrictions.
- This non-publication of orders also undermines public confidence in the Government. The Internet is a necessity in this day and age, and restrictions without publicly disclosed reasons create a trust deficit.
- There is also a deficit because the Union Government has also not done enough to give statutory recognition to the directions in Anuradha Bhasin. In 2020, it amended the Telecom Suspension Rules, 2017 to limit Internet suspension orders to a maximum of 15 days.
- However, the amendment did not include an obligation on the Government to publish orders nor did it include the Supreme Court's direction to undertake periodic review of these orders.

Lack of awareness

- As a result, the governmental non-compliance with the law is difficult to comprehend. One has to study the decision of the Supreme Court as opposed to simply looking at the rules to understand the obligations on the Government.
- The experience with Section 66A of the Information Technology Act has shown that if Supreme Court decisions are not statutorily recognised, the officials enforce the law incorrectly simply because of a lack of awareness.
- As an example, the State of Meghalaya in reply to an RTI application stated that it was not even aware of the judgment in Anuradha Bhasin even though eight months had passed since the Supreme Court's pronouncement.

Wide-ranging impact

- However, Internet suspension also remains a problem independent of non-compliance with the directions of the Supreme Court. In 2020, the Indian economy suffered losses to the tune of \$2.8 billion due to 129 separate instances of Internet suspension, which affected 10.3 million individuals.
- The Internet is a source of information, entertainment, health care, education, livelihood and a platform for the members of Indian society to interact with each other and the world at large.
- The harm — economic, psychological, social, and journalistic — caused by such suspensions outweighs any speculative benefits.
- Internet suspensions ought to be imposed in times of emergency and not to stifle the democratic exercise of the right to protest. In those times, the Internet is a necessity to seek help.
- Moreover, it is also a tool to verify rumours, and enables individuals and the Government to disseminate the truth.
- On September 2, the government of J&K restricted access to any form of communication on the ground that the 'provocative material on social media' could misguide the general public and result in a law and order situation.



- A similar reason was stated to justify the Internet suspension in Karnal, Haryana. However, the Government will do well to recognise that offline rumours can also ‘misguide the public’, but the individuals will not have access to the Internet to determine the veracity of those rumours independently.
- Internet restrictions are often justified on the ground that they are limited to mobile data services. These contentions also miss the point. According to a 2019 Telecom Regulatory Authority of India (TRAI) report on Indian Telecom Services Performance Indicators, mobile device users (dongle and phone) constituted 97.02% of total Internet users. Only 3% of users have access to broadband Internet.
- These numbers are not likely to have changed significantly since then, since broadband Internet continues to be expensive. It follows from this that Internet restrictions also tend to adversely affect those from lower socio-economic backgrounds more.
- Considering these issues, it is not surprising that the Supreme Court, in Anuradha Bhasin, permitted the Government to restrict Internet access only in limited circumstances.
- Parliament has also allowed these restrictions only in a public emergency or when there is a threat to public safety. Yet, to much dismay, Internet restrictions are much more common than desirable and cannot be challenged because of a lack of transparency.
- More faithful compliance with the Supreme Court guidelines on the part of the executive government is needed to rid ourselves of the tag of the “internet shutdown capital” of the world and fulfil Digital India’s potential.

A selective nuclear policy

(Source: [The Hindu](#))

Context: *The resumption of North Korea’s largest fissile material production reactor, after operations were ceased in December 2018, has sparked speculation about its real and symbolic significance. The International Atomic Energy Agency (IAEA) has underlined that the restart of activity in Yongbyon constitutes a violation of UN Security Council resolutions.*

Details:

- This is the same reactor that the North Korean leader Kim Jong-un, in a bilateral summit in 2019 with then U.S. President Donald Trump, offered to fully dismantle in exchange for securing complete relief from international economic sanctions, but to little avail.
- The ageing five-megawatt reactor at the Yongbyon complex has been central to the North Korean reprocessing of spent fuel rods to generate plutonium, besides the production of highly enriched uranium for the development of atomic bombs.
- But observers also point to the diversification of the country’s nuclear weapons and missile programmes to covert locations over time. Hence, they are cautious not to exaggerate the importance of the recent reopening.

