CURRENT AFFAIRS WEEKLY

WEEK: 2
MARCH 2022

MAINS

GS-I

- HERITAGE ERASED: HOW THE KASHMIR VALLEY'S ANCIENT MOUND FORMATIONS ARE BEING LEVELLED
- THE LEGACY OF SAVITRIBAI AND JYOTIRAO PHULE

GS-II

- WAR CRIMES AND THE RULES OF WAR
- INCREASING ROLE OF OTT PLATFORMS
- LAUNCH OF E-BILL PROCESSING SYSTEM AS PART OF EASE OF DOING BUSINESS
- HIGH COURT ON ANDHRA PRADESH GOVERNMENT'S PLAN TO DEVELOP 3 CAPITALS
- RULES OF GUARDIANSHIP AND DOCUMENTATION IN INDIA
- SEALED COVER JURISPRUDENCE
- ARTIFICIAL INTELLIGENCE IN JUDICIARY

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- WOMEN & THEIR ROLE IN ECONOMY
- INDIA'S DOMESTIC INVESTORS BEING ALLOWED TO TRADE IN TOP US STOCKS
- RAINFOREST DEGRADATION AND ITS IMPACT

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HISTORY	■ THE PAL-DADHVAV MASSACRE
INTERNATIONAL RELATIONS	■ BANGLADESH INDIA NEPAL TO MOVE MVA PACT
POLITY & GOVERNANCE	■ HOW THE VAN GUJJARS PERCEIVE THE WILDLIFE PROTECTION AMENDMENT ACT, 2021
SCIENCE & TECHNOLOGY	■ ICG LAUNCHES URJA PRABHA ■ INDIA SET TO CARRY OUT PHASE 3 CLINICAL TRIALS FOR VACCINE AGAINST DENGUE ■ PETASCALE SUPERCOMPUTER "PARAM GANGA" ■ IRAN PLACES NOUR-2 IN ORBIT
ECONOMY	■ EQUALISATION LEVY A SOVEREIGN RIGHT, FM
ENVIRONMENT	■ CHILE CREATES NATIONAL PARK TO SAVE GLACIERS

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— Disclaimer —

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

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

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SECTION: A

(MAINS)

CURRENT AFFAIRS

HERITAGE ERASED: HOW THE KASHMIR VALLEY'S ANCIENT MOUND FORMATIONS ARE BEING LEVELLED

CONTEXT:

Kashmir's highly fertile alluvial soil deposits called 'karewas' are being destroyed in the name of development.

About Karewa:

- In the Kashmiri dialect, the term Karewa means "**elevated table land**".
- Firstly, this term was used by **Godwin Austin in 1859** and later on by **Lydekker in 1878** for unconsolidated to semi-consolidated sand clay conglomerate sequence.
- "**Vudr"** is the local name for **Karewas in Kashmiri language**.
- Karewas are the **thick deposits of glacial clay** and other materials **embedded with moraines**.
  - These are unconsolidated **lacustrine deposits**. Lacustrine means "associated to lakes".
- Kashmir valley resides between the **Great Himalayas and the Pir Panjal ranges** of the Kashmir Himalayas.
  - In earlier times, when the upliftment of the Pir Panjal ranges happened, the flow of the river has stopped.
  - As a result, the whole of Kashmir valley became a large lake. Slowly, the glacial deposits have accumulated here in this lake.
  - Thus creating a **large lacustrine plain.**
- Later on, the water drained away and these unconsolidated deposits remained there.
  - These **unconsolidated gravel and mud deposits are known as Karewa formation.**
- However, some beliefs also say that the water accumulation was of Tethys Sea and over time, many earthquakes came.
  - As a result, some fault developed in the **Baramulla range** and the water drained out.
- The depth of **Karewa deposits is about 1400 m** and most of the area lies to the west of the river Jhelum.

Significance:

- The **fertility** of these patches is believed to be the result of their **long history of formation**.
- When formed during the **Pleistocene period** (2.6 million years to 11,700 years ago), the **Pir Panjal range** blocked the natural drainage in the region and formed a lake spanning 5,000 sq km (roughly three times the size of Delhi).
- Karewa, these plateaus are 13,000-18,000 metre-thick deposits of alluvial soil and sediments like sandstone and mudstone.
- This makes them **ideal for cultivation of saffron, almonds, apples and several other cash crops.**
- **Kashmir saffron**, which received a **Geographical Indication (GI) tag in 2020** for its longer and thicker stigmas, deep-red colour, high aroma and bitter flavour, is **grown on these karewas**.

Destruction of Karewas:

- Despite its agricultural and archaeological importance, **karewas are now being excavated to be used in construction.**
- Between 1995 and 2005, massive portions of **karewas in Pulwama, Budgam and Baramulla districts were razed to the ground for clay for the 125-km-long Qazigund-Baramulla rail line.**
- The **Srinagar airport** is built on the **Damodar karewa in Budgam**.
- The most recent violation is in 2021 when the Baramulla deputy commissioner gave consent for the excavation of **karewas around Pattan village and uses the clay for the construction of the Srinagar ring road.**
- Two other karewas—in **Pulwama and Budgam districts**—are also **being excavated for the 58-km-long project.**

See Image on Next Page

Acts violated:

- The **Jammu and Kashmir Land Revenue Act, 1996**, says the topographic shape of a karewa or hill cannot be changed in the valley.
  - But clay mining often razes the highland to the ground and changes the entire topography of the place.

- The residents allege that the project also violates the **Jammu and Kashmir Minor Mineral (Storage, Transportation of Minerals and Prevention of Illegal Mining) Rules, 2016.**
- "The panchayat needs to give consent for minor mineral mining. The order has conveniently bypassed this."

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THE LEGACY OF SAVITRIBAI AND JYOTIRAO PHULE

CONTEXT:

Governor Bhagat Singh Koshyari has recently received flak for his remarks on the social reformist couple Jyotirao and Savitribai Phule.

About Savitribai Phule:

- Savitribai Phule (3 January 1831 – 10 March 1897) was an Indian social reformer, educationalist, and poet from Maharashtra.
- She is regarded as the **first female teacher of India**.
- Savitribai Jyotirao Phule was a **prominent Indian social reformer**, **educationist and poet** who played an instrumental role in women education and empowerment during the nineteenth century.
- Counted among few literate women of those times, Savitribai is credited for founding the **first girl's school in Pune in Bhide Wada** with her husband Jyotirao Phule.

Role in Women Education & Empowerment

- The **first indigenously-run school for girls** in Pune (at that time Poona) was started by Jyotirao and Savitribai in 1848 when the latter was still in her teens.
- In 1863, **Jyotirao and Savitribai also started a care center called 'Balhatya Pratibandhak Griha,' possibly the first ever infanticide prohibition home founded in India.**
  - It was set up so that pregnant Brahmin widows and rape victims can deliver their children in a safe and secure place thus preventing the killing of widows as well as reducing the rate of infanticide.
- In 1874, Jyotirao and Savitribai, who were otherwise issueless, went on to **adopt a child from a Brahmin widow called Kashibai** thus sending a strong message to the progressive people of the society. The adopted son, Yashavantrao, grew up to become a doctor.
- She was also associated with a social reform society called 'Satyashodhak Samaj' founded by Jyotirao on September 24, 1873 in Pune.
  - The objective of the samaj, which included Muslims, Non-Brahman, Brahmans, and government officials as members, was to free women, Shudra, Dalit and other less privileged ones from getting oppressed and exploited.

Her Writing and Valuable Contribution

Savitribai Phule's poems and other writings continue to be an inspiration for many and remain pioneering in the struggle against India's caste system. She has put together some very valuable writing.

- Kavyaphule- Collection of poems, 1854
- Jyotirao's Speeches, Edited by Savitribai Phule, 25 December 1856
- Savitribai's Letters to Jyotirao
- Speeches of Matoshree Savitribai, 1892
- Bavankashi Subodh Ratnakar, 1892

About Jyotirao Govindrao Phule:

- Jyotirao Govindrao Phule (11 April 1827 – 28 November 1890) was an Indian social activist, thinker, anti-caste social reformer and writer from Maharashtra.
- His work extended to many fields, including eradication of untouchability and the caste system and for his efforts in educating women and exploited caste people.
- He and his wife, Savitribai Phule, were pioneers of women's education in India.
- Phule started his **first school for girls in 1848** in Pune at Tatyasaheb Bhide's residence or Bhidewada.
- He, along with his followers, formed **the Satyashodhak Samaj** (Society of Truth Seekers) to attain equal rights for people from exploited castes.
  - People from all religions and castes could become a part of this association which worked for the upliftment of the oppressed classes.
  - Phule is regarded as an important figure in the social reform movement in Maharashtra.
  - He was bestowed with honorific '**Mahatma' title** by Maharashtrian social activist **Vithalrao Krishnaji Vandekar in 1888.**

About Satya Shodhak Samaj:

- In 1873, Jyotiba Phule formed the Satya Shodhak Samaj (Society of Seekers of Truth).

- He undertook a **systematic deconstruction of existing beliefs** and history, only to reconstruct an equality promoting version.
- Jyotirao vehemently **condemned the Vedas, the ancient holy scriptures of the Hindus**.
- He **traced the history of Brahmanism** through several other ancient texts and held the Brahmins responsible for framing the exploitative and inhuman laws in order to maintain their social superiority by suppressing the "shudras" and "atishudras" in the society.
- The purpose of the Satya Shodhak Samaj was to **decontaminate the society from caste discrimination and liberate the oppressed lower-caste people** from the stigmas inflicted by the Brahmins.
- Jyotirao Phule was the **first person to coin the term 'Dalits'** to apply to all people considered lower caste and untouchables by the Brahmins.
- Membership to the Samaj was **open to all irrespective of caste and class**.
- **In 1868, Jyotirao decided to construct a common bathing tank outside his house** to exhibit his embracing attitude towards all human beings and wished to dine with everyone, regardless of their caste.

His famous works:

- Tritiya Ratna (1855)
- Gulamgiri (1873)
- Shetkarayacha Aasud, or Cultivator's Whipcord (1881)
- Satyashodhak Samajokt Mangalashtakasah Sarva Puja-vidhi (1887).

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WAR CRIMES AND THE RULES OF WAR

CONTEXT:

Russian President Vladimir Putin has ordered a "military operation" in some parts of eastern Ukraine on 24th February, 2022.

While announcing about the operation he warned of bitter consequences if they interfered.

Russia thus started the invasion and the crisis escalated with each day passing.

⦿ BACKGROUND (GENESIS OF WAR CRIMES)

- As per United Nations, the concept of war crimes developed particularly at the end of the **19th century** and the beginning of the **20th century.**
- During that time, the **international humanitarian law**, which is also known as the law of armed conflict, was codified.
- **The Hague Conventions** was adopted in 1899 and 1907.
- **The Hague Conventions** prohibited the warring parties of using certain means and methods of warfare.

