

My Notes....

NATIONAL

INDIA'S MIIRA TO PROMOTE MILLETS

India has introduced a draft to launch a **global initiative** to encourage the **consumption and production of millet**. The draft of the proposed initiative — **MIIRA** — was placed during the **first Agriculture Deputies Meeting** under the **Agriculture Working Group (AWG), G20** at Indore, Madhya Pradesh on 13-15 February 2023. During the meeting, Shubha Takur, Joint Secretary, Ministry of Agriculture, introduced the MIIRA.

What is MIIRA?

- 1. The acronym MIIRA stands for 'Millet International Initiative for Research and Awareness'.
- 2. According to Agriculture Ministry sources, the MIRA will be aimed at coordinating millet research programmes at the international level.
- It is in line with the UN declaring 2023 as the International Year of Millets, the proposal for which was moved by India and supported by 72 countries.
- 4. The International Year will see several events and activities such as conferences, issuing of stamps and coins etc. to raise awareness about millets, improve their production and quality, and attract investments. The Centre also plans to make India a global hub for millets.

What is the aim of MIIRA?

- According to the sources, MIIRA will aim to connect millet research organisations across the world while also supporting research on these crops.
- This is significant as issues like food security and nutrition are among the key priority areas in the agriculture sector during India's G20 Presidency. India assumed the G20 Presidency on 1 December 2022.
- 3. Besides setting up a web platform to connect researchers and holding international research conferences, the plan is also to raise awareness for promoting the consumption of millet.

Who will fund the MIIRA initiative?

- 1. For MIRA to take off, India will contribute the "seed money", while each G20 member will later have to contribute to its budget in the form of a membership fee.
- 2. The **MIIRA secretariat will be in Delhi**, the sources said, adding that with India being a **major producer of millets**, this will ensure a flow of investment from the country's industry and research bodies.

Which foodgrains are called millets?

- 1. Millets are small-grained cereals such as sorghum (jowar), pearl millet (bajra), foxtail millet (kangni/ Italian millet), little millet (kutki), kodo millet, finger millet (ragi/ mandua), proso millet (cheena/ common millet), barnyard millet (sawa/ sanwa/ jhangora), and brown top millet (korale).
- 2. These crops require much less water than rice and wheat, and are mainly grown in rainfed areas.
- 3. Gobally, jowar is the most widely grown millet crop; its major producers are the US, China, Australia, India, Argentina, Nigeria, and Sudan.

FIRST EVER SC USES AI FOR LIVE TRANSCRIPTION

The **Supreme Court (SC)** on 21 February 2023 started a **first-of-its-kind project** to transcribe its proceedings live using **Artificial Intelligence (AI)**. It helps judges and the lawyers, but it will also help our law colleges. They can analyse **how matters are argued**...It is a huge resource, Chief Justice of India (CJI) DY Chandrachud said.



What proceedings are being transcribed?

- 1. The **AI transcript** is seen on the live-streaming screen of courtroom number 1, which is the **C.II's court**
- 2. The **five-judge Bench headed by the CJI** is hearing the case related to the political crisis in Maharashtra.
- 3. The Bench had deferred the decision on the question of whether to reconsider the **2016 verdict** of the court in **Nabam Rebia vs Deputy Speaker**, which had held that the Speaker of the Legislative Assembly cannot decide on disqualification petitions when a motion seeking his own removal is pending.

What is the AI powering the transcription and how is it doing?

- 1. The **SC transcription** is using **Teres**, which is a platform used often for **transcribing** arbitration proceedings.
- 2. The platform is run by **Nomology Technology Private Limited**, a Bengaluru based company.
- 3. If there are **two or more voices at the same time** that **causes a little bit of a problem**, CJI Chandrachud said. But they have personnel who will clean up the errors by the evening.
- 4. The **transcript will also be shared with lawyers** who argued cases for verification, and are likely to be uploaded on the SC website every evening.

What is the significance of this step?

- 1. The **transcribing** is the **second major decision** towards making the court **more transparent** after the SC's decisions to livestream its proceedings before Constitution Benches.
- 2. The **suggestion to transcribe hearings** was made by senior advocate **Indira Jaising in the plea** she had filed seeking live telecast of court proceedings.

Are transcripts available for courts in other countries?

- 1. In the US, court transcripts are available to litigants and the public. The US Supreme Court provides audio and text transcripts of the proceedings.

 Many local courts in the US also make a stenographic record of most court proceedings.
- 2. In the UK, a litigant can ask for a transcript of the court proceedings for a fee if the hearing is recorded.

'NEUTRAL CITATION' SYSTEM IN SC JUDGMENT

Chief Justice of India (CJI) **D Y Chandrachud** on 23 February 2023 announced that the Supreme Court will adopt a "**neutral citation system**" for its judgments. The CJI expressed hope that **High Courts too would follow neutral citation** for their judgments. The **Delhi, Kerala, and Madras HCs** have already introduced neutral citation.

What is a "citation"?

- 1. A case citation is essentially an identification tag for a judgment.
- 2. Typically, it would contain a **reference number**, the **year of the judgment**, the **name of the court** that delivered that judgment, and shorthand for the journal publishing the judgment.

What is a neutral citation?

- A neutral citation would mean that the court would assign its own citation distinct from those given by traditional Law Reporters.
- 2. Law Reporters are periodicals or annual digests that publish judgments, often

Why is a neutral system good or necessary?