Confusion over motives

- Indeed, the opaque nature of Pyongyang’s nuclear programme partly accounts for the current confusion over the motives behind the restart of the reactor.
- In June 2008, in order to buttress its denuclearisation commitment to the U.S. and four other countries, Pyongyang blew up the cooling tower at the Yongbyon complex.
- The move did little to assuage the concerns of critics, either regarding the plutonium stockpile the regime had amassed or its engagement in clandestine nuclear proliferation.
- But it nevertheless led former U.S. President George W. Bush to ease some sanctions against North Korea, which he had in 2002 dubbed part of the “axis of evil”.



- More controversial was Washington's decision to revoke, less than two years after Pyongyang's first nuclear explosion of 2006, the designation of "state sponsor of terrorism". North Korea was placed on the terrorism list after the 1987 bombing of a South Korean airplane.
- A few months after blowing up the cooling tower in 2008, Pyongyang barred IAEA inspectors access to its reprocessing plant in the Yongbyon complex and eventually expelled them the following April. In November 2010 American scientist Siegfried Hecker confirmed accounts that North Korea had rapidly built a uranium enrichment plant at Yongbyon.
- The above sequence of developments was almost a rerun of events nearly a decade earlier. In 1994, Pyongyang barred IAEA access to the Yongbyon complex amid suspicions that the country was generating plutonium from spent fuel.
- The U.S. had initially planned pre-emptive precision strikes on the nuclear sites, but was deterred against such a misadventure by a blueprint for a peace deal brokered by President Jimmy Carter.
- The so-called 1994 Agreed Framework, an executive agreement signed by President Bill Clinton, required Pyongyang to freeze all nuclear activity and allow inspection of its military sites in return for the construction of two light water reactors. The accord broke down in 2002.

Pragmatic path

- The Biden administration has adopted a pragmatic path of declaring its readiness to resume negotiations with Pyongyang without the grandiose distractions of the Trump era that amounted to exerting little diplomatic leverage.
- Meanwhile, Mr. Kim has spurned all such overtures until he can win concrete relief from sanctions, especially those relating to raw materials exports.
- Apart from the punitive impact of such measures on an impoverished people, the protracted stand-off over North Korea reinforces the hollowness of the doctrine of deterrence and begs the question whether proliferation can ever be prevented just because nuclear weapons states want to perpetuate their dominance.
- The UN treaty on complete abolition of atomic arms, whose deliberations were boycotted by all nuclear weapons states, is the morally superior alternative.

GS III

PLI Scheme for textile industry

(Source: [The Hindu](#))

Context: Ten months after it first approved a Production Linked Incentive (PLI) scheme for the textile sector, the Union Cabinet cleared it on September 8, after the Ministry of Textiles incorporated suggestions from the industry. With a total budgeted outlay of ₹10,683 crore, the government has designed the scheme with a view to providing a big fillip to the man-made fibres and technical textiles segments of the industry.

What are the details of the scheme?

- The scheme is aimed at promoting industries that invest in the production of 64 select products. The product lines include 40 in man-made fibre apparel, 14 in man-made fibre fabrics, and 10 technical textile segments/products.
- The investment period is two years, and the incentive will be paid for five years after the first year of post-investment operation.
- The scheme is for two types of investments.
 - The first entails a minimum of ₹300 crore in plant, machinery, equipment and civil works in a unit that must register a minimum turnover of ₹600 crore once it commences operation.
 - The second is for a minimum of ₹100 crore, where the business achieves a minimum turnover of ₹200 crore. Thus, the incentive is based on a combination of investment and turnover.
- While details of the 64 specific products are expected to be announced once the scheme is notified — officials expect it by the end of this month — the government has indicated that the incentive for the higher investment scheme would start at 15% of the turnover for the first year, and 11% in the case of the lower turnover plan, decreasing gradually by 1% each subsequent year over the next four years for both schemes.
- Priority will also be given to investment in aspirational districts, Tier-3, Tier-4 towns, and rural areas.

Why the stress on man-made fibre?

- The scheme focuses on the man-made fibre segment to enable the Indian textile and clothing sector to regain its dominant status in the global textiles trade.
- Currently, Indian production and export of textile and clothing products are largely cotton-based. In 2018-19, while Indian textile and clothing exports amounted to about \$36 billion, less than one-third was man-made fibre-based.
- In contrast, of the total textile and clothing exports by China, it is estimated that almost 80% are man-made fibre-based. Similarly, of the total global fibre manufacturing and consumption, 70% is man-made fibre-related, while in India it is just about 35%.
- Annual textile and clothing exports have remained largely stagnant over the last seven years, and stuck in the range of \$30 billion-\$35 billion. India is ranked sixth in the global trade in this sector. Added to this, in recent years, countries including Bangladesh and Vietnam have gained a sizeable share in the man-made fibre segment of the global textile trade, making it all the more vital for India to provide policy support to ensure the country remains competitive internationally.
- Though the final list of products eligible for the scheme is yet to be notified, it is expected that most of the top globally traded man-made fibre product lines in which India's share is less than 5% will be covered.