Geneva Conventions:

- Apart from Hague Conventions, several other related treaties have also been adopted.
- The **Geneva Convention of 1864** and subsequent Geneva Conventions (four 1949 Geneva Conventions and the two 1977 Additional Protocols) focus on the protection of persons not or no longer taking part in hostilities.
- Hague Law and Geneva Law identify several of the violations of its norms, however, all violations are not war crimes.

⦿ ANALYSIS

What are war crimes?

- As per the **Rome Statute of the International Criminal Court**, when it comes to war crimes, the court has jurisdiction when the crime is committed as part of a plan or policy or as part of a large-scale commission of such crimes.
- For the purpose of this statute, 'war crimes' means grave breaches of the Geneva Conventions of 12 August 1949.
- Violation as per the above statute includes:
- wilful killing
- torture or inhuman treatment (including biological experiments)
- wilfully causing great suffering (or serious injury to body or health)
- extensive destruction and appropriation of property
- compelling a prisoner of war or other protected person to serve in the forces
- wilfully depriving a prisoner of war or other protected person of the rights of fair and regular trial
- unlawful deportation or transfer or unlawful confinement, taking of hostages

What about 'grey areas' in the definition?

- As per the **UN Office on Genocide Prevention** and the Responsibility to Protect, war crimes are separated from **genocide** and **crimes against humanity.**
  - Genocide and crimes against humanity can happen in peacetime. It can happen during the unilateral aggression of a military toward a group of unarmed people.
- On the other hand, war crimes are defined as **occurring in a domestic conflict or a war between two states.**
- There is no white and black when it comes to identifying and defining war crimes, a lot of grey is also there because what constitutes a war crime may differ, depending on whether an armed conflict is international or non-international.
- UN states that war crimes contain two main elements –
  - **A contextual element:** "the conduct took place in the context of and was associated with an international/non-international armed conflict".
  - **A mental element:** intent and knowledge both with regards to the individual act and the contextual element.

What are the rules of war?

- There are some principal points of international humanitarian law that makes up the rules of war, which aims to protect people no longer or not taking part in hostilities.
  - The civilians cannot be attacked as the impact of warfare on them should be limited.
  - The detainees must not be tortured or face inhumane treatment.
  - Hospitals and aid workers should not be attacked.
  - Civilians should be given safe passage to flee.
  - Humanitarian organisations should be provided access.
  - There should not be unnecessary or excessive loss and suffering.

Did Russia commit war crimes?

- When the death toll in Ukraine started to increased, voices were raised to probe Russia's actions on whether it has committed war crimes during its invasion of Ukraine.
- Ukrainian President Volodymyr Zelensky had described Russia's missile strikes in civilian areas as war crimes.
- Russia has been accused of using cluster munitions in the bombardment of residential areas in the Ukrainian city of Kharkiv.
- Human rights groups say the weapons are indiscriminate and the Russians' use of cluster munitions in a populated area could be considered a war crime.

Wrapping Up

War crimes investigations and trials often take years to come together, and sometimes fail to secure a conviction. In the case of Ukraine, events have moved at an unprecedented pace. After dozens of governments formally requested action, the ICC launched a war crimes investigation just weeks into the conflict. Still, legal experts said proving in court that a military unit has intentionally targeted civilians, or recklessly bombarded them, is a difficult task

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INCREASING ROLE OF OTT PLATFORMS

CONTEXT:

Public service broadcaster, Prasar Bharati has inked a Memorandum of Understanding (MoU) with YuppTV, an over-the-top (OTT) platform, which will act as gateway for Doordarshan viewers across the globe.

BACKGROUND:

- The content hosting agreement was signed by Shashi Shekhar Vempati, CEO of Prasar Bharati, and Uday Reddy, founder and CEO of YuppTV.
- DD India is now available on the OTT platform of YuppTV in the USA, UK, Europe, Middle East, Singapore, Australia and New Zealand.

About OTT:

- OTT stands for "**over-the-top**".
- It refers to the productized practice of **streaming content to customers directly over the web.**
- An "**over-the-top" media service is any online content provider that offers streaming media as a standalone product**.
- The term is commonly applied to **video-on-demand platforms**, but also refers to audio streaming, messaging services, or internet-based voice calling solutions.
- OTT services **circumvent traditional media distribution channels** such as telecommunications networks or cable television providers.
- As long as you have access to an internet connection — either locally or through a mobile network — you can access the complete service at your leisure.
- OTT services are typically monetized via paid subscriptions, but there are exceptions. For example, some OTT platforms might offer in-app purchases or advertising.
    - At present, several broadcasters such as Star India, Zee Entertainment, Tata Play and Sony Pictures have made their presence on OTT platforms to widen audience engagement on their shows as well as channels.
- **Towards development**: The country's age-old DD India channel tying up with an OTT platform is a sure shot precursor of unfolded developments in the coming times.

About DD India Channel:

- DD India, **Prasar Bharati's international channel, is India's window to the world**.
- The channel, through its various programmes, **offers international viewers India's perspective on all domestic and global developments.**
- Available in more than 190 countries, DD India also acts as a "**bridge between India and the Indian diaspora**" spread across the world.

Significance of the move

- DD India channel will put forth the **country's perspective on various international developments on global platforms.**
- With the new MOU signed, DD India would be available on the **OTT platform of Yupp TV** in the **United States, United Kingdom, UK, Europe, Middle East, Singapore, Australia and New Zealand.**
- The content hosting agreement was signed by Prasar Bharati's chief executive officer and Yupp TV founder.

What is the aim of this move?

- **Expanding reach at global level:** With this move, Prasar Bharati aims to expand the **global reach of DD India channel**, to put forth the country's perspective on various international developments on global platforms and to showcase its culture and values to the world.
- **Increasing viewership:** The move can be speculated owing to the increasing viewership of OTT platforms in India.

IT Rules, 2021

- The Rules aim to empower ordinary users of social media and OTT platforms with a mechanism for redressal and timely resolution of their grievance with the help of a Grievance Redressal Officer (GRO) who should be a resident in India.
- **Safety measures:** Special emphasis has been given on the protection of women and children from sexual offences, fake news and other misuse of the social media.

- **Source identification:** Identification of the "first originator of the information" would be required in case of an offence related to sovereignty and integrity of India.
- **Appointment of Chief Compliance Officer**: A Chief Compliance Officer, a resident of India, also needs to be appointed and that person shall be responsible for ensuring compliance with the Act and Rules.
- **Complaint monitoring:** A monthly compliance report mentioning the details of complaints received and action taken on the complaints would be necessary.
- **Code of Ethics:** The OTT platforms, online news and digital media entities, on the other hand, would need to follow a **Code of Ethics.**
- **Self-classification:** OTT platforms would be called as 'publishers of online curated content' under the new rules.
- They would have to self-classify the content into five categories based on age and use parental locks for age above 13 or higher. They also need to include age verification mechanisms for content classified as 'Adult'.
- **Redressal mechanism:** A three-level grievance redressal mechanism has been mandated. This includes the appointment of a GRO, self-regulatory bodies registered with the Ministry of Information & Broadcasting (MIB) to look after the Code of Ethics and a Charter for the self-regulating bodies formulated by MIB.

What lies ahead?

With the increase in the user base of streaming content, thanks to deeper internet penetration, affordable data and Indian young consumers, the stage is all set for startups to play bigger role in mass media industry.

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LAUNCH OF E-BILL PROCESSING SYSTEM AS PART OF EASE OF DOING BUSINESS

CONTEXT:

Union Finance Minister Nirmala Sitharaman launched the electronic bill (e-Bill) processing system that seeks to bring in broader transparency and expedite the process of payments.

⦿ BACKGROUND:

- The Finance Minister had announced this major e-governance initiative in the **Union Budget 2022-23** presented in Parliament on February 1.
  - The move is a part of **'Ease of Doing Business (EoDB)** and **Digital India eco-system'.**
- The electronic bill processing system was launched at an event organised to mark the 46th **Civil Accounts Day celebration.**

⦿ ANALYSIS

What is the e-Bill processing system?

- The e-Bill processing system aims to enhance transparency, efficiency and faceless-paperless payment system by allowing suppliers and contractors to submit their claims online which will be trackable on a real-time basis.
- In a phased manner, the new system will make the entire process of submission and backend processing of bills completely paperless and transparent.
- The objectives of the system are to provide convenience to all vendors and suppliers of the government to submit their bills and claims at anytime, from anywhere.
- It is seen as a major step forward in realizing the vision of "Digital India" and promoting ease of doing business.
- The system will also eliminate the physical interface between suppliers and government officers, enhance efficiency in the processing of bills/claims and reduce discretion in the processing of bills through the **First-In-First-Out method.**

First In, First Out (FIFO) is an accounting method in which assets purchased or acquired first are disposed of first.

How are Bills from Suppliers and Vendors processed currently?

- The suppliers of various goods and services to the Government have to submit physical, ink signed copies of their bills to the respective ministries/ departments/offices of the Government of India.
- Similarly, government employees also need to submit hard copies of their claims. At the backend too, the processing of bills is done through a mixed system of physical and digital modes.
- The suppliers/vendors or their representatives therefore need to visit the offices to deliver bills. Moreover, they are unable to track the status of the processing of their bills.

How would the current system change the current situation?

- Under the newly launched e-Bill system, vendors/ suppliers can upload their bills online along with supporting documents from the convenience of their homes/offices at any time through digital signature.
- For those not having a digital signature, the facility of e-sign using the Aadhaar has also been provided.
- Hence, the suppliers will no longer be required to visit the offices concerned for this purpose.
- At the backend too, the electronic bill received will be processed by the authorities digitally at every stage and finally, the payments will be credited digitally to the bank account of the vendor.
- The vendor/supplier would be able to track the status of the processing of their bills online.
- The new system will bring a lot of efficiency and transparency in the system and is a big citizen-centric decision of the Government of India.

Where has the government implemented this system first?

- The e-Bill system has been developed by **the Public Financial Management System (PFMS) Division** in the office of the **Controller General of Accounts** in the **Department of Expenditure, Ministry of Finance.**
- These bills will be processed by the first-in-first-out method.

- The system has been initially rolled out in pay and accounting units of nine ministries/departments. The e-bill system will be rolled out in other ministries/departments in a phased manner in 2022-23.
- In addition to promoting ease of doing business and bringing convenience to lakhs of vendors/ suppliers, the e-Bill system will be environment friendly, eliminating the need to submit crores of paper bills annually and will thus save tonnes of papers every year.
- The e-Bill system has an elaborate digital storage facility for the retrieval of documents and a robust audit trail.

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HIGH COURT ON ANDHRA PRADESH GOVERNMENT'S PLAN TO DEVELOP 3 CAPITALS

CONTEXT:

Farmers in Andhra Pradesh' Amravati won a major battle with the Andhra Pradesh High court directing the YS Jagan Mohan Reddy government to develop Amaravati city as the state's capital as promised to the farmers.