- Judgments mention citations while referring to precedents and often use citations from different Law Reporters. With artificial intelligence (AI) enabled translation of judgments and transcribing of court proceedings, a uniform citation is necessary.
- 2. Several High Courts including **Delhi High Court** have started a neutral citation format.
- 3. The **Delhi HC neutral citation** is, for example, in this format: No-YEAR/DHC/XXXXXX

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with an editorial note to make it accessible for lawyers to refer to precedents.

3. For example, for the landmark **Kesavananda Bharati case**, the citation in 'Supreme Court Cases', a journal published by the Eastern Book Company, is (1973) 4 SCC 225. In the All India Reporter (AIR), the citation is AIR 1973 SC 1461.

How will the SC implement the neutral citation system?

- 1. Our recent initiative is **neutral citations for all judgments** of the Supreme Court so **all 30,000 judgments are going to have neutral citations**.
- 2. First tranche will be till 1 January 2023, then the other tranche will be till judgments from 2014 and then finally we will go back to 1950. So all judgments will now have **neutral citations**, the CJI said.

'RIGHT TO BE FORGOTTEN' IN INDIA

The **Delhi High Court** agreed to hear a doctor's plea for enforcement of his 'Right to be Forgotten', which includes the removal of news articles and other incriminating content related to his "wrongful arrest" in response to a "fabricated FIR against him" which he claims is causing detriment to his life and personal liberty.

What is the Right to be forgotten?

- 1. The "Right to be Forgotten" is the right to remove or erase content so that it's not accessible to the public at large.
- 2. It **empowers an individual to have information** in the form of **news, video, or photographs** deleted from internet records so it doesn't show up through search engines, like Google in the present case.

What is the law on the Right to be Forgotten?

- 1. **Section 43A** of the **Information Technology Act, 2000** says that organizations that possess **sensitive personal data** and **fail to maintain appropriate security** to safeguard such data, resulting in wrongful loss or wrongful gain to anyone, may be obligated to pay damages to the affected person.
- 2. While, the IT Rules, 2021 do not include this right, they do however, lay down the procedure for filing complaints with the designated Grievance Officer so as to have content exposing personal information about a complainant removed from the internet.

What have the courts said so far?

- 1. While the right is not recognized by a law or a statute in India expressly, the courts have repeatedly held it to be endemic to an individual's Right to Privacy under Article 21 since the Apex Court's 2017 ruling in "K.S.Puttaswamy vs Union of India".
- 2. In this case, a nine-judge bench, including CJI Chandrachud, referred to the European Union Regulation of 2016 which recognized "the right to be forgotten" an individual's right to remove personal information from the system when "he is no longer desirous of his personal data to be processed or stored" or when "its no longer necessary, relevant, or is incorrect and serves no legitimate interest".
- 3. However, the court also recognized that such a right can be restricted by the right to freedom of expression and information or "for compliance with legal obligations", or for the performance of tasks in the public interest or on "grounds of public interest in the area of public health" or "scientific or historical research purposes or statistical purposes, or for the establishment" and "exercise or defense of legal claims".

What is this case?

- 1. In "Dr. Ishwarprasad Gilda vs. Union of India & Others", a practicing doctor who is a "world-renowned figure in the fight against HIV-AIDS" was accused of offenses under the Indian Penal Code, including causing death by negligence (Section 304A), cheating (Section 417) and personating a public servant (Section 170).
- 2. The doctor was accused of **illegally procuring medicines** from abroad and administering them to **HIV patients in India**, who he was also accused of "**mishandling**".
- 3. When one of the patients, **Girdhar Verma**, passed away, the petitioner contends he was wrongfully arrested on 23 April 1999, and was subsequently given bail on 11 May 1999.



- 4. Thereafter, relying on a trial court order from 4 August 2009, exonerating him, he reiterated that there was no evidence of him having engaged in any illegality.
- 5. Thus. the approached the Delhi High **Court** seeking directions to the respondents like Google, Information Press Bureau, and the Press Council of India to remove all "irrelevant" news "grave content causing injury" to his reputation and dignity or to pass any other order or direction to

What are the origins of this Right?

- 1. The Right to be Forgotten originates from the 2014 European Court of Justice ruling in the case of "Google Spain SL, Google Inc v Agencia Española de Protección de Datos, Mario Costeja González", where it was codified for the first time following a Spanish man's quest to make the world forget a 1998 advertisement saying "his home was being repossessed to pay off debts."
- Thereafter, it was included in the EU's General Data Protection Regulation (GDPR) in addition to the right to erasure. Article 17 of the GDPR provides for the right to erasure and lays down certain conditions when such a right can be restricted.

safeguard his dignity, including availing his "Right to be Forgotten."

INTERNATIONAL

WINDSOR FRAMEWORK BETWEEN UK AND EU

The **UK government** under Prime Minister **Rishi Sunak** on 27 February 2023 reached a **landmark deal with the European Union (EU)** on **post-Brexit trade rules** that will govern **Northern Ireland**. The **'Windsor Framework'** will **replace the Northern Ireland Protocol**, which had proved to be among the **thorniest of Brexit fall-outs**, creating problems both **economic and political**.

The Northern Ireland Protocol problem

- 1. After the UK left the European Union, Northern Ireland remained its only constituent that shared a land border with an EU-member, the Republic of Ireland.
- 2. Since the EU and the UK have different product standards, border checks would be necessary before goods could move from **Northern Ireland to Ireland**.
- 3. However, the two Irelands have had a long history of conflict, with a hard-fought peace secured only in 1998 under the Belfast Agreement, also called the Good Friday agreement.
- 4. Fiddling with this border was thus considered **too dangerous**, and it was decided the checks would be conducted between **Great Britain** (England, Scotland and Wales) and **Northern Ireland** (which together with Great Britain forms the United Kingdom). This was called the **Northern Ireland Protocol**.
- 5. Under the protocol, **Northern Ireland remained in the EU single market**, and trade-and-customs inspections of goods coming from **Great Britain** took place at its ports along the **Irish Sea**.