How will it impact traditional textiles such as jute?



- The scheme will not impact traditional textile segments such as jute or cotton. It has minimum investment thresholds and select product lines and hence targets a limited number of players. The traditional segments have a large number of industries spread across micro, small and medium enterprises and large-scale operations.
- They will continue to invest and grow in the fields they are strong in.

Will the scheme help lower dependence on imports?

- During 2018-19, the import of man-made fibre garments jumped 39% from the previous year, while the import of the man-made fibre yarn, fabrics, and made-ups rose 16%.
- With the government recently removing the anti-dumping duty on viscose staple fibre and Purified Terephthalic Acid, most man-made fibre is now available in India at internationally competitive prices.
- With an incentive to invest in production too, Indian manufacturing of man-made fibre value-added products is expected to increase and thus bring down imports, especially of man-made fibre apparel and fabrics, from countries such as China and Bangladesh.

What lies ahead?

- The government has said the scheme will help attract ₹19,000 crore of fresh investments and generate 7.5 lakh jobs.
- The expectation is that it will motivate industries to make fresh investments in the select product lines and scale up capacities.
- Global retail brands, which are present in India and sourcing man-made fibre-based apparel from other countries, are likely to start sourcing from India once the garments become available at internationally competitive prices.

E-safety for kids

(Source: [The Hindu](#))

Context: Last week the U.K. government brought into effect the Age Appropriate Design Code or the Children's Code, as an amendment to the Data Protection Act, 2018, operationalising a set of regulations that will make using the digital space safer for children. While the Code is officially in place only in the U.K., tech majors such as TikTok, Instagram and YouTube have tightened safety rules for children, and campaigners hope this will become the norm globally.

What is the Children's Code?

- The Children's Code is a data protection code of practice for online services likely to be accessed by children.
- As 5Rights Foundation, which spearheaded the movement, said, "It has the potential to completely transform the way that companies collect, share and use children's data, requiring them to offer children a high level of privacy protection by default."
- It sets out 15 standards for online services, including in apps, games, toy and devices and even news services. Unless the service provider is able to prove that children do not access the service at all, it is required to consider making changes as per the Code.

What are the threats to children online?

- Research conducted by 5Rights and Revealing Reality pointed out that within 24 hours of a social media profile being created, children were being targeted with graphic content. It established the pathways between the design of digital services and the risks children face online.



- According to 5Rights, “It shows that services such as Facebook, Instagram and TikTok are allowing children, some as young as 13 years old, to be directly targeted within 24 hours of creating an account with a stream of harmful content.
- Despite knowing the children’s age, the companies are enabling unsolicited contact from adult strangers and are recommending damaging content, including material related to eating disorders, extreme diets, self-harm and suicide as well as sexualised imagery and distorted body images.”
- Further, they concluded that even if the services were not conceived with the intent of putting children at risk, they are by no means ‘bugs’ or mistakes in the code that allow such errors to creep up on children, unbeknownst to the service providers.
- “These are not ‘bugs’ but features. Revealing Reality interviewed engineers and designers who explained they design to maximise engagement, activity and followers — the three drivers of revenue, not to keep children safe.”
- U.K.’s Information Commissioner Elizabeth Denham said, “Data sits at the heart of the digital services children use every day. From the moment a young person opens an app, plays a game or loads a website, data begins to be gathered. Who’s using the service? How are they using it? How frequently? Where from? On what device?
- That information may then inform techniques used to persuade young people to spend more time using services, to shape the content they are encouraged to engage with, and to tailor the advertisements they see. For all the benefits the digital economy can offer children, we are not currently creating a safe space for them to learn, explore and play.”

Who does the Code apply to?