What does the judgement state?

- A three-judge division bench led by Chief Justice Prashant Kumar Mishra gave its verdict in response to 63 writ petitions filed on the matter.
- The court directed the state government and the AP Capital Region Development Authority (APCRDA) to develop Amaravati and handover reconstituted plots to the original landowners, as well as complete the pending works such as construction of roads, electricity connection, drainage, water supply, etc.
- It also directed the state to submit a status report in six months.

The Indian Constitution

- **Article 2 and Article 3 of the Constitution of India** confer exclusive and plenary powers upon Parliament to form or establish or completely alter and destroy the identity of the existing states.
- A state legislature, as per **Clause (e) of Article 3 of the Constitution,** cannot even change the name of the state.
- It is within the exclusive domain of Parliament to form any state, set boundaries, and name a state in the Union as defined in **Article 1 of the Constitution.**

Why three capitals for Andhra Pradesh?

- After the bifurcation of the erstwhile state of Andhra Pradesh in 2014, Hyderabad went to Telangana while Andhra Pradesh was left with no capital city.
- The state government, then led by N Chandrababu Naidu, decided to develop Amaravati as the new state capital. Accordingly, a project to develop Amaravati as a Greenfield administrative capital city of the state was launched in 2015.
- However, Naidu's TDP lost the 2019 Assembly election in Andhra Pradesh, and YSRCP came to power.
- After becoming the new Chief Minister of Andhra Pradesh, Jagan Mohan Reddy proposed a plan to have three capitals — Visakhapatnam as the executive capital, Kurnool as the judiciary capital and limiting Amaravati as only the legislative capital.
- The plan was a severe blow to farmers in Amaravati who had given over 35,000 acres for the development of the new capital city.
- Angry with the government, they moved court.
- This verdict was in response to a batch of 63 writ petitions filed in the Andhra Pradesh High Court. There are several other petitions, hearings for which, the court said, will continue.

What are the implications of this judgement?

- AP HC verdict goes beyond upholding farmers rights The AP High Court verdict, however, goes beyond laying down basic instructions for the state government to resume development of Amaravati.
- It makes several important points that not only reveal key motivations behind the Andhra Pradesh chief minister's three-capital plan, but also the general problem with development in India.
- Pulling up the Jagan government, the High Court said that "change in government is not a ground to change the policy". It then said that the "present government is under statutory legal obligation to complete the projects undertaken by the earlier government, unless they are contrary to any statutory or constitutional provisions".
- The court also held that "the Notified Master Plan (for Amravati) cannot be modified suo-motu".
- These remarks are crucial given how development works and policies change with change in government.
- The verdict also recognises the impact that sudden changes in government policies have on citizens.
- It held that the state government and the APCRDA violated the fundamental rights of the petitioners (farmers who parted with their land) when it (the state government) placed the development of the city and the region on hold.

The Court also held that the sudden stoppage of the developmental activities due to an alleged financial crisis or otherwise was impermissible and thereby, the State and APCRDA should be held responsible to the public under the Doctrine of Public Trust for the total amount spent on the development activities till date.

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RULES OF GUARDIANSHIP AND DOCUMENTATION IN INDIA

CONTEXT:

In the recent past, there have been changes to the rules for passport and PAN card that allow an applicant to furnish their mother's name if she is a single parent.

But this continues to be a niggling issue when it comes to school certificates and umpteen other documents that insist on the father's name as the guardian.

A 2019-2020 report by UN Women highlighted that in India, the number of "lone mothers" is rising, with 4.5% (approximately 13 million) of all Indian households run by single mothers.

The Law

- **Section 6 of India's Hindu Minority and Guardianship Act, 1956** provides that the natural guardian of a Hindu minor boy or unmarried girl is the father, and only after him, the mother.
  - It also provides that the guardian of a married minor girl is her husband.

Is it discriminatory in nature?

- **Article 14 of the Constitution of India:** The State shall not deny to any person **equality before the law** or the equal protection of the laws within the territory of India.
- **Article 15(1):** The State shall not discriminate against any citizen on grounds only of religion, race, caste, **sex**, place of birth or any of them.

- **The Muslim Personal Law (Shariat) Application Act, 1937** says that the Shariat or the religious law will apply in case of guardianship according to which the father is the natural guardian, but custody vests with the mother until the son reaches the age of seven and the daughter reaches puberty though the father's right to general supervision and control exists.
  - The concept of Hizanat in Muslim law states that the welfare of the child is above all else.
  - This is the reason why Muslim law gives preference to the mother over father in the matter of custody of children in their tender years.
- The Supreme Court's landmark judgment in **Githa Hariharan v. Reserve Bank of India** in 1999 provides partial relief.
  - In this case, the HMGA was challenged for violating the guarantee of equality of sexes under Article 14 of the Constitution of India and the court held that the term "after" should not be taken to mean "after the lifetime of the father ", but rather "in the absence of the father".
  - But the judgment failed to recognise both parents as equal guardians, subordinating a mother's role to that of the father. Though the judgment sets a precedent for courts, it has not led to an amendment to the HMGA.
- The **Law Commission of India in its 257th report on "Reforms in Guardianship and Custody Laws in India"** in May 2015 recommended that the "superiority of one parent over the other should be removed and that both the mother and the father should be regarded, simultaneously, as the natural guardians of a minor."
- Before this, in its **133 report too**, the Commission had recommended that the HMGA be amended to "constitute both the father and the mother as being natural guardians 'jointly and severally,' having equal rights in respect of a minor and his property."

What are the rights of guardian of person?

- The natural guardian has the following rights in respect of minor children:
  - Right to custody,
  - Right to determine the religion of children,
  - Right to education,
  - Right to control movement, and
  - Right to reasonable chastisement

These rights conferred on the guardians in the interest of the minor children. Therefore of each- of these rights is subject to the welfare of the minor children. Hence, the natural guardians have also the obligation to maintain their minor children.

What is the attitude of Government departments on documentation of minors with single mothers?

- There have been changes to the rules for passport and PAN card that allow an applicant to furnish their mother's name if she is a single parent.

- But this is not followed when it comes to school certificates and many other documents were mention of father's name as the guardian is insisted.
- Last year in September, a PIL in Madras High Court sought that all documents must also require the mother's name to be mentioned along with the father's.

What are the rules for issuing of passport and PAN cards to those with single parents?

- The rules for the issuance of passports were liberalised by **Ministry of External Affairs** in recent years.
- Certain changes were made following the recommendations of a three-member committee comprising of the Ministry of External Affairs and the Ministry of Women and Child Development that examined various concerns pertaining to passports for children after a divorce or in case of adoptions.
- Following this changes, applicants could provide the name of either parent instead of providing details of both the father and mother.
- The new passport application form also does not require the applicant to provide the name of spouse when the person is divorced and is also not required to provide the divorce decree.
- Similarly, in November 2018, the Central Board of Direct Taxes amended Income Tax Rules, 1962, so that the father's name was not mandatory when a mother was a single parent.
- The new PAN application form also seeks the mother's name alongside the father's. Applicants can also choose whether they want their father's name on the PAN card or their mother's name.

What is the way forward?

Various Government departments must proactively amend their rules to ensure that they are in sync with the Githa Hariharan judgment as amending laws can be a challenging exercise. Until that happens individuals will have to continue to flock courts to seek relief.

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SEALED COVER JURISPRUDENCE

CONTEXT:

License of MediaOne a television channel in Kerala was cancelled by the Ministry of Information and Broadcasting on the grounds of national security.

Subsequently, the State High court also dismissed its appeal plea. However, the reasons for invoking national security were not disclosed.

⦿ BACKGROUND

- MediaOne TV, a channel of Madhyamam Broadcasting Limited, is owned by Jamaat-e-Islami Hind, which makes it one of the few Indian news channels whose ownership lies with an Islamic organization.
- MediaOne TV first received its license from the **Ministry of Information and Broadcasting (I&B Ministry)** in 2011, and was launched in 2013.
- In January this year, the I&B Ministry refused to renew the Kerala-based TV channel's transmission license and issued an order asking the company to halt its operations.
- The I&B Ministry claimed that this was because the Ministry of Home Affairs (MHA) had denied security clearance to the channel.
- In its communication to MediaOne TV, the I&B Ministry cited considerations of 'national security' and public order in its refusal to renew the channel's license.
- It is not the first time that the channel has found itself in troubled waters.
- It was earlier barred from transmission in March 2020 for 48 hours in violation of the Cable Television Networks (Regulation) Act, 1998, for its report on riots that took place in Delhi.
- **Asianet, another Malayalam news channel,** had been similarly banned for its coverage of the Delhi riots.

⦿ ANALYSIS

How this particular incident infringes upon several Fundamental Rights?

- It compromises right to **freedom of speech and expression** of the television channel.
- The **rights to association, occupation and business**s are also impacted.
- Moreover, the viewers also have a right to receive ideas and information that gets compromised.
- The most disturbing part of the incident is that state need not even show that its security is threatened.

Understanding the meaning of 'national security'

- National security is the ability of a country's government to protect its citizens, economy, and other institutions.
- Today, some non-military levels of national security include
  - ► economic security
  - ► political security
  - ► energy security
  - ► homeland security
  - ► cybersecurity
  - ► human security
  - ► environmental security
- To ensure national security, governments rely on tactics, including political, economic, and military power, along with diplomacy.

I&B Ministry can regulate the content of which all sectors? and how?

- Originally the Union I&B Ministry had the power to regulate contents of **TV channels, newspapers, magazines, radio and movies in theatres and TV.**
- After the implementation of **Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules**, the regulatory powers of I&B Ministry was extended to internet content also, especially on digital news platforms and Over The Top (OTT) platforms such as Netflix, Amazon Prime etc.
  - ► In January 2021, **Tandav** on Amazon Prime became the first show on an OTT platform to edit out scenes after direct intervention of I&B Ministry.

This was done after complaints that certain scenes hurt religious and caste sentiments were received.

- The Union Ministry of I&B in the case of MediaOne barred its transmission after the security clearance of the media house was withdrawn by the Union Ministry of Home Affairs.
  - According to the guidelines of the new Rules mentioned above- once a channel is granted security clearance by Union Ministry of Home Affairs, it will be valid for 10 years.
  - But it adds that this can be terminated by the Union Home Ministry at any time within the period.
- Reasonable opportunity has to be given to the media organisation before termination of security clearance by the Ministry of Home Affairs.
- The Union I&B Ministry, under the guidelines of the New Rules, can use its emergency powers to block certain YouTube channels and social media accounts based on inputs from intelligence agencies.