What the Windsor Framework proposes

1. The framework has two crucial aspects – the introduction of a green lane and red lane system for goods that will stay in Northern Ireland and those that will go to the EU respectively; and the 'Stormont Brake', which allows Northern Ireland lawmakers and London to veto any EU regulation they believe affects the region adversely.

The two lanes

- 2. British goods meant for Northern Ireland will use the green lane at the ports, and will be allowed to pass with minimal paperwork and checks.
- 3. Physical checks will be conducted if the **goods are deemed suspicious**, in place of the routine checks now.



- 4. This is especially significant for meat products, such as sausages, travelling between the two parts of the UK, as the EU has stricter rules about animal products.
- 5. Goods destined for Ireland or the rest of the EU will have to take the red lane, with the attendant customs and other checks.

What is Stormont Brake

- 1. The new Stormont Brake means the democratically elected Northern Ireland Assembly can oppose new EU goods rules that would have significant and lasting effects on everyday lives in Northern Ireland.
- 2. For this, they will need the **support of 30 members** from at least two parties. The British government can then veto the law.

RUSSIA SUSPENDS NEW START

Days before the **first anniversary of the beginning of the war in Ukraine**, President Vladimir Putin announced in an address to his nation on 21 February 2023 that **Russia is suspending its participation in the New START**, the last remaining major military agreement with the United States.

What is the New START?

1. The name **START** comes from the original "**Strategic Arms Reduction Treaty**", known as **START-I**, which was signed

between the US and the erstwhile USSR in 1991, and came into

force in 1994.

- 2. START-I, which capped the numbers of nuclear warheads and intercontinental ballistic missiles (ICBMs) that each side could deploy at 6,000 and 1,600 respectively, lapsed in 2009, and was replaced first by the Strategic Offensive Reductions Treaty (SORT, also known as the Treaty of Moscow), and then by the New START treaty.
- 3. The New START, officially, the "Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms",

Has Russia threatened to pull out before?

- 1. Russia said earlier this month that it wanted to preserve the treaty, despite what it called a destructive U.S. approach to arms control.
- 2. Together, Russia and the United States account for about 90% of the world's nuclear warheads and both sides have stressed that war between nuclear powers must be avoided at all costs.
- 3. However, **Russia's invasion of Ukraine** has pushed the two countries closer to direct confrontation than at any time in the **past 60** years.
- 4. The United States has accused Russia of violating the treaty by not allowing inspections on its territory, while Moscow has warned that the West's determination to "defeat" Russia could stop the treaty from being renewed when it expires in 2026.

entered into force on 5 February 2011, and placed new verifiable limits on intercontinental-range nuclear weapons.

- 4. The two countries had to meet the **treaty's central limits on strategic offensive arms** by 5 February 2018, and to then stay within those limits for the period the treaty remained in force.
- 5. The **US and Russia Federation** subsequently agreed to extend the treaty through 4 February 2026.

What Happens Now?

- 1. Russia said last year that the **danger of a nuclear conflict** was real and should not be underestimated, but that it should be avoided at all costs.
- 2. Both the **U.S. and Russia** have checks **to ensure that their nuclear missiles cannot be used accidentally**, after years of tension during the Cold War led to some near misses.

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3. However, fears of a nuclear confrontation have increased since the Ukraine invasion. Putin has reminded the world of the size and power of Moscow's arsenal and said he is ready to use all means necessary to defend Russia's "territorial integrity".

CHINA'S PEACE PROPOSAL FOR UKRAINE WAR

One year into Russia's war against Ukraine, China is offering a 12-point proposal to end the fighting. The proposal follows China's recent announcement that it is **trying to act as a mediator in the war** that has **re-energised Western alliance's** viewed by Beijing and Moscow as rivals.

What has China proposed?

- 1. China's proposal calls for a ceasefire and peace talks, and an end to Western sanctions against Russia.
- 2. It says "relevant countries should stop abusing unilateral sanctions" and "do their share in de-escalating the Ukraine crisis."
- 3. It says **sovereignty of all countries should be upheld**, though it doesn't specify what that would look like for Ukraine, and the land taken from it since **Russia seized Crimea** in 2014.
- 4. The proposal condemns a "**Cold War mentality**," a rebuke of the United States and NATO, the US -European military alliance.
- 5. The security of a region should not be achieved **by strengthening or expanding military blocs**, the proposal says. Russian President Vladimir Putin demanded a promise that **Ukraine will not join the bloc before the invasion**.
- 6. Other points call for a cease-fire, peace talks, protection for prisoners of war and stopping attacks on civilians, keeping nuclear power plants safe and facilitating grain exports.

'EX DHARMA GUARDIAN' START

The armies of India and Japan was conducted the **fourth edition** of **joint military exercise**, **'Ex Dharma Guardian'**, at Camp Imazu in **Japan's Shiga province** from 17 February 2023. The military drill that will last till 2 March 2023 will help them know each other better, share their wide experiences and **enhance their situational awareness**, the Army said.