- The Code, according to 5Rights, applies to “information society services likely to be accessed by children”. The definition of an ISS is “any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services”.
- This includes apps; programs; search engines; social media platforms; online messaging or internet-based voice telephony services; online marketplaces; content streaming services (like video, music or gaming services); online games; news or educational websites; and any websites offering other goods or services to users on the internet.
- Electronic services for controlling connected toys and other connected devices are also ISS. The code applies to the U.K. based companies and non-U.K. companies that use data of children in the country.
- However, as has been seen with the example set out by some tech giants, it makes sense to make the entire architecture child-friendly, and not region-specific alone.

Will children in India benefit from the Code?

- As Ms. Denham says, “It is rooted in the United Nations Convention on the Rights of the Child that recognises the special safeguards children need in all aspects of their life.”
- John Carr, online safety expert based in the U.K., says on his blog that the UNCRC put in an addition, General Comment 25, which looked at child rights in the context of a digital environment.
- If tech giants universalise their safety architecture, children across the world will benefit from the Code.
- However, child rights activists say it is high time that the Indian government incorporated child safety into its social media agenda.

E-Shram needs some hard work to get going

(Source: [The Hindu](https://www.thehindu.com/news/national/article3648442.e-shram-needs-some-hard-work-to-get-going.html))

Context: On August 26, 2021, the Ministry of Labour and Employment (MOLE) launched the E-Shram, the web portal for creating a National Database of Unorganized Workers (NDUW), which will be seeded with Aadhaar. It seeks to register an estimated 398-400 million unorganised workers and to issue an E-Shram



card. However, it has come into existence more than a decade after the passage of the Unorganised Workers' Social Security Act in 2008; and if we consider inter-State migrant workers, the portal is a little more than four decades late. It has come about even after repeated nudging by the Supreme Court of India. Had the Central and the State governments begun these legally mandated processes on time, much of the distress of lakhs of vulnerable workers would have been avoided. It is the result of state apathy. No government — either the United Progressive Alliance or the National Democratic Alliance — can stake claim for this legally mandated measure. In fact, the political class owe an 'apology' to informal workers.

A long process

- Given the gigantic nature of registering each worker, it will be a long-drawn process. It is natural that in the initial stages, the pace of registrations will be slower; at the time of writing this article, 0.61 million workers have been registered.
- Considering the estimated 380 million workers as the universe of registration — debatable as the novel coronavirus pandemic has pushed lakhs of workers into informality and the estimate also depends on the assumptions used for estimation — 6.33 million workers have to be registered for completion of registration in 60 days, and 4.2 million workers for 90 days. The Government has not mentioned a gestation period to assess its strategy and efficiency.
- Workers stand to gain by registration in the medium to long run. But the instant benefit of accident insurance upto ₹0.2 million to registered workers is surely not an attractive carrot.
- The main point of attraction is the benefits they stand to gain during normal and crisis-ridden periods such as the novel coronavirus pandemic now which the Government needs to disseminate properly.

Data security, other issues

- There is also another issue: why should small employers be incentivised to ask or require their workers to register even though the government reportedly requires them mandatorily to register their workers.
- While the Government can appeal to them, any penal measure will hurt the ease of doing business. The apparent productivity gains arising out of social security assurances to these workers is a moot point.
- One of the vital concerns of e-portals is data security, including its potential abuse especially when it is a mega-sized database. The central government would have to share data with State governments whose data security capacities vary. There are also media reports pointing out the absence of a national architecture relating to data security.
- There are several issues concerning the eligibility of persons to register as well as the definitional issues. By excluding workers covered by EPF and ESI, lakhs of contract and fixed-term contract workers will be excluded from the universe of UW.
- Under the Social Security Code (SSC), hazardous establishments employing even a single worker will have to be covered under the ESI, which means these workers also will be excluded.
- The NDUW excludes millions of workers aged over 59 from its ambit, which constitutes age discrimination. Given the frugal or no social security for them, their exclusion will hurt their welfare.
- As such, SSC is exclusionary as ESC and EPF benefits will be applicable only to those employed in establishments employing 10 or 20 workers, respectively. Thresholds in labour laws segment the labour market. Many workers will not have an Aadhaar-seeded mobile or even a smartphone.
- Aadhaar-seeding is a controversial issue with political overtones, especially in the North-eastern regions. But it is necessary and the Government is right in insisting on it. The extent of definitional and systemic exclusions is vast and there may be other categories of exclusion due to possible procedural deficits.