- In December 2021 and January 2022, the I&B Ministry issued orders to YouTube, Facebook. Instagram, twitter etc., to ban over 60 channels and social media accounts, based on inputs from intelligence agencies.
- Apurva Chandra, I&B Secretary, had said in January, 2022 that these Pakistan-based channels were banned for their anti-India content.
- These IT rules also allow the I&B Ministry to ban websites based on their content.
- The Union I&B Ministry also consists of the Electronic Media Monitoring Cell which keeps tracks on channels for any violations of the programming and advertising codes mentioned in the Cable TV Network Rules, 1994.

What kind of content is not allowed?

- There are no specific laws on content allowed or prohibited in print and electronic media, radio, films or OTT platforms.

The content on any of these platforms has to follow the free speech rules of the country.

- **Article 19(1) of the Constitution**, while protecting the freedom of speech, also lists certain "reasonable restrictions" on this right.
- Reasonable restrictions under **Article 19 (2) of the Indian Constitution** can be imposed on Freedom of Expression to protect -
  - Sovereignty and integrity of India
  - Security of the State
  - India's friendly relations with foreign states
  - Public order
  - Decency and Morality
- The restrictions under **Article 19 (2)** of the Indian Constitution can also be imposed on Freedom of Expression for –
  - Punishing contempt of court or avoiding it
  - Avoiding the instances of defamation or incitement to an offence or punishing the same.

What earlier Supreme Court judgements have said on the issue?

- It is paramount to ensure that the test of **reasonable restrictions** is satisfied as it is the bedrock of judicial review.
- The Supreme Court adopted the **proportionality test** in the Modern Dental College vs State of Madhya Pradesh (2016) case and reiterated it in the **K.S. Puttaswamy vs Union of India** (2017) case.
- When an action is alleged to have curtailed fundamental rights, the court is bound to examine the legality of the action through the **lens of proportionality**.
- This act of executive to not disclose the reasons of using the national security clause even to the other party concerned (here the broadcaster) is opposed to the **principles of natural justice.**

How the current High court judgement stands in contradiction to previous SC judgements?

- **First,** there **was no examination of the national security plea** based on the well-established proportionality analysis.
- **Second,** as per a three-judge Bench in the **Pegasus case (Manohar Lal Sharma vs Union of India, 2021)** the state does not get a "free pass every time the spectre of 'national security' is raised".

Way Forward

With the MediaOne TV case, the phantom of national security continues to loom over the Court. It remains to be seen if and how the Court will undertake another balancing exercise between Free Speech Rights and national security.

ARTIFICIAL INTELLIGENCE IN JUDICIARY

CONTEXT:

An unstarred question in the Lok Sabha during the first part of the Budget session of Parliament was asked with reference to artificial intelligence and its use in judicial processes to reduce the pendency of cases.

Pendency of Cases in India:

- The High Courts in India have 57.39 lakh cases and the subordinate courts have 1, 08, 36,087 cases pending.

What will be the benefits of integrating AI & ML in Justice delivery?

- **While implementing phase two of the eCourts projects**, under operation since 2015, a need was felt to adopt new, cutting edge technologies of Machine Learning (ML) and Artificial Intelligence (AI) to **increase the efficiency of the justice delivery system.**
- **The Supreme Court of India has constituted an Artificial Intelligence Committee** which has mainly identified application of AI technology in Translation of judicial documents; Legal research assistance and Process automation.
- **ML-based applications in Judiciary:** AI powered tools like **SUPACE** will not only help organise cases, it will also bring references into the judgment at a speed not seen so far.
- AI will present a more **streamlined, cost effective and time bound** means to the fundamental right of access to justice.
- **Tools derived from AI** could help expedite the case-flow management which in turn helps in lowering delays and pendency in courts.
- The **use of software** to analyze thousands of previous cases and create a **'judge analytics'.**
- Over the course of the **COVID-19 pandemic**, the use of technology for **e-filing, and virtual hearings** has seen a dramatic rise which can be solved via this technology.

What are the issues and Challenges associated with AI in Judiciary?

- **The use of ML in India's legal sphere has so far been restricted to automating back-end work**, and is still a very long way from being used as a decision-making tool for the judiciary.
- **Many of the judgments**, particularly in the lower courts, **are yet to be fully digitized.**
- **Going by global trends**, greater adoption of these tools in the Indian legal system is inevitable.
- AI and ML should assist but **do not replace human decision making**.
- The **ethical and responsible use of AI and ML** for the advancement of efficiency enhancement can be increasingly embedded in legal and judicial processes.

What is the way Forward?

- **Automated systems, controversially, were being used to decide bail applications in some parts of the United States, and other countries such as Estonia** have incorporated AI and ML in a major way.
- **But the Indian judicial system is generally "more conservative"**, and a lot more work remained in making India's legal data amenable to ML formats.
- **AI and ML can be tried in tribunals** where there is no need for oral evidence and cross examination.
- **Consumer courts are an area where AI can be helpful**.
  - **But in criminal cases** where oral evidence and cross examination are key processes, we have to rely on regular human intervention.

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WOMEN & THEIR ROLE IN ECONOMY

CONTEXT:

Every year, International Women's Day on 8 March gives us a lot to cheer about—but it gives even more to introspect. Despite gradual gains over the decades, Indian women's economic well-being and financial independence remains a far cry, continually hindered by stubborn structural and societal barriers.

This brief aims to analyse the role of women in economy and also assess the present challenges and way to improve the overall situation.

⊙ BACKGROUND

- To spread the message of gender equality, the United Nations observance of International Women's Day is celebrated on March 8.
- The theme for this year's Women's Day is: "Gender equality today for a sustainable tomorrow".
- 2022 is pivotal for achieving gender equality in the context of climate change, and environment and disaster risk reduction.
- Today, women are the agent of change in several fields. One buzzing idea where women business leaders have scripted great success.
  - As the name suggests, the circular economy lays special emphasis on reusing and recycling products. Recycling leads to optimum use of resources.
  - But executing the idea is easier said than done.
  - Consider this: The world generates 2.01 billion tonnes of solid waste annually, with at least 33% of that — an extremely conservatively estimate — is not managed in an environmentally safe manner.

⊙ ANALYSIS

Contribution of women in economy

- Women in India represent **29 percent** of the labour force, down from **35 percent** in 2004.
- According to the World Bank, Indian women's participation in the formal economy is among the lowest in the world—only parts of the Arab world fare worse.
- **Agriculture:** Even when they comprise almost 40 percent of agricultural labour, they control only 9 percent of land in India.
- **Contribution to GDP:** It is therefore unsurprising that at 17 percent, India has a lower share of women's contribution to the GDP than the global average of 37 percent.
- More than half of the work done by women in India is unpaid, and almost all of it is informal and unprotected.
- Women are not well represented in most sectors, including business leaders.
- Women are also shut out of the formal financial system. Nearly half of India's women do not have a bank or savings accounts for their own use, and 60 percent of women have no valuable assets to their name.
- Women in India also face great physical insecurity. The rate of crimes against women in India stands at 53.9 percent in India.

Women, Business and the Law 2022

- The World Bank's **"Women, Business and the Law 2022" report**, outlines the importance of women's economic empowerment and involvement in business.
- The annual study, which looks into "laws and regulations affecting women's economic opportunity," scores and ranks 190 countries in eight areas: mobility, pay, parenthood, assets, workplace, marriage, entrepreneurship, and pensions.
- According to the 2022 report, "nearly 2.4 billion women globally don't have [the] same economic rights as men."

Positive impacts on Indian Economy of women's economic empowerment

- The economic impact of achieving gender equality in India is estimated to be US$700 billion of added GDP by 2025.
- The IMF estimates that equal participation of women in the workforce will increase India's GDP by 27 percent.
- There are also social benefits to empowering women.
- Women spend 90 percent of their income on their families, and economically empowered women boost demand, have healthier and better-educated children, and raise human development levels.

- It has been reported that profits increase when efforts to empower women in emerging markets are made.

Sustainable Development Goals that can be achieved by economically empowering women:

- **SDG 1:** No poverty
- **SDG 4:** Quality Education
- **SDG 5:** Gender Equality
- **SDG 8:** Decent work and economic growth
- **SDG 10:** Reduced inequality

Initiatives by the Government

- The Government of India's MUDRA scheme to support micro and small enterprises and direct benefit transfers under the Jan Dhan Yojana seeks to empower women.
- Women entrepreneurs account for about 78 percent of the total number of borrowers under MUDRA.

Potential Areas of Focus:

- The private sector and business community will be crucial in helping bridge the gap between skills and jobs and enable access to decent work for women.
- Vocational and technical training, life skills and financial literacy programmes for women to help them develop marketable skills and better decision-making abilities cannot be undertaken in a meaningful way without the involvement of industry.
- Companies can also invest in women entrepreneurs through microfinance, and bring their goods and services into supply chains.
- Enhancing women's access to the internet and ICT can create a merging market of connected women who can be linked to business opportunities.
- The private sector can invest in women's security against violence at home and in public spaces, and take steps to ensure their mobility through inclusive transport.

Activities undertaken by UN India Business Forum to economically empower women?

- UNIBF agreed that increasing women's participation in the workforce would have a direct, positive impact on productivity and profitability.
- A consensus has developed at the UNIBF that gender equality in the workforce is now a business imperative.
- Best practices within the industry are shared in the UNIBF to leverage existing platforms to educate the industry on the benefits of gender equality in the workforce and identify role models to "grow the tribe".
- The UNIBF has agreed on the following next steps:
  - Encourage more CEOs to pledge their support towards gender equality.
  - Identify mentors who can lead other organisations in their sector to adopt gender equal policies
  - Create ways to increase brand/ PR value for organisations that encourage women in their workforce
  - Enable cross pollination of best practices by:
    - Leveraging existing platforms and content
    - Identifying role models
    - Storytelling
    - Sharing success stories and policies

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INDIA'S DOMESTIC INVESTORS BEING ALLOWED TO TRADE IN TOP US STOCKS

CONTEXT:

Indian investors will be able to trade in the stocks of 50 leading US companies through the NSE International Exchange, a subsidiary of NSE.

Trading in US stocks will be facilitated through the NSE IFSC platform in GIFT City, Ahmedabad.

The NSE IFSC US stocks are unsponsored depository receipts issued by the NSE IFSC receipts custodian, namely HDFC Bank IFSC Banking Unit.

What does this mean?

- This means that the domestic investors can purchase US stocks sitting in India through NSE IFSC.
- Right now, the NSE IFSC has announced the trading format of eight US stocks, details about the remaining 42 US stocks will be announced later.
- However, the offering will be in the form of unsponsored depository receipts. For example, one share of Tesla will be equivalent to 100 NSE IFSC receipts.
- The International Financial Services Authority (IFSCA) has already given the approval for the plan.

How will transactions to buy US stocks take place?