More about the exercise

- 1. The **scope of this exercise** covers **platoon-level joint training on operations** in jungle and semi-urban/urban terrain. The Indian contingent arrived at the exercise location on 12 February 2023.
- 2. The troops of the **Garhwal Rifles Regiment of the Indian Army** and an **Infantry Regiment** from the Middle Army of the **Japan Ground Self Defence Force (JGSDF)** are participating in the exercise to share experiences gained during operations in order **to enhance interoperability** in planning and execution.
- 3. **The joint exercise** will enable the armies from the two countries to share best practices in **tactics**, **techniques**, and procedures for conducting tactical operations **under a UN mandate**, in addition **to developing interoperability**, **bonhomie**, **camaraderie**, and friendship between the two armies.
- 4. The training will focus primarily on a **high degree of physical fitness** and sharing of drills at the tactical level.
- 5. The exercise will further **enhance the level of defence cooperation** between Indian and Japanese troops, furthering the bilateral relations between the two nations.
- 6. This annual training event with Japan is crucial and significant in terms of **security challenges** faced by both nations against the backdrop of **the current global situation**.



ECONOMY

RBI NOD TO BE PAYMENT AGGREGATORS

The payments arm of big technology companies Amazon and Google are among 32 firms that have been given in-principle approval by the Reserve Bank of India (RBI) to operate as online payment aggregators. Approvals have also been granted to Reliance Payment Solutions, a part of Reliance Jio Infocomm, and the payments platform of food delivery firm Zomato. The RBI has for the first time released a full list of the entities to which it has granted a payment aggregator licence, as well as those whose applications are still in process, and those whose applications it has rejected.

Who are payment aggregators?

- 1. Online payment aggregators can onboard digital merchants and accept payments on their behalf after getting a licence from the RBI. The central bank introduced a framework for such entities in March 2020.
- 2. Applications were invited until last September. Under the payment aggregator **framework**, only firms approved by the RBI can acquire and offer payment services to merchants, which bring them under the direct purview of the regulator.
- 3. According to RBI rules, a company applying aggregator authorisation must have a minimum net worth of Rs 15 crore in the first year of application, and at least Rs 25 crore by the second year.
- 4. It also must fulfil the "fit and proper" criteria, and be compliant with global payment security standards.

Which are the entities that are vet to receive RBI's approval?

1. Among the applications for aggregators payment that remain under consideration are

those of prominent Indian start-ups such as PhonePe and Dreamplug Paytech **Solutions**, the parent company of Cred.

- 2. The applications of Paytm and the Naspers-owned PayU have been returned. This means these companies can continue to function as payment aggregators, but they cannot take on board new merchants until they receive RBI's approval.
- 3. The applications of Ola Financial Services and CAMS Payment Services among others have been rejected. These companies cannot function as payment aggregators.

GOM REPORT ADOPTED BY GST COUNCIL

Union Finance Minister Nirmala Sitharaman on 18 February 2023 said the GST Council adopted the report of the Group of Ministers on GST Appellate Tribunal with certain modifications, and the final draft amendments will be circulated to state finance ministers for their comments. The GoM on Goods and Services Tax Appellate Tribunals (GSTATs) was set up in July last year under the chairmanship of Haryana deputy chief minister Dushyant Chautala.

What other action is RBI taking to regulate fintech firms?

- 1. The RBI has prepared a "white-list" of digital **lending apps** in the country, which it might soon release.
- 2. In order to curb rising malpractices in the digital lending ecosystem, the RBI last August issued guidelines for entities engaged in digital lending that stated that all digital loans must be disbursed and repaid through bank accounts of regulated entities only, without the pass-through of lending service **providers (LSPs)** or other third parties.
- 3. Earlier this month, the Ministry Electronics and IT (MeitY) banned 94 digital lending apps, including Indian startups such as LazyPay and Kissht. However, the ban on some of these entities was later revoked.



What the panel said?

- 1. The panel has suggested that the tribunals should **consist of two judicial members**, and **one technical member each from the Centre and states**, besides a retired Supreme Court judge as president.
- 2. The **GoM report** on the establishment of the **GST Appellate Tribunal** has been accepted with slight modifications in the language that will be shared with States and following which a **final draft of the Tribunal's setting up** will be worked out, Sitharaman said after chairing the 49th meeting of the GST Council.
- 3. She also informed that the **Council has authorised the chairperson** to take the final view and incorporate it in the **Finance Bill**, since there is not much time for the Council to meet again.
- 4. The **much-awaited GSTAT** is expected to help resolve these matters faster. **The establishment of GSTAT** is expected to bring **relief to businesses** that have long awaited a quick and efficient process for resolving GST disputes.
- 5. The GST Council also **took on board a GoM report** to plug the leakages and improve the revenue collection from the commodities like **pan masala**, **gutkha**, **chewing tobacco**.
- 6. The **GST Council** has now relaxed and capped the late fees for **filing GSTR 9 to 0.04 per cent of turnover** for those taxpayers with a turnover of up to Rs 20 Crore. This is a relief to such taxpayers.

WORLD'S FIRST PAYMENT LINK ON CLOUD

In the first such collaboration for India, the country's flagship payment platform, the Unified Payments Interface and Singapore's PayNow payment system have launched a real-time cross-border payment system linkage. The linkage was launched by Prime Minister Narendra Modi and Singapore PM Lee Hsien Loong on 21 February 2023.

