

July - 15

## TNPSC BITS

- ❖ Coimbatore Junction is the only non-divisional terminus station in the Southern Railway to surpass earnings of even a few divisional headquarters stations.
- ❖ ONGC becomes the first Central Public Sector Enterprise (CPSE) in India to receive certification for its Anti-Bribery Management System.

## NATIONAL

### Third extension of ED Director



**Apex court affirms 2021 amendments**

**WHAT THE TOP COURT ORDERED**  
SC quashed tenure extension given to ED chief Sanjay Kumar Mishra in 2021 and 2022.

**WHY?** It held that the extension was 'illegal' as it came after SC's September 2021 order which had specifically issued a mandamus that no further extension be granted to him as the apex court's writ cannot be nullified using a law.

**WHAT NOW:** Mishra can continue in office till July 31 to initiate a "smooth transition"

**CENTRE'S AMENDMENTS**  
Govt had said that amendments to the Central Vigilance Commission Act and the Delhi Special Police Establishment Act empowered it to give ED and CBI chiefs a max total tenure of 5 years.

**WHAT SC SAID:** While SC found no flaws with the amendments (meaning Centre's power to extend tenure of ED director or CBI chief is valid), it noted they can not be used to defend Mishra's extension in this instance.

- ❖ The Supreme Court quashed the Centre's order of granting a third extension to Enforcement Director (ED) Director Sanjay Kumar Mishra.
- ❖ It also affirmed the amendments in the DSPE and CVC Act, giving the Centre the power to extend the tenure of a CBI chief and ED director by a possible 3 years beyond their mandatory two-year term.
- ❖ Extension can be granted to high-level officials in the public interest and with reasons in writing.
- ❖ Mishra was initially appointed as ED director for a two-year tenure ending November 2020.
- ❖ Before his tenure came to an end, he was granted a one-year extension which was challenged in the Supreme Court by an NGO, Common Cause.
- ❖ By a judgment in September 2021, the court allowed the extension noticing that the tenure was coming to an end in about two months.

- ❖ However, the judgment was clear that no further extension was to be granted to Mishra.
- ❖ On November 15, 2021, the Centre brought amendments to the CVC Act and the DSPE Act.
- ❖ It allowed the government to extend the tenure of CBI, ED chiefs for a period of three years beyond their two-year tenure by granting extensions of one-year each.
- ❖ These amendments were challenged in a clutch of petitions before the Supreme Court.
- ❖ Under the challenged amendment, Mishra got an extension from November 2021 to November 2022.
- ❖ Last November, his tenure was further extended by a notification till November 2023.

## INTERNATIONAL

### Netherlands' apology on slavery



- ❖ The year 2023 marks the 150th anniversary of the abolishment of slavery in Suriname and in Dutch colonies in the Caribbean in 1873.
- ❖ The king of the Netherlands, Willem-Alexander, has apologised for his country's role in the slavery of colonised people, beginning in the 16th Century.

- ❖ The Dutch were involved themselves in the transatlantic slave trade like other European nations.
- ❖ Between 1596 and 1829, the Dutch transported about half a million Africans across the Atlantic.
- ❖ More than 600,000 people were transported across the Atlantic Ocean from Africa aboard Dutch ships, to be sold as slaves or put to work on plantations.
- ❖ Around 75,000 did not survive the crossing.
- ❖ It found that between 1945 and 1949, the Dutch used “excessive violence” in Indonesia after World War 2.