- Entire trading, clearing, settlement and holding of US Stocks will be under the regulatory structure of IFSC Authority.
- This initiative is a first-of-its-kind at IFSC where Indian retail investors will be able to transact on the NSE IFSC platform under the Liberalized Remittance Scheme (LRS) limits prescribed by the Reserve Bank of India (RBI).
- Under the LRS framework, the RBI permits the resident individuals to remit up to $2,50,000 per financial year for any permitted current or capital account transaction.
- Investors will be provided with an option to trade in fractional quantity or value when compared to the underlying shares traded in US markets.
- This trading framework will make US stocks affordable to Indian retail investors.
- NSE IFSC Clearing Corporation Limited (NICCL) will offer its robust risk management framework, facilitate clearing and settlement of all trades in depository receipts and provide settlement guarantee in respect to all trades executed on the NSE IFSC platform. Furthermore, all the trades will be covered under the investor protection framework at NSE IFSC.
- Indian investors now mostly invest in US stocks through the mutual fund schemes floated by domestic asset management companies (AMCs). However, these AMCs invest in fund of funds (FoF) floated by US mutual funds.

How will this benefit investors in India?

- The business model offered by NSE IFSC will not only provide an additional investment opportunity to the Indian investors but also make the entire process of investment easy and keep it at a low cost.

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RAINFOREST DEGRADATION AND ITS IMPACT

CONTEXT:

More than 75 per cent of the Amazon rainforest has been likely heading towards a tipping point since the early 2000s.

It may be losing its ability to bounce back from extreme events such as drought or fire, threatening to become a dry savanna-like ecosystem. The researchers used satellite data and statistical tools to arrive at these findings.

ANALYSIS:

What are Rainforests?

- A rainforest is an area of tall, mostly evergreen trees and a high amount of rainfall.
- Rainforests are **Earth's oldest living ecosystems**, with some surviving in their present form for at least 70 million years.
- They are incredibly diverse and complex, home to more than half of the world's plant and animal species—even though they cover **just 6% of Earth's surface**.

Amazon Rainforests

- These are large tropical rainforest occupying the drainage basin of the Amazon River and its tributaries in northern South America and covering an area of 6,000,000 square km.
- Tropical forests are **closed-canopy forests** growing within 28 degrees north or south of the equator.
- They are very wet places, receiving **more than 200 cm rainfall** per year, either seasonally or throughout the year.
- Temperatures are uniformly high - between **20°C and 35°C**.
- The Amazon's rainforest is home to **30 per cent of the world's species**, comprising **40,000 plant** species, **16,000 tree species**, **1,300 birds** and more than **430 species of mammals**.

Rainforest as Climate stabilizer:

- Rainforests help **stabilize** the world's climate by **absorbing carbon dioxide** from the atmosphere.
- Therefore, living rainforests have an important role in **mitigating climate change**.
- But when rainforests are chopped down and burned, the carbon stored in their wood and leaves is released into the atmosphere, **contributing to climate change**.
- Hence, a degraded forest transforms from **Carbon Sink to Carbon Source**.

Rainforests and rainfall:

- Rainforests contribute to rainfall through **transpiration**, which is the process of water movement through a plant and its release into the air via leaves, stems, and flowers.
- Plants release water as a **byproduct of photosynthesis**.
- Water released by plants contribute to **local humidity or moisture in the air**.
- Because a forest consists of a large number of trees, the volume of water released via transpiration can contribute to the **formation of rain clouds**, resulting in rainfall.
- Very large rainforests, like the Amazon, can drive rainfall over very large areas. By one estimate, the **Amazon is responsible for 70% of rainfall in southern Brazil**.

Rainforests and local temperature

- Tropical forests can have a **localized cooling effect** by increasing humidity through transpiration and contributing to wind currents.
- Additionally, **shade from the forest canopy** can result in dramatically cooler temperatures relative to areas exposed to direct sunlight.

Effect of Climate change on Rainforests

Climate Change → Forest degradation → Food Shortages → Changing habitat → Threatened species

Changing climate leads to forest degradation:

- Scientists say that deforestation in the Amazon is pushing this ecosystem to a **tipping point** at which the forest will gradually turn into dry savanna.
- Once sufficiently degraded, the forest will **lose its ability** to generate its own rainfall.

- And after a **series of devastating fires** burned through the Amazon in 2019, this rainforest is inching ever closer to its dreaded tipping point.

Deforestation Leads to food shortages:

- About **1.2 billion** people in the world rely on tropical **rainforests for survival**.
- Unfortunately, **agriculture**, both large- and small-scale farming, is responsible for the majority of tropical deforestation— which is accelerating climate breakdown.
- Studies show that since 1980 a decrease in annual rainfall due to the changing climate has created a steady decline of corn, wheat, soybeans and rice.
- This **jeopardizes the livelihoods of local farmers**, who depend on the crops commonly grown in the rainforest.

Degraded forests and food shortages result in an increased number of threatened species:

- Tropical rainforests are home to nearly 30 million species of plants and animals, which heavily rely on another for survival.
- As plant growth dwindles, these animals become **vulnerable**.
- In 2019, a landmark UN report revealed that nearly **1 million species face extinction** due to human activities and climate change.
- When human activities accelerate climate change, species are going to try to follow those climates that are suitable for them **rather than adapting to new ones**.
- For many species, this requires moving upslope — but at a certain point, there will be nowhere left to go, which is what we call the **escalator to extinction**.

⊙ CONCLUSION:

- In order for the forest to be preserved, the underlying **social, economic, and political reasons** for deforestation must be recognized and addressed.
- Once the issues are brought into the light, the decision can be made about what should be done. If it is decided that rainforests must be saved, then the creation of multi-use reserves that promote sustainable development and **education of local people** would be a good place to start.

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SECTION: B
(PRELIMS)

CURRENT AFFAIRS

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SHACKLETON'S SHIP 'ENDURANCE' FOUND BENEATH ANTARCTIC ICE, 100 YEARS ON

⊙ CONTEXT: **An expedition team locates wreckage of explorer's ship which sank in Weddell Sea in 1915.**

Background Story:

- The Endurance had set sail from **Plymouth, England, in August 1914**, just as Europe was entering the maelstrom of World War I.
- The **Imperial Trans-Antarctic Expedition** was to be led by **Shackleton** and would be the first attempt to cross the Antarctic continent by foot.
- However, shortly after leaving **South Georgia** at the end of 1914, the Endurance was caught in pack ice.
- The **ship sank in 1915, about 3,008 meters deep in the Weddell Sea.**
- **After months spent in makeshift camps** on the ice floes drifting northwards**, Shackleton** and his 27 crew members boarded lifeboats to **reach the uninhabited Elephant Island**.
- Shackleton and five others then made an 800-mile open-boat journey to reach South Georgia.
- Despite being stranded with little food and shelter, **all survived.**

About the expedition:

- **Previous attempts** to locate the 144-foot-long wooden wreck, whose location was logged by its **captain Frank Worsley**, had failed due to the hostile conditions of the ice-covered Weddell Sea under which it lies.
- Recently, an international team of marine archaeologists and scientists located the wreck 3,000 meters under the Weddell Sea.
- The **Endurance22 mission**, organised by the **Falklands Maritime Heritage Trust** and using advanced underwater vehicles called **Sabertooths** fitted with high-definition cameras and scanners, tracked the vessel's remains down.
- The expedition led by British polar explorer **John Shears**, operated from the **South African ice-breaking ship Agulhas II** and also **researching the impact of climate change** found the "Endurance" four miles (six km) from the position recorded by Worsley.

Protection under 1959 Antarctic Treaty:

- The wreck is protected as a **historic site and monument** under the **1959 Antarctic Treaty**.
- As per the guidelines of the Antarctic Treaty which was signed by 12 countries in 1959 and is the closest thing to a constitution for the southernmost continent, Endurance will not be moved or taken apart.
- Instead, she will remain where she is and be studied, mapped and photographed there.

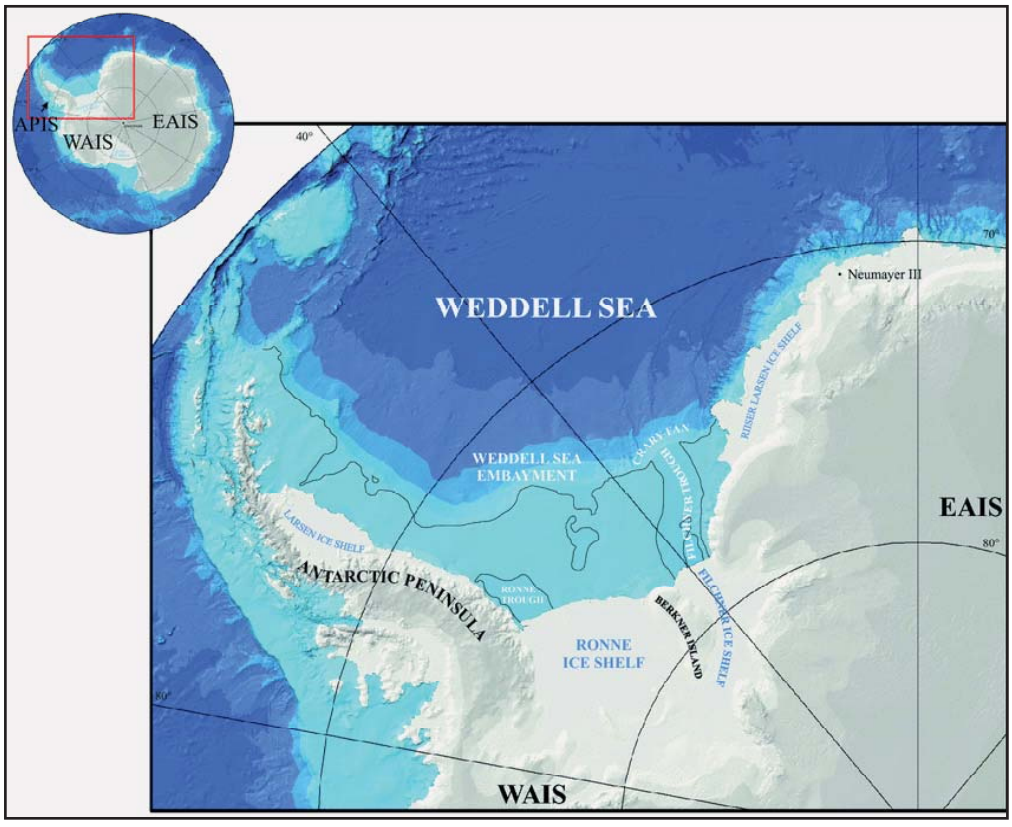
About Antarctic Treaty:

- The Antarctic Treaty was signed in **Washington in 1959 by the 12 countries** whose scientists had been active in and around Antarctica.
- The Antarctic Treaty came into **force in 1961**.