What

- 1. The newly launched linkage will enable users to transfer funds held in bank accounts or e-wallets to and from India using only the UPI ID, mobile number or Virtual Payment Address (VPA), the RBI said.
- 2. This facility will provide a **low-cost** and **real-time option** for **cross-border remittances** between our two countries.
- 3. The people who will specially benefit from this are **migrant workers**, professionals, students and their families, Modi said via videoconference.
- 4. **More than 400,000 Indians reside in Singapore** and the annual cross-border retail payments and remittances between the two countries amount to **over \$1 billion**, Loong said.
- 5. Apart from marking India's maiden cross-border real-time, person-toperson payments linkage, the partnership between UPI and PayNow marks the world's first to feature cloud-based infrastructure and participation by non-bank financial institutions.

How much money can you send or receive daily?

- 1. The RBI said that customers of the participating banks can undertake cross-border remittances to Singapore using the bank's mobile banking app/internet banking.
- 2. Initially, an Indian user will be allowed to remit up to Rs 60,000 (SGD 1000) in a day.

Flashback

- In 2018, Singapore's Network for Electronic Transfers worked with NPCI International Payments Limited to allow card and QR code payments between the two countries.
- The idea of linking PayNow and UPI was first conceived in 2018 when PM Modi visited Singapore.
- The PayNow-UPI linkage will offer cheaper, faster and safer cross-border retail payments and remittances for businesses and individuals alike directly between bank accounts or e-wallets.

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3. The RBI said that at the time of making the transaction, **the system will dynamically calculate** and display the amount in **both the currencies** for convenience of the user.

FCRA LICENCE OF CPR SUSPENDED

The Centre on 27 February 2023 suspended the Foreign Contribution Regulation Act (FCRA) licence of the Centre for Policy Research (CPR). This came five months after the Income Tax department conducted 'surveys' on the premises of the CPR, Oxfam India, and the Independent and Public Spirited Media Foundation (IPSMF), which funds a range of digital media entities. The Ministry of Home Affairs said that the licence was suspended following prima facie inputs regarding the violation of funding norms.

What is the FCRA?

- 1. The law sought to regulate foreign donations to individuals and associations so that they functioned "in a manner consistent with the values of a sovereign democratic republic".
- 2. An amended FCRA was enacted under the UPA government in 2010 to "consolidate the law" on utilisation of foreign funds, and "to prohibit" their use for "any activities detrimental to national interest".
- 3. The **law was amended again** by the **current government in 2020**, giving the government **tighter control and scrutiny** over the receipt and utilisation of foreign funds by NGOs.
- 4. Broadly, the FCRA requires every person or NGO seeking to receive foreign donations to be (i) registered under the Act, (ii) to open a bank account for the receipt of the foreign funds in State Bank of India, Delhi, and (iii) to utilise those funds only for the purpose for which they have been received and as stipulated in the Act.
- 5. They are also required to file annual returns, and they must not transfer the funds to another NGO.
- 6. The Act prohibits the receipt of foreign funds by candidates for elections, journalists or newspaper and media broadcast companies, judges and government servants, members of legislature and political parties or their office-bearers, and organisations of a political nature.
- 7. In July 2022, the MHA effected changes to FCRA rules through two gazette notifications and increased the number of compoundable offences under the Act from 7 to 12.
- 8. The other key changes were **exemption from intimation to the government for contributions less than Rs 10 lakh** the **earlier limit was Rs 1 lakh** received from relatives abroad, and increase in time limit for intimation of opening of bank accounts.

INDIA AGAINST CARBON BORDER TAX

India in a submission to the World Trade Organisation (WTO) has slammed carbon border measures being imposed by some countries, calling them discriminatory and protectionist. India has written to WTO raising concerns over the selective application of Carbon border rules to "trade-exposed industries" like steel, aluminium, chemicals, plastics, polymers, chemicals and fertilisers, which reflects the underlying competitiveness concerns driving such measures.

What

- 1. According to the WTO rules, it is mandatory that there is **non-discriminatory treatment for same products**, irrespective of their production methods and such border measures can lead to "**behind-the-border**" protectionist practices, India said.
- 2. Any measures taken **to combat climate change**, including **unilateral ones**, should not constitute a means of arbitrary or **unjustifiable discrimination** or a **disguised restriction** on international trade, India's submission to WTO said.
- 3. This statement from India comes at a time when the **US** introduced an Inflation Reduction Act to establish green technology industries.



4. The **European Union (EU)** too has a **Carbon Border Adjustment Mechanism** which is a global carbon tax levied on imports to the bloc.

What are Carbon Border measures?

- 1. A few developed countries have **imposed high costs on carbon-intensive businesses** in their own countries to reduce emissions.
- 2. However, it was found that businesses could overcome these restrictions by moving production to developing countries where the norms are less strict.
- 3. This is known as **carbon leakage**. To curb these, the countries started imposing Carbon Tax at borders.
- 4. One such instance is the EU's Carbon Border Adjustment Mechanism (CBAM).
- 5. EU defines **CBAM** as a "**landmark tool** to put a fair price on the carbon emitted during the production of **carbon-intensive goods** that are entering the EU, and to encourage cleaner industrial production in non-EU countries."
- 6. It is **like a carbon tax on goods entering the EU** from other countries. India's concern is that these border taxes on **its goods entering EU would increase the prices of Indianmade goods** and **make them less attractive to buyers** and could negatively affect demand.
- 7. Such a tax could pose a **serious threat to companies** with larger greenhouse gas footprints.
- 8. India along with other BASIC countries (Brazil, South Africa, India and China) raised this issue in November last year at the COP27 in Sharm El Sheikh, saying it could "result in market distortion".