### **Zero Waste Dining**

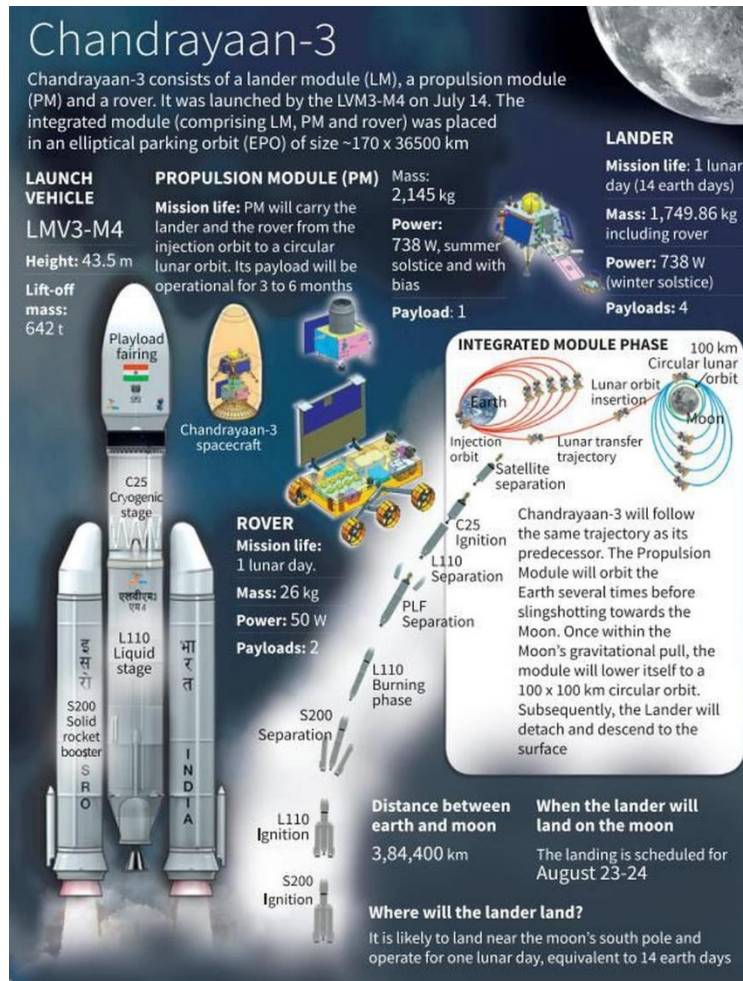


- ❖ Restaurants and bars around the world are embracing zero-waste dining and changing the way diners approach sustainability.
- ❖ RE- in Sydney, Australia, is the world’s first permanent “waste-free” regenerative cocktail bar and restaurant.

- ❖ RE- uses upcycled decor elements and serves cocktails and food made from repurposed ingredients.
- ❖ It includes coffee liquor made from recycled coffee grounds and banana peel syrup in their Old Fashioned.
- ❖ The restaurant focuses on reducing food waste and promoting sustainability.

## SCIENCE AND TECHNOLOGY

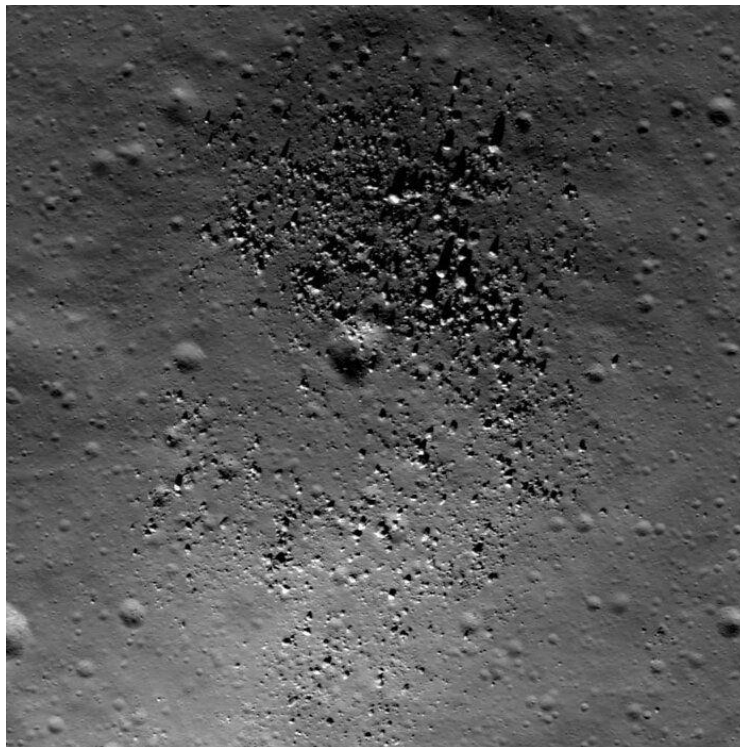
### Chandrayaan 3 mission



- ❖ The Chandrayaan 3 mission by the Indian Space Research Organisation (ISRO) launched on July 14, 2023 from the Satish Dhawan Space Centre, Sriharikota.
- ❖ The spacecraft was launched onboard the Launch Vehicle Mark 3 (LVM 3) rocket.
- ❖ The lunar mission is a follow-up to the Chandrayaan 2, launched in September 2019.