Complex identities

- The very identity of unorganised workers presents problems thanks to its complexity and ever-changing identities. Many are circular migrant workers and they quickly, even unpredictably, move from one trade to another.
- Many others perform formal and informal work as some during non-office hours may belong to the gig economy, for example as an Uber taxi or a Swiggy employee. They straddle formal and informal sectors.

- The nuances of the unorganised workers' identity are so complex that one wonders whether the mechanical and assumptions-based portal registration will be able to capture the complexities and dynamics involved regarding them.
- Even though MOLE has included gig workers in this process, it is legally unclear whether the gig/platform worker can be classified first as a worker at all (the other three Labour Codes do not include these workers), and second as organised or unorganised workers — the definition of an “unorganised worker” in the Social Security Code (vide. S.2(86)) does not specifically include them, unless they are declared ‘self-employed’ or ‘wage workers’.
- In fact, the NCO family code does not specifically include ‘gig/platform worker’ even though they may be registered under several categories of ‘drivers’ which will hide their unique identity.
- Of course, there is an all-inclusive miscellaneous category that will have to be intelligently used to expand the occupational categories.

Other impediments

- The central government will have to depend on the State governments for this project to be successful.
- The main trouble points arise at the regional level for two primary reasons. It has been reported that in some States such as Maharashtra, the server was down for a few days.
- The incentive for multiple attempts on the part of registering workers will be weak. The helping stakeholders must make suitable interventions in these cases.
- In many States, the social dialogue with the stakeholders especially is rather weak or non-existent. The success of the project depends on the involvement of a variety of stakeholders apart from trade unions, massive and innovative dissemination exercises involving multiple media outlets of various languages, the holding of camps on demand by the stakeholders and on their own by the Government, efficiency of the resolution of grievance redress mechanisms, micro-level operations, etc.
- There is also the concern of corruption as middle-service agencies such as Internet providers might charge exorbitant charges to register and print the E-Shram cards. Therefore, the involvement of surveillance agencies is crucial.
- More importantly, the Government must publish statistics at the national and the regional levels of the registrations to assess the registration system's efficiency.
- E-Shram is a vital system to provide hitherto invisible workers much-needed visibility. It will provide the Labour Market Citizenship Document to them. I would go one step further to argue for triple linkage for efficient and leakage-less delivery of all kinds of benefits and voices to workers/citizens, viz.
- One-Nation-One-Ration Card (ONOR), E-Shram Card (especially bank account seeded) and the Election Commission Card. Last but not least, registrations cannot be a source of exclusion of a person from receiving social assistance and benefits.

Current Affairs Quiz

1) Which of the following is a battle fought between the British Raj and Afghan tribesmen in 1897?

- a. Battle of Chanderi
- b. Battle of Purandar
- c. Battle of Saragarhi
- d. Battle of Haldighati

Answer : c

2) Climate & Clean Energy Agenda 2030 Partnership is a joint initiative by India and-

- a. France
- b. United Arab Emirates
- c. United Kingdom
- d. United States of America

Answer : d

3) Which of the following statements is/are correct with respect to T+1 Trade Settlement Period?

- 1. It reduces the number of outstanding unsettled trades at any instant, and will reduce systemic risk.
- 2. If the stock exchange opts for this it will have to mandatorily continue with it for a minimum 6 months.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

4) Shoonya Campaign is about -

- a. A Roadmap to zero new HIV infections
- b. To promote zero pollution delivery vehicles
- c. To achieve zero malnutrition related deaths in India
- d. Awareness program about India's net zero emission targets

Answer : b

6) Who launched the Reforms in Urban Planning Capacity in India Report?

- a. NITI Aayog
- b. UN- Habitat
- c. Ministry of Housing & Urban Affairs
- d. None of the above

Answer : a

7) Which of the following statements is/are correct with respect to AUKUS Agreement?

- 1. It is a trilateral security partnership between France, the United Kingdom and the United States.
- 2. Under the Agreement the United States will help Australia to deploy nuclear-powered submarines in the Pacific region.
- 3. The deal explicitly mentions that it is a step towards curtailing China, especially in and around the South China Sea.

Select the correct answer code:

- a. 1 and 3 only
- b. 2 only
- c. 1 and 2 only

- d. 1, 2 and 3

Answer : b

It is a new enhanced trilateral security partnership between United States, United Kingdom and Australia. Although the leaders of these three countries did not say so, the deal is seen as a step towards curtailing China, which has made significant aggressive manoeuvres in the Pacific region, especially in and around the South China Sea, where it has expansive territorial claims.