SCIENCE AND TECHNOLOGY

NATIONAL SCIENCE DAY 2023

National Science Day in India is celebrated on 28th February every year to commemorate the discovery of the Raman Effect by Indian physicist Sir Chandrasekhara Venkata Raman, also known as Sir C.V. Raman. The discovery was announced on 28th February 1928, and Raman won the Nobel Prize in Physics in 1930, making him the first Indian to receive a Nobel Prize in a scientific field. This year's edition is being celebrated under the theme of "Global Science for Global Wellbeing", in light of India's G20 presidency.

What is CV Raman Effect

- 1. The Raman Effect is a phenomenon in which a photon interacts with a molecule, causing it to undergo a change in energy and momentum.
- 2. Specifically, when a photon interacts with a molecule, it can transfer some of its energy and momentum to the molecule, causing it to vibrate or rotate.
- 3. This change in the molecule's energy and momentum results in a **shift in the wavelength** of the scattered photon, which is known as **Raman scattering**.

Objectives of National Science Day

- The idea of celebrating National Science Day was first proposed by the National Council for Science and Technology Communication (NCSTC) in 1986, and it was subsequently accepted by the Indian government.
- 2. The **first National Science Day** was celebrated on 28th February 1987.
- 3. The day is celebrated **to recognize and appreciate** the contributions of scientists and researchers to the **field of science** and to create awareness among the general public about the **importance of science** and its applications in **everyday life**.
- 4. It is an opportunity **to promote scientific temper** and **encourage young people** to take up careers in science.
- 4. The Raman effect is used in Raman spectroscopy, which is a technique used to identify and analyze the chemical composition of materials.



5. In Raman spectroscopy, a **laser is used to excite the molecules** in a sample, and the resulting **Raman scattering** is measured and analyzed to determine the **vibrational and rotational modes** of the molecules in the sample.

IAF DEVELOPS INDIGENOUS 'VAYULINK' PLATFORM

The Indian Air Force has come out with an innovative solution that would help pilots to deal with bad weather and also provide them jammer-proof uninterrupted communication with the base station. Known as 'Vayulink', the data link communication uses the Indian Regional Navigation Satellite System (IRNSS) that is also known as NAVIC, to send radio communication to the base station when the signals are low.

More about Vayulink

- 1. The important aspect of the **technological solution** is that it **prevents fratricide** or friendly fire.
- 2. The IAF has put up a **gallery on Vayulink** to provide information about its platform at the India Pavilion in the ongoing **Aero India 2023**.
- 3. Vayulink is an ad-hoc data link communication system, which when installed in an aircraft, gives position of other aircrafts close by, encrypted traffic data over secured channel.
- 4. When the planes are flying close to **any friendly forces** on grounds during a combat situation, the aircraft display gives the position of such forces on the ground including **tanks and troops beneath**.
- 5. The advantage of the system is when you are going into combat, it prevents fratricide. It means, you are able to know where our ground forces are present.
- 6. The **Vayulink system** also **prevents aircraft collision**, provides better combat teaming and **helps plan real-time basis** where multiple teams can get together and go towards the target coming from different areas.
- 7. The system can also give the **pilots data on the weather**. When you are flying above the hills where there is no **radio communication**, the system can give you radio communication also.
- 8. **Vayulink is helpful for the Air Force, Army and Navy**, while it can be given to government services as well since the technology has been made by the Indian Air Force.
- 9. Vayulink has been developed by the IAF only and it is a very secure system.

COMMISSIONING OF ITER'S FIRST PHASE

The first phase of commissioning of the seven-nation International Thermonuclear Experimental Reactor (ITER), of which India is a part, at Cadarache in France is expected in 2028.

What

- 1. **India formally joined the ITER project in 2005** and is a **10 per cent stake holder**. **ITER-India** is the nodal agency for the country's participation in the \$45-65 billion ITER project.
- 2. AV Ravi Kumar, scientific officer and head, outreach division of the Gandhinagar-based **Institute for Plasma Research (IPR)**, and Kartik Mohan, scientist of ITER-India, said that of the nine packages which are **India's share of the project**, four have already been delivered.
- 3. These are the **cryostat** (which is the world's largest and heaviest component), the **water cooling** and **heat rejection system**, the in-wall shielding as well as the cryo lines and cryo distribution system. The remaining five are in the process of being delivered and are currently on schedule.
- 4. **IPR and ITER-India**, which comes under **the department of atomic energy**, are participating in the five-day Maha Edu Fest, which began at the Lokseva e-school in Pune. The event is organised by the **Indo Science Education Trust** and the NM Foundation and Research Centre.



- 5. **The outreach division of IPR**, which has set up this exhibition, has over 25 models, of which a majority are working interactive ones, depicting various forms of plasma, their many applications as well as models of **'tokamak**' and details of the ITER project.
- 6. Though **IPR has two 'tokamaks'** which are essentially devices where **hot plasma is generated**, magnetically confined and studied no fusion reaction is carried out in these machines.
- 7. The studies carried out in these machines will help us learn more about **hot plasma** and **how to sustain and control them**, which are essential precursors to doing actual fusion reactions in the future.

INDIA IN INTERNATIONAL IP INDEX

India ranks 42nd among 55 leading global economies on the International IP Index released by the US Chambers of Commerce, according to which India is ripe to become a leader for emerging markets seeking to transform their economy through IP-driven innovation.