- The total **number of Parties** to the Treaty is now **54**.
- The Treaty covers the area **south of 60°S latitude**.
- Its **objectives** are simple yet unique in international relations. They are:
  - to demilitarize Antarctica, to establish it as a zone free of nuclear tests and the disposal of radioactive waste, and to ensure that it is used for peaceful purposes only
  - to promote international scientific cooperation in Antarctica
  - to set aside disputes over territorial sovereignty
- Some **important provisions of the Treaty**:
  - Antarctica shall be used for peaceful purposes only
  - Freedom of scientific investigation in Antarctica and cooperation toward that end... shall continue
  - Scientific observations and results from Antarctica shall be exchanged and made freely available
- The **three international agreements** are:
  - Convention for the Conservation of Antarctic Seals (1972)
  - Convention on the Conservation of Antarctic Marine Living Resources (1980)
  - Protocol on Environmental Protection to the Antarctic Treaty (1991)

About Weddell Sea:

- The Weddell Sea is part of the Southern Ocean and is enclosed between the **Antarctic Peninsula** on the west, **Cape Norvegia** on the east and **Filchner and Ronne ice shelves** to the south.



- The Weddell Sea is **named in honor of Scottish sailor James Weddell** who, in **1823** discovered the vast body of water.
- Today, **Argentina, Britain and Chile** have **territorial claims** over parts of Weddell Sea. The heavily iced waters of Weddell Sea have temperatures ranging from -0.63°C to -1.8°C with depths greater than 6000m.
- **Six research stations** from Argentina (Belgrano II), United Kingdom (Halley), Sweden (Wasa), Finland (Aboa), South Africa (SANAE IV) and Germany (Neumayer) have been established along Weddell Sea.
- Scientists have regarded the clarity of Weddell Sea to be comparable to that of distilled water.

THE PAL-DADHVAV MASSACRE

⊙ CONTEXT: **The Gujarat government marked 100 years of the Pal-Dadhvav killings, calling it a massacre "bigger than the Jallianwala Bagh".**

About the incident:

- The Pal-Dadhvav massacre took place on **March 7, 1922,** in the Pal-Chitariya and Dadhvaav villages of Sabarkantha district, then part of **Idar state**.
- The day was **Amalki Ekadashi**, which falls just before Holi, a major festival for tribals.
- Villagers from Pal, Dadhvav, and Chitariya had gathered on the **banks of river Heir** as part of the **'Eki movement'**, led by one Motilal Tejawat.
- The movement was **to protest against the land revenue tax (lagaan**) imposed on the peasants by the British and feudal lords.
- The **Mewad Bhil Corps (MBC), a paramilitary force raised by the British** that was on the lookout for Tejawat, heard of this gathering and **reached the spot**.
- British officer **Major H.G. Sutton** from Mewad Bhil Corps ordered to **open fire at the innocent tribals.**

Republic Day tableau

- The Pal-Dadhvav massacre was brought into focus at the Republic Day parade 2022.
- Traditional **'Ger' dance** and music was performed by the tribal artistes of Poshina taluka of Sabarkantha.

About Motilal Tejawat:

- Motilal Tejawat (16 May 1896 – 14 January 1963) was born in Kolyari village, **Udaipur,** Rajasthan.
- The **social reform activities** of Motilal Tejawat spread his popularity among the **Bhils.**
- Along with these he also **started Eki (Unity) movement**.
- The Eki movement aimed at a united opposition to all types of exploitation of Bhils by the States and jagirdars.

BANGLADESH INDIA NEPAL TO MOVE MVA PACT

⊙ CONTEXT: **Recently, India, Bangladesh and Nepal finalised an enabling memorandum of understanding (MoU) for implementing the long-gestating Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement (MVA) that is aimed at boosting regional trade and connectivity.**

About BBIN MVA:

- Bangladesh, Bhutan, India and Nepal (BBIN) had signed the Motor Vehicles Agreement (MVA) in 2015 at Thimphu, Bhutan.
- To provide **seamless people-to-people contact and enhance economic interaction** by facilitating cross border movement of people and goods.
- As per the agreement, member countries would allow vehicles registered in the other countries to enter their territory under certain terms and conditions.
  - **Customs and tariffs will be decided by the respective countries** and these would be finalized at bilateral and trilateral forums.
- **Assistance: Asian Development Bank (ADB)** has been providing technical, advisory, and financial support to the BBIN MVA initiative as part of its assistance to the **South Asia Subregional Economic Cooperation (SASEC) program.**

Bhutan's point of view:

- Bhutan PM has said that the **country's top priority is to remain "carbon-negative**". That's why it would not be possible for them to join the MVA as there are **serious sustainability and environmental concerns.**
- **Bhutan is the only countr**y in the world that is **carbon negative**, which means it produces more oxygen than it consumes.

About the recent meeting:

- The trilateral Memorandum of Understanding (MoU) would be similar to the four-nation pact signed in 2015, but would be effective only for movement of vehicles within the three nations without any obligation for Bhutan.
- They also agreed to work fast on **two separate protocols,** which, once finalized, would govern the **movement of passenger and cargo vehicles** among the three nations.
- Bhutan also sent its officials to take part in the meeting hosted by India but as observers.
- The delegations from Bangladesh, India and Nepal agreed upon the need to expeditiously finalize the Passenger and Cargo Protocols for implementation of the BBIN MVA (Motor Vehicle Agreement).

HOW THE VAN GUJJARS PERCEIVE THE WILDLIFE PROTECTION AMENDMENT ACT, 2021

⊙ CONTEXT: **The Wild Life (Protection) Amendment Bill, 2021 was introduced in the Lok Sabha by Ministry of environment, forest and climate change in December, 2021. The Bill amends the Wild Life (Protection) Act, 1972 (WLPA).**

About the Wild Life (Protection) Act, 1972 (WLPA):

- The original Wild Life (Protection) Act acts to:
  - prohibits people from hunting wildlife
  - provides legal safeguards for different species based on their threat status
  - regulates trade and commerce in wild species
  - imposes penalties for wildlife-related crimes
  - specifies the terms to declare protected areas

- The Act has been amended several times, in 1982, 1986, 1991, 1993, 2002, 2006 and 2013.
- The proposed amendment is likely the most expansive so far in scope: it covers more areas of legislation, from trade in wild species to permitting filmmaking in protected areas and controlling the spread of invasive species.

Key provisions of the Wildlife Protection (Amendment) Bill, 2021:

- **Standing Committees of State Boards of Wildlife:**
  - The Bill proposes setting up of Standing Committees of State Boards of Wildlife.
  - These committees will function like the National Board for Wildlife NBWL).
  - It will be able to make decisions on wildlife management and permissions granted for projects without having to refer most projects to the NBWL.
- **Rationalization of Schedules for Wildlife:**
  - The bill rationalises Schedules for Wildlife under the Act by bringing it down from 6 to 4 major schedules.
  - For example, A schedule I category of wildlife (such as Tigers) are the highest protected under the Act.
- **Wildlife Management Plans:**
  - The Bill mandates that Wildlife Management Plans which are prepared for sanctuaries and national parks across the country will now become a part of the Wildlife Act.
  - Further, they will have to be approved by the Chief Wildlife Warden of the state.
  - Earlier, the plans were approved through executive orders.
- There is also the insertion of a new section 42A about surrender of wild animals and products.
- The inclusion of the **new Section 62A (I) that defines alien invasive species**.
- It has mandated the **need to consult the Gram Sabha** in protected areas falling under scheduled areas or areas recognised to possess forest rights based on claims under the Forest Rights Act, 2006.

About Van Gujjars:

- The Van Gujjars are a **semi-nomadic pastoral community**, which continues to practice seasonal migration across forests in **Uttarakhand, Uttar Pradesh and Himachal Pradesh** in pursuit of their pastoral livelihood.
- Van Gujjars being **classified as 'poachers'** rests on the **perceptions of criminality embedded** while determining lives of de-notified nomadic tribes.
- In fact, Van Gujjars' activities such as **lopping of leaves enable sustenance of herbivores**. It also **fosters healthier growth and density of the lopped trees.**

ICG LAUNCHES URJA PRABHA

CONTEXT: **Recently, the Indian Coast Guard (ICG) launched auxiliary barge Urja Prabha.**

About Urja Prabha:

- Urja Prabha is launched at Shoft Shipyard, Bharuch, Gujarat.
- Urja Prabha is 36.96 metres long with a draft of 1.85 metres.

- It is designed to cargo ship fuel, aviation fuel and fresh water with a capacity of 50 ton, 10 ton and 40 ton respectively.
- It will enhance the Indian Coast Guard operations by extending logistics support to Indian Coast Guard ships deployed in the sea at far-flung areas.

About Indian Coast Guard (ICG):

- The **'Nag Committee'** was setup in **1970**, to examine the growing **menace of smuggling**. The committee recommended the need for a separate marine force to deal with smuggling activities.
- In **1972**, the **United Nations Convention on the Laws of the Sea (UNCLOS)** awarded **Exclusive Economic Zones (EEZ**) to all coastal states.
  - Thereafter, the Union of India, enacted the **Maritime Zones of India Act 1976**, to claim sovereign rights over the vast sea area of the Exclusive Economic Zone.
  - In one stroke, India acquired 2.01 million sq kms of ocean for extensive exploitation of all living and non-living resources, and this vast area clearly needed to be policed.
- Later ICG, was established in **1978 by the Coast Guard Act, 1978.** It performs **non-military functions.**
- It operates under the **Ministry of Defence**.
- Headquarter of the Indian Coast Guard is in **New Delhi**.
- It has **jurisdiction** over the territorial waters of India including **contiguous zone and exclusive economic zone.**
- **Mission:**
  - To protect our ocean and offshore wealth including oil, fish and minerals.
  - To assist mariners in distress and safeguard life and property at sea.
  - To enforce maritime laws with respect to sea, poaching, smuggling and narcotics.
  - To preserve marine environment and ecology and protect rare species.
  - To collect scientific data and back-up the navy during war.

INDIA SET TO CARRY OUT PHASE 3 CLINICAL TRIALS FOR VACCINE AGAINST DENGUE

⊙ CONTEXT: **Pharmaceutical companies and vaccine makers who have developed potential vaccine candidates against dengue and have successfully completed phase 1 and 2.**

About Dengue:

- Dengue viruses are spread to people through the bite of an **infected Aedes species (Ae. aegypti or Ae. albopictus) mosquito.**
- These mosquitoes are also vectors of chikungunya, yellow fever and Zika viruses.
- The virus responsible for causing dengue, is called **dengue virus (DENV).** There are four DENV serotypes and it is possible to be infected four times.
- **Diagnosis and Treatment:**
  - Diagnosis of dengue infection is done with a blood test.

- There is no specific medicine to treat dengue infection.