8) Baijayant Panda Committee was constituted for which of the following?

- To suggest measures to safeguard children from online gambling frauds
- To create a skeletal framework on Digital Ecosystem for Agriculture in India
- To review National Cadet Corps in order to make it more relevant in changed times
- To examine the feasibility of extending Production Linked Incentive Scheme to various sectors

Answer : c

9) Consider the following statements about the Guptas:

- The Guptas were the first to build structural temples.
- Dashavatara Temple in Uttar Pradesh is one of the structural temples built during Guptas.

Select the CORRECT answer code:

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer : c

10) Consider the following statements:

- Shankhalipi Script is a term used by scholars to describe ornate spiral characters assumed to be Brahmi derivatives that look like conch shells.
- They are found in inscriptions across north-central India and dated between 4th and 8th centuries.
- Both Shankhalipi and Brahmi are stylised scripts used primarily for names and signatures.

Which of the statement(s) given above is/are correct?

- 1 and 2 only
- 1 and 3 only
- 2 and 3 only
- 1, 2 and 3

Answer : d

11) For filing Public Interest Litigation (PIL), the Supreme Court invokes -

- Appellate jurisdiction
- Writ Jurisdiction
- Original Jurisdiction
- None of the above

Answer : b)

12) Consider the following statements with respect the Hydrogen:

- Hydrogen in its pure form is the most abundant element available on Earth.
- Since Hydrogen has higher energy density than that of diesel, it makes it a rich source of energy.

Select the CORRECT answer code:

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer: b)

Hydrogen is the most abundant element on the planet, but rarely in its pure form which is how we need it.

13) Consider the following statements:

1. Hydrogen is the lightest and first element on the periodic table.
2. Water is the most abundant compound of hydrogen found on earth.
3. Because of its highly combustible property, Hydrogen as a fuel can be used only in internal combustion engines and not in spacecraft propulsion.

Select the CORRECT answer code:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

Answer: a)

Hydrogen fuel is **a zero-emission fuel** burned with oxygen. It **can be used in fuel cells or internal combustion engines**. It is also **used as a fuel for spacecraft propulsion**.

14) Consider the following statements:

1. The Gulf of Mexico is an ocean basin of the Pacific Ocean.
2. The present shape of Gulf of Mexico is a result of plate tectonics.
3. The Gulf Stream, which is a warm ocean current, originates in the Gulf of Mexico.

Select the CORRECT answer code:

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

Answer: c)

The **Gulf of Mexico** is an ocean basin of the **Atlantic Ocean**, largely surrounded by the North American continent.

15) Consider the following statements regarding (TRQ) system.

1. The Tariff rate quota (TRQ) is a mechanism that allows import of a set quantity of specific products.
2. They are used on a wide range of products but most are in the agriculture sector.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: c)

16) RTS is the first vaccine for which of the following?

- a) Bird Flu
- b) Malaria
- c) Coronavirus
- d) None of the above

Answer: b)

17) Sinjar Mountains is located in –

- a) Syria and Turkey
- b) Iraq and Iran
- c) Iraq and Syria
- d) Iraq and Jordan

Answer: c)

18) Strait of Gibraltar connects which of the following?

- a) Adriatic Sea & Ionian Sea
- b) Tasman Sea and South Sea
- c) Atlantic Ocean and Mediterranean Sea
- d) Gulf of Mexico and Caribbean Sea

Answer: c)

19) Consider the following statements with respect to the Guptas:

- 1. The majority of the temples built during Gupta period were rock-cut temples.
- 2. Dashavatara Temple (Deogarh) and Bhitargaon Temple were built during Gupta age.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: b)

The **Guptas built structural temples, distinctly different from the ancient rock-cut temples.**

20) Which of the following statements is/are correct regarding National Monetisation Pipeline (NMP)?

- 1. Under the NMP, the government aims to monetise its brownfield infrastructure assets.
- 2. Among the identified sectors, Roads and Railways constitute the highest component.
- 3. The complete monetisation of road assets would be done through Toll Operate Transfer (ToT) model.

Select the CORRECT answer code:

- a) 1 and 3 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) All of the above

Answer: b)

The potential models of road assets monetisation would be Toll Operate Transfer (ToT) and Infrastructure Investment Trust (InvIT).