According to the report

- 1. The report covers everything from patent and copyright laws to the ability to monetize IP assets and the ratification of international agreements.
- 2. **India** has maintained **continued strong efforts in copyright piracy** through the issuing of "dynamic" injunction orders.
- 3. India not only has generous R&D and IP-based tax incentives, but also has a strong awareness-raising efforts regarding the negative impact of piracy and counterfeiting.
- 4. It is a global leader on **targeted administrative incentives** for the creation and use of IP assets for SMEs.
- 5. India has taken steps to improve enforcement against copyright-infringing content and provides a best-in-class framework to promote better understanding and utilisation of IP assets.
- 6. However, addressing long-standing gaps in its IP framework will be critical to India's ability to create a new model for the region and India's continued economic growth.
- 7. However, the report said the **2021 dissolution of the Intellectual Property Appellate Board**, combined with the long standing issue of an under-resourced and **overstretched judiciary**, raises serious concerns about rights holders' ability to enforce their **IP rights in India** and **to resolve IP-related disputes**.
- 8. Carriers to licensing and **technology transfer**, including **strict registration requirements**, said noting that there is limited framework for the protection of **biopharmaceutical IP rights**.
- 9. Following a decade of steady, **incremental, improvement in IP systems worldwide**, a deluge of proposals under consideration by US and international policy leaders, including at **multilateral organisations**, threatens to compromise hard-won economic gains.

THIRD PATIENT IS CURED OF HIV

A 53-year-old man from Germany, referred to as the **Dusseldorf patient**, has become at least the **third person to have been "cured of HIV"** with the virus not being detectable in his body even four years after stopping the medicine. This was achieved with a **bone-marrow transplant** from people carrying a **specific HIV-resistant genetic mutation**.

Who are the people who have become HIV-free?

- 1. Referred to as the Berlin patient, Timothy Ray Brown became the first person to overcome HIV after he underwent two stem cell transplants in 2007 and 2008 for treating his blood cancer.
- 2. As a person with HIV, his doctors **selected a donor** carrying **two copies of a CCR5-delta 32 genetic mutation** a mutation that is known to make the **carriers almost immune to HIV**. He remained HIV-free till his death due to cancer in 2020.



- 3. Years later, researchers announced similar results in the London patient Adam **Castillejo in 2019**, replicating the treatment for the first time.
- 4. The Dusseldorf patient, who also underwent a transplant for blood cancer, has remained free of HIV four years after he stopped taking antiretroviral that controls the level of the virus in the body.

What is CCR5 mutation and how does it fight off HIV?

- 1. HIV (Human Immunodeficiency Virus) mainly attacks the CD4 immune cells in the human body, reducing a person's ability to fight off secondary infections.
- 2. The CCR5 receptors on the surface of the CD4 immune cells act as a doorway for the HIV virus.
- 3. However, the **CCR5-delta 32 mutation** prevents these receptors used by the HIV virus from forming on the **surface**, effectively removing the doorway.
- 4. Only 1 per cent of the people in the world carry two copies of the CCR5delta 32 mutation meaning they got it from both their parents – and another 20 per cent carry one copy of the mutation, mainly those of European descent.

Why did the Chinese researcher who edited this gene out face backlash?

- 1. A Chinese scientist called **He Jiankui**, in 2018, edited the genomes of twins Lulu and Nana to remove this CCR5 gene in an attempt to make them immune to HIV. Their father was living with HIV.
- 2. A month after the first babies were born in **October 2018**, he announced that he had created the first genetically edited babies.
- 3. He faced immediate backlash from the scientific community and legal action. This is because guidelines for genetic editing prohibit germ**line editing** – editing a genome that can be passed from one generation to the other – as the editing techniques are not very precise and the long-term consequences of such editing is unknown.
- And, antiretroviral therapy could anyway have prevented mother-to-child transmission of HIV.
- 5. Those with the mutation hence are almost immune to the infection, although some cases have been reported.

MISCELLANEOUS

INTERNATIONAL MOTHER LANGUAGE DAY 2023

International Mother Language Day is observed on 21st February each year to promote linguistic and cultural diversity and multilingualism. The day was first proclaimed by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in November 1999, and has been observed every year since February 2000.

Objective

- 1. The main objective of International Mother Language Day is to promote linguistic and cultural diversity, multilingualism, and the preservation and protection of all languages, especially endangered ones.
- 2. The day aims to raise awareness about the importance of linguistic diversity in promoting cultural understanding, peaceful coexistence, and sustainable development.
- 3. The observance of International Mother Language Day also serves as an opportunity to celebrate and promote the use of mother tongues, which are an important part of people's cultural heritage and identity.



- 4. The day encourages people to take pride in their mother language and to use it in their daily lives, in education, and in other aspects of society.
- 5. Another objective of International Mother Language Day is to promote the use of multilingual education and to encourage the development of language policies that support linguistic diversity and promote social inclusion.
- 6. The day provides a platform for policymakers, educators, and other stakeholders to discuss and share best practices for language education and language policy.
- 7. Ultimately, **the objective of International Mother Language Day** is to promote the idea that **linguistic and cultural diversity** is a source of strength and a means of achieving a more peaceful and sustainable world.

History

- 1. International Mother Language Day was established by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in November 1999, in response to a tragic event that took place in Bangladesh in 1952.
- 2. On 21 February 1952, students and activists in East Pakistan (now Bangladesh) protested against the Pakistani government's decision to impose Urdu as the only official language of the country. During the protest, police opened fire on the demonstrators, killing several of them.
- 3. The protest and the subsequent violence that followed became a turning point in the struggle for independence for East Pakistan, and it gave rise to a movement to promote the Bengali language and culture.
- 4. **In 1999**, the **Government of Bangladesh proposed to UNESCO** that 21st February be declared as **International Mother Language Day** to commemorate the events of 1952 and to promote **linguistic and cultural diversity** around the world.
- 5. The proposal was accepted by UNESCO, and International Mother Language Day was first observed on 21 February 2000.