- **Status of Dengue:**
  - Incidence of dengue has grown dramatically around the world in recent decades, with a vast majority of cases under-reported, according to the World Health Organization (WHO).
  - WHO estimates **39 crore dengue virus infections per year**, of which 9.6 crore show symptoms.
  - India registered over 1 lakh dengue cases in 2018 and over 1.5 lakh cases in 2019, according to the National Vector-Borne Disease Control Programme (NVBDCP).
    - NVBDCP is the central nodal agency for prevention and control of **six vector borne diseases** i.e. Malaria, Dengue, Lymphatic Filariasis, Kala-azar, Japanese Encephalitis and Chikungunya in India. It works under the Ministry of Health and Family Welfare.

- **Controlling Dengue Using Bacteria:**
  - Recently researchers from the World Mosquito Program have used **mosquitoes infected with Wolbachia bacteria** to successfully control dengue in Indonesia.
  - The scientists infected some mosquitoes with Wolbachia and then released them in the city where they bred with local mosquitoes, until nearly all mosquitoes in the area were carrying Wolbachia bacteria. This is called the **Population Replacement Strategy.**
  - At the end of 27 months, the researchers found that the incidence of dengue was **77% lower in areas where Wolbachia-infected mosquitoes had been released,** as compared to areas without such deployments.

About Indian Council of Medical Research (ICMR):

- The Indian Council of Medical Research (ICMR) is the **apex body** in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world.
- It was formed **in 1911** when it was known as Indian Research Fund Association (IRFA). In **1949, IRFA was renamed ICMR**.
- It comes under the Department of Health Services (DHS), **Ministry of Health and Family Welfare (MoH&FW).**
- The headquarters of ICMR is in **New Delhi.**
- It is **neither a statutory body nor a regulatory body**.
- ICMR hosts **Clinical Trials Registry – India (CTRI)**. It was established on 20th July 2007.
  - It is a free and online public record system for the registration of clinical trials being conducted in India.
  - Till 15th June 2009, the clinical trial registry was a voluntary measure; after which the Drugs Controller General of India (DCGI) has made trial registration at CTRI mandatory.
  - Importance – It encourages registration of clinical trials before the enrolment of the first participant.
- The ICMR has always attempted to address itself to the growing demands of scientific advances in biomedical research on the one hand, and to the need of finding practical solutions to the health problems of the country, on the other.

PETASCALE SUPERCOMPUTER "PARAM GANGA"

⊙ CONTEXT: **Recently, a Made in India Petascale Supercomputer "PARAM Ganga" has been installed at IIT Roorkee.**

About National Supercomputing Mission (NSM):

- The Mission envisages empowering our **national academic and R&D institutions** spread over the country by installing a vast supercomputing grid comprising of more than 70 high-performance computing facilities.
- These supercomputers will also be **networked on the National Supercomputing grid** over the National Knowledge Network (NKN).
  - The NKN is another programme of the government which connects academic institutions and R&D labs over a high speed network.
- The National Supercomputing Mission (NSM) is being **steered jointly** by Ministry of Electronics & Information Technology (**MeiTY)** and the Department of Science and Technology (**DST)**.
- It is being implemented by **Centre for Development of Advanced Computing (C-DAC) and Indian Institute of Science (IISc), Bangalore**.
- The **four major pillars** of the NSM, namely, **Infrastructure, Applications, R&D, HRD**, have been functioning efficiently to realize the goal of developing indigenous supercomputing eco system of the nation.
- **Objective:**
  - To make India **one of the world leaders in Supercomputing** and to enhance India's capability in solving grand challenge problems of national and global relevance
  - To empower our scientists and researchers with **state-of-the-art supercomputing** facilities and enable them to carry out cutting-edge research in their respective domains
  - To **minimize redundancies and duplication of efforts**, and optimize investments in supercomputing
  - To **attain global competitiveness** and ensure self-reliance in the strategic area of supercomputing technology
- Some of the **large-scale applications** which are being developed under NSM include the following.
  - NSM Platform for **Genomics and Drug Discovery**.
  - **Urban Modelling**: Science Based Decision Support Framework to Address Urban Environment Issues (Meteorology, Hydrology, Air Quality).
  - **Flood Early Warning** and Prediction System for River Basins of India.
  - **HPC Software Suite for Seismic Imaging** to aid Oil and Gas Exploration.
  - **MPPLAB:** Telecom Network Optimization.

About Supercomputer:

- A supercomputer is a computer with a **high level of performance** compared to a general-purpose computer.
- Performance of a supercomputer is measured in **floating-point operations per second (FLOPS)** instead of million instructions per second (MIPS).
- Supercomputers contain **tens of thousands of processors** and can perform billions and trillions of calculations or computations per second.

- Some supercomputers can perform up to a **hundred quadrillion FLOPS**.
- Since information moves quickly between processors in a supercomputer (compared to distributed computing systems) they are **ideal for real-time applications**.
- Supercomputers are used for **data-intensive and computation-heavy scientific and engineering** purposes such as quantum mechanics, weather forecasting, oil and gas exploration, molecular modeling, physical simulations, aerodynamics, nuclear fusion research and cryptoanalysis.

Fastest supercomputers: According to the TOP500 list, the world's fastest supercomputer is

- **Japan's Fugaku** at a speed of 442 petaflops as of June 2021.
- IBM supercomputers, **Summit and Sierra**, garner the second and third spots, clocking in at 148.8 and 94.6 petaflops, respectively.

India's fastest Supercomputers:

As of June 2021 there are 3 systems based in India on the TOP500 supercomputer list.

Rank	Site	Name
89	Centre for Development of Advanced Computing	PARAM Siddhi-AI
107	Indian Institute of Tropical Meteorology	Pratyush (Cray XC40)
187	National Centre for Medium Range Weather Forecasting	Mihir (Cray XC40)

About "PARAM Ganga":

- The new system, designed and commissioned by the Centre for Development of Advanced Computing (C-DAC) under the auspices of the NSM, will offer 1.66 (presumably peak) petaflops.

About National Knowledge Network (NKN):

- National Knowledge Network (NKN) was **established in 2010.**
- Its objective is to **interconnect all institutions of higher learning and research** with a high-speed data communication network.
- It will be helpful to **facilitate knowledge sharing** and collaborative research.
- **Implementation:** National Informatics Centre (NIC), under the Ministry of Electronics and Information Technology, is the implementing agency.

IRAN PLACES NOUR-2 IN ORBIT

◉ CONTEXT: **Recently, Iran's paramilitary Revolutionary Guard launched a second reconnaissance satellite into space.**

About the launch:

- Iran's Islamic Revolutionary Guard Corps (IRGC) has successfully put a **second military satellite, the Noor 2**, into orbit.
- Noor 2 is orbiting at an altitude of 500 kilometres (311 miles).

- The **first military satellite**, launched by the Islamic Republic in **April 2020**, placed the Noor at an orbit of 425km (265 miles) above the earth's surface.
- The **three-stage Qased**, or "**Messenger**", carrier launched the Noor 2, from the **Shahroud space port.**

United States Objections:

- The United States has repeatedly voiced concern that such launches **could boost Iran's ballistic missile technology.**
  - However, **Iran insists** it's not seeking nuclear weapons and that its satellite and rocket **launches are for civil or defensive purposes only**.
- The U.S. has alleged Iran's satellite launches **defy a UN Security Council resolution** and has called on Tehran to undertake no activity related to ballistic missiles capable of delivering nuclear weapons.

EQUALISATION LEVY A SOVEREIGN RIGHT, FM

⊙ CONTEXT: **Recently, while justifying the 2% equalisation levy (EL) imposed by India on the supply of services by multinational enterprises, finance minister Nirmala Sitharaman said it is a sovereign right to tax revenues earned from operations in the country.**

What is Equalisation Levy (EL)?

- Equalization Levy (EL) is a **tax leviable on consideration received by a non-resident for specified services.**
  - Specified Service means online advertising or provision of digital space for online advertisement or any other service for purpose of online advertising.

- Equalization Levy is imposed under the **Finance Act 2016** and not as a part of the Indian **Income Tax Act, 1961.**
- The Government introduced **Equalization Levy vide Finance Bill, 2016**, with the intention of taxing the digital transactions.
- As per **Sec 165 of Finance Act 2016**, a person resident in India or a non-resident having a permanent establishment in India shall deduct EL at **6%** on the consideration paid to non-resident towards specified services.

Applicability of Equalisation Levy:

- Equalisation Levy is a **direct tax**, which is withheld at the time of payment by the service recipient.
- The **two conditions** to be met to be liable to equalisation levy:
  - The payment should be made to a **non-resident service provider**;
  - The annual payment made to one service provider exceeds **Rs. 1,00,000** in one financial year.

About EL (Equalization Levy) 2.0:

- The Finance Act, 2020 expanded the scope of the EL to include all non-resident e-commerce operators providing 'e-commerce supply or services.
- As per the expanded provisions, with effect from 01 April 2020, a non-resident e-commerce operator is liable to pay Equalization Levy at the rate of 2% on the consideration received/receivable from e-commerce supply or services.

- **Salient features of (Equalization Levy) EL 2.0:**
  - The Equalization levy 2.0 **does not apply to transactions already covered by the Equalization Levy under Finance Act 2016.**
  - Thus, services such as online advertisement, provision of digital space for online advertising, or related services are not subject to EL 2.0.
  - EL 2.0 is **applicable on the online sale of goods or online provision of services or a combination of both by the non-resident e-commerce operator.**
  - EL 2.0 is applicable where non-resident e-commerce operators supply to
    - (a) person resident in India
    - (b) Person using an Indian IP address
    - (c) Non-resident in specific cases.
- The **threshold limit attracting equalization 2.0 is Rs 2 Crores**.
  - The EL 2.0 shall be levied only if the aggregate amount of consideration for such specified services received in a previous year exceeds Rs. 2 crores.
  - EL 2.0 is charged at the rate of 2% on the amount of consideration received/ receivable by the non-resident.
  - The non-resident e-commerce operator is liable for deposit the EL amount to the Government treasury & complies with the statutory requirements viz. the filing of EL return, etc.
  - The onus of compliance cast on the non-resident e-commerce operator EL 2 is not applicable where E-commerce operator has a Permanent Establishment in India and the e-commerce supplies or services are effectively connected with such Permanent Establishment.

In October 2021, G20 countries approved a global deal to adopt a 15 per cent minimum corporate tax and reallocate taxing rights for large profitable multinational enterprises (MNEs) to countries where they sell products and services.

CHILE CREATES NATIONAL PARK TO SAVE GLACIERS

⊙ CONTEXT: **Chile recently created a vast national park to protect hundreds of glaciers that are melting owing to climate change.**

About the Santiago Glaciers National Park:

- The creation of **Santiago Glaciers National Park to protect 46 percent of the ice contained in the Andes area of the Santiago Metropolitan Region.**
- The objective is to advance the protection of about **75,000 hectares**, which contain glaciers holding **56 percent of the water in the Metropolitan Region**.
- The new park provides official protection to **368 glaciers**, with 118 located in the **Olivares River basin** and 250 in the **Colorado River basin**.
- **Chile is among the world's top 10 countries as measured by glacier surface area**, the government says. Others include Canada, the United States, China and Russia.

About glaciers:

- Glaciers are **large, thick masses of ice that form on land when fallen snow gets compressed into ice over many centuries.**

- Presently, **10 percent of land area on Earth is covered with glacial ice**, including glaciers, ice caps, and the ice sheets of Greenland and Antarctica.
- Glacierized areas cover over 15 million square kilometers (5.8 million square miles).
- Glaciers store about **69 percent of the world's fresh water.**
- Most of the **world's glaciers exist in the Polar Regions**, in areas like Greenland, the Canadian Arctic, and Antarctica.
- Glaciers also can be **found closer to the Equator in some mountain regions**.
  - The **Andes Mountain range** in South America contains some of the world's largest tropical glaciers.
- During the **maximum point of the last ice age**, glaciers covered about 32 percent of the total land area.
  - Starting around the early 14th century, and lasting to the mid-19th century, the world experienced a "Little Ice Age," when temperatures were consistently cool enough for glaciers to advance in many areas of the world.
  - Glacier ice crystals can grow to be as large as baseballs.

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SECTION: C
(QUICK FACTS)

KAVACH, THE INDIAN TECHNOLOGY THAT CAN PREVENT TWO TRAINS FROM COLLIDING

⊙ CONTEXT: **Recently, the Indian Railways tested 'Kavach'-Automatic Train Protection System by making two trains move towards each other at full speed.**

About Kavach – The Train Collision Avoidance System (TCAS):

- It is **India's very own automatic protection system** in development since 2012, under the name Train Collision Avoidance System (TCAS), which got rechristened to Kavach or "armour".
- It is a **set of electronic devices and Radio Frequency Identification devices** installed in locomotives, in the signalling system as well the tracks.
  - The system talk to each other using **ultra high radio frequencies to control the brakes of trains and also alert drivers**, all based on the logic programmed into them.
- One of its features is that by continuously refreshing the movement information of a train, it is able to send out triggers when a loco pilot jumps signal, called **Signal Passed at Danger (SPAD).**
  - SPAD is a grave offence in railway operations with respect to safety, and the key to accidents like collision.
- The devices also continuously relay the signals ahead to the locomotive, making it useful for loco pilots in low visibility, especially during dense fog.
- TCAS or Kavach includes the key elements from already existing, and tried and tested systems like the **European Train Protection and Warning System, and the indigenous Anti Collison Device.**
- It will also **carry features of the high-tech European Train Control System Level-2** in future.
- The current form of Kavach adheres to the **highest level of safety and reliability standard called Safety Integrity Level 4.**

NINTH EDITION OF SRI LANKA-INDIA NAVAL EXERCISE SLINEX TO BEGIN TODAY IN VISAKHAPATNAM

⊙ CONTEXT: **The ninth edition of Sri Lanka-India Naval Exercise SLINEX is being help in Vishakhapatnam.**

About SLINEX:

- SLINEX aims to enhance **inter-operability, improve mutual understanding** and exchange best practices and procedures for multi-faceted maritime operations between both navies.
- The Harbour Phase would include **professional, cultural, sporting and social exchanges**.

- SLINEX exemplifies the **deep maritime engagement between India and Sri Lanka** and has grown in scope over the years to strengthen mutual cooperation, in consonance with India's policy of '**Neighbourhood First'** and India's vision of '**Security and Growth for All in the Region (SAGAR)'.**
- The exercise **began in 2005**.
- The eighth edition of SLINEX was conducted off **Trincomalee in October 2020.**

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GS SCORE
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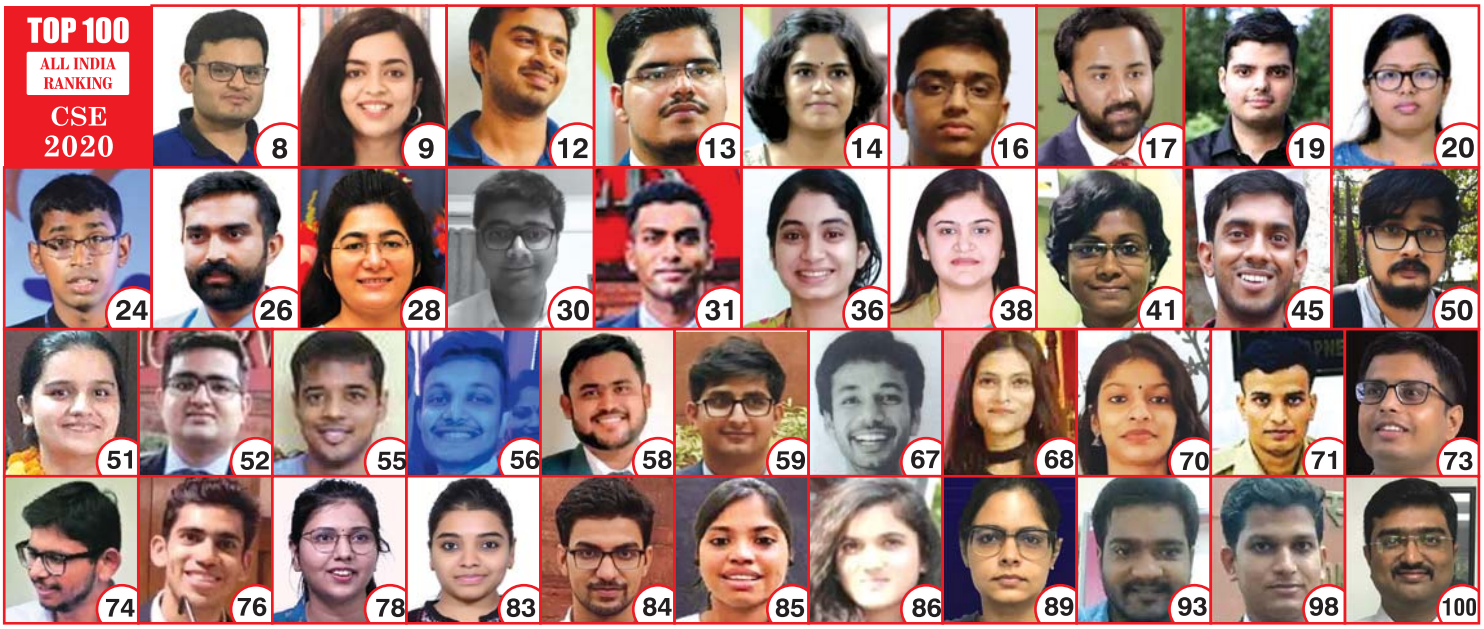
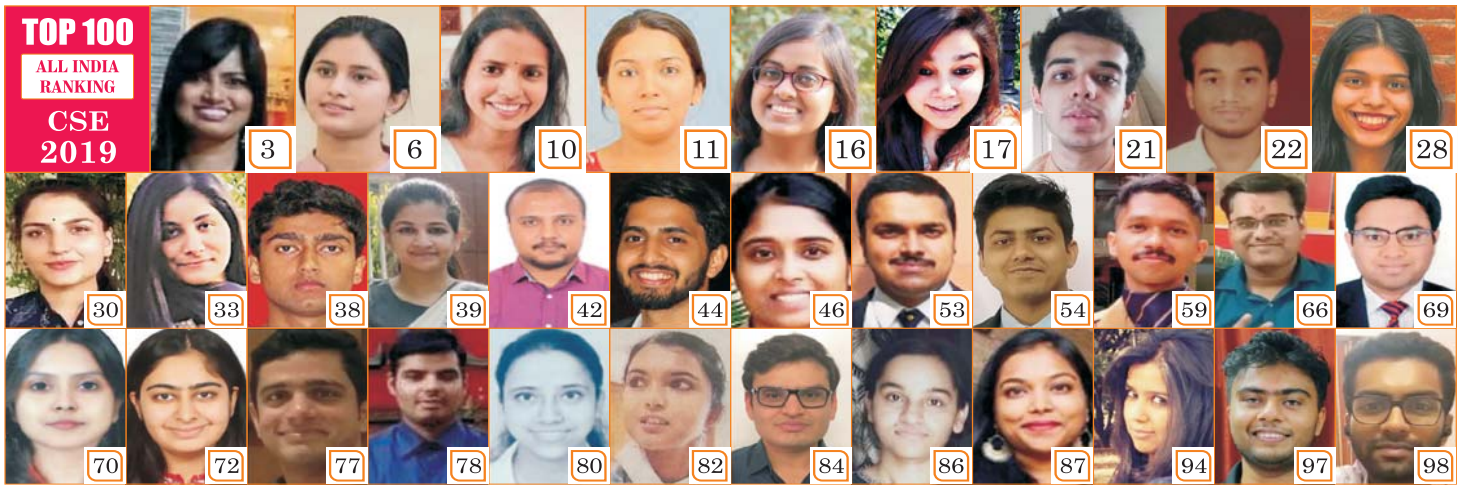
CSE RESULTS

TOP 100 ALL INDIA RANKING CSE 2020



SUCCESS IS A PRACTICE WE DO!

TOP 100 ALL INDIA RANKING CSE 2019



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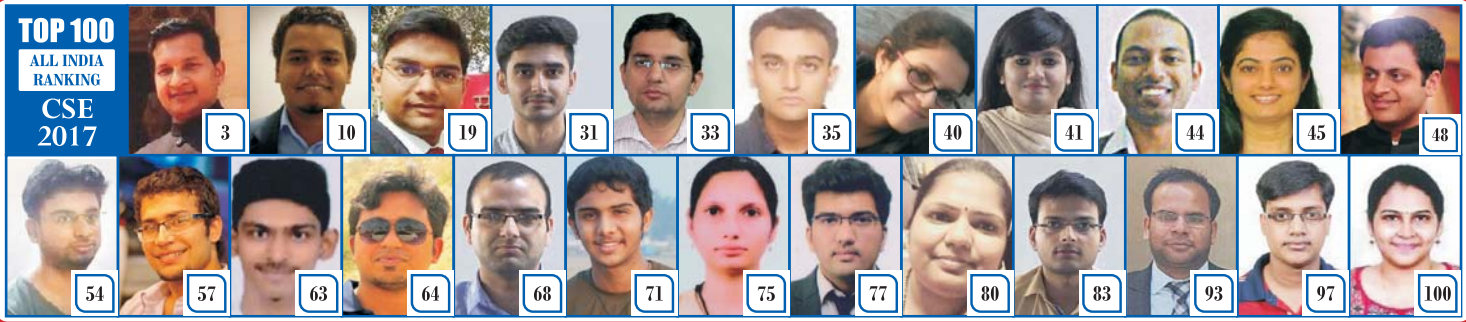
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