SANSAD RATNA AWARDS

Prime Minister congratulated fellow Members of Parliament who will be conferred the Sansad Ratna Awards 2023. The Sansad Ratna Awards were instituted in 2010, inspired by the teachings of former President APJ Abdul Kalam, who launched the first edition of the Award function in Chennai. They seek to recognise and felicitate the top-performing MPs on the basis of their work in the apex legislative body. So far, 90 Parliamentarians have been given this award. The 13th edition of the award ceremony is set to be held this year on 25 March 2023 in New Delhi.

Who are the Sansad Awards winners this year?

- 1. The **Jury Committee** has chosen a **total of 13 MPs** and **two parliamentary committees** for the award, with a **lifetime award** being presented for the first time this year.
- 2. The awardees are Bidyut Baran Mahato (BJP, Jharkhand), Sukanta Majumdar (BJP, West Bengal), Kuldeep Rai Sharma (INC, Andaman Nicobar Islands), Heena Vijayakumar Gavit (BJP, Maharashtra), Adhir Ranjan Chowdhury (INC, West Bengal), Gopal Chinayya Shetty (BJP, Maharashtra), Sudhir Gupta (BJP, Madhya Pradesh), and Amol Ramsing Kolhe (NCP, Maharashtra) from the Lok Sabha.



- 3. From the Rajya Sabha, **John Brittas** (CPI-M, Kerala), **Manoj Kumar Jha** (RJD, Bihar), **Fauzia Tahseen Ahmed Khan** (NCP, Maharashtra), **Vishambhar Prasad Nishad** (Samajwadi Party, UP) and **Chhaya Verma** (INC, Chhattisgarh) will be given the Sansad Ratna award.
- 4. The Finance Committee (Lok Sabha, under BJP's **Jayant Sinha**) and Transport, Tourism and Culture Committee (Rajya Sabha, under YSR Congress's **V Vijayasai Reddy**) have been nominated for Awards for their **outstanding cumulative performance** from the beginning of the **17th Lok Sabha** until the end of Winter Session of 2022.
- 5. **T K Rangarajan** (former Rajya Sabha MP for two terms and a Senior CPIM Leader) will be honoured with the "**Dr APJ Abdul Kalam Lifetime Achievement Award**" for his contribution to "**Parliament and Indian people**" over the years.

Which is the organisation that instituted the Sansad Ratna Awards?

- 1. The **Sansad Ratna Awards** are **not given by the Government of India**, though over the years, its jury members have included individuals in the government.
- 2. The awards were instead the **brainchild of K Srinivasan**, a communication strategist who founded the **Prime Point Foundation in 1999**.
- 3. Started to "**promote communication awareness**", it is this foundation which runs the awards show, alongside the foundation's monthly eMagazine PreSense.
- 4. The awards were started with support from IIT Madras.

IRAN CLAIMS TO HAVE LITHIUM DEPOSIT

A senior official in the Iranian Ministry of Industry, Mine and Trade (MIMT) said on 27 February 2023 that a deposit located in the western province of Hamedan contains some 8.5 million metric tons of lithium ore. India recently established inferred lithium resources of 5.9 million tons in the Reasi district of Jammu and Kashmir.

The importance of lithium in today's world

- 1. Lithium is ubiquitous in modern life, found in all kinds of electronic devices, from mobile phones to EVs basically, anything that requires a rechargeable battery.
- 2. A battery is made up of an **anode**, **cathode**, **separator**, **electrolyte**, and **two current collectors** (positive and negative).
- 3. Lithium-ion batteries use aqueous electrolyte solutions, where ions transfer to and fro between the anode (negative electrode generally made of graphite) and cathode (positive electrode made of lithium), triggering the recharge and discharge of electrons.
- 4. Even promising alternatives to the lithium-ion batteries, such as **QuantumScape Corp's** solid-state lithium-metal battery, continue to use lithium.
- 5. This is primarily due to **Lithium's low weight as compared to other metals** (such as nickel, used in traditional batteries) as well as its superior electrochemical potential.
- 6. Lithium has become especially valuable in the context of increasing climate concerns with the internal combustion engine and the rise of electric vehicles (EV) as an alternative.



- 7. Currently, all EVs use lithium in their battery packs with demand set to rise exponentially over the coming decades.
- 8. A **2020 World Bank report on clean energy transition** estimates that the production of minerals, such as **graphite**, **lithium and cobalt**, could increase by nearly 500 percent by 2050, to meet the growing demand for clean energy technologies.

FACT TO REMEMBER:

- 1. INDIA'S PROPOSED MIIRA TO PROMOTE MILLETS
- 2. FIRST EVER SC USES AI FOR LIVE TRANSCRIPTION
- 3. 'RIGHT TO BE FORGOTTEN' IN INDIA
- 4. WINDSOR FRAMEWORK BETWEEN UK AND EU
- 5. RUSSIA SUSPENDS NEW START
- 6. RBI NOD TO BE PAYMENT AGGREGATORS
- 7. WORLD'S FIRST PAYMENT LINK ON CLOUD
- 8. COMMISSIONING OF ITER'S FIRST PHASE
- 9. INDIA IN INTERNATIONAL IP INDEX
- 10. INTERNATIONAL MOTHER LANGUAGE DAY 2023

QUESTIONS IN LAST YEAR (2022) PT FROM MY NOTES SCAN QR CODE