- ❖ The Chandrayaan 3 mission plans to demonstrate end-to-end capability in safe landing and roving on the lunar surface.
- ❖ Objectives are:
  - To demonstrate safe and soft landing on the lunar surface
  - To demonstrate rover roving on the moon and
  - To conduct in-situ scientific experiments.
- ❖ After reaching the lunar surface, the lander, called 'Vikram' will deploy its four scientific payloads.
- ❖ They aimed to study the moon's surface temperature and subterranean characteristics.
- ❖ The module has an instrument called the 'Spectro-polarimetry of Habitable Planet Earth' (SHAPE) will collect data about the light emitted and reflected by the earth.
- ❖ The rover, called 'Pragyan', will study the lunar surface using chemical and visual tests as it moves around.

### **Granite on Moon**



- ❖ A gigantic chunk of old granite that was hidden beneath the surface of the Moon has been discovered by scientists.



- ❖ The 50-km-diameter granitic system discovered below the far-side feature known as the Compton-Belkovich Volcanic Complex.
- ❖ It was likely to formed from the cooling of molten lava that fed a volcano or volcanoes that erupted approximately 3.5 billion years ago.
- ❖ Granite has high concentrations of radioactive elements like uranium and thorium compared to other rocks in the lunar crust.

### **PBW RS1 wheat variety**

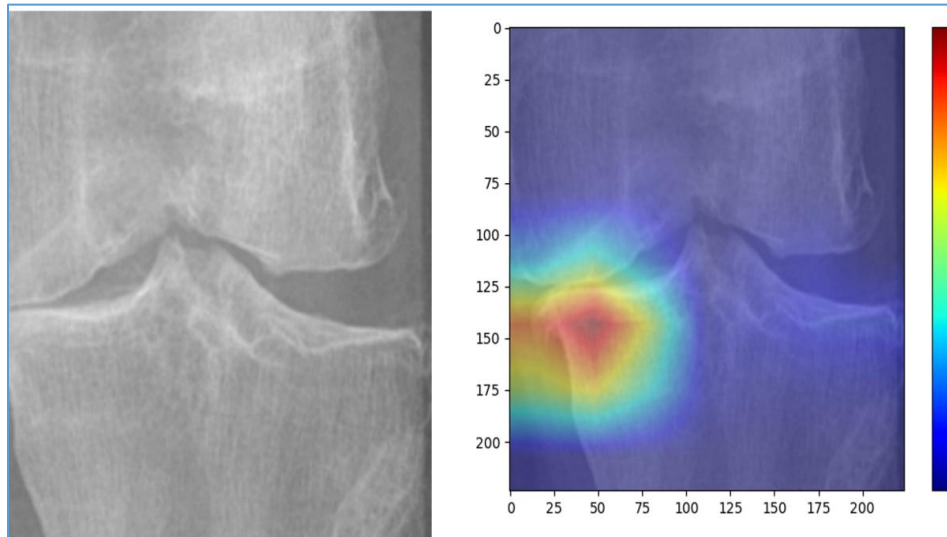
<b>LOWER GLYCEMIC INDEX</b>				
GI is value of how quickly foods can increase blood sugar				
	<b>New variety</b>	<b>Checks*</b>		
	<b>PBW RS1</b>	<b>PBW 550</b>	<b>PBW 725</b>	<b>PBW 766</b>
<b>Chapati</b>	43.1	66.7	66.9	65.3
<b>Atta biscuits</b>	32.4	51.4	54.6	52.2

*\*Comparison with other varieties*

- ❖ The Ludhiana-based university has come up with a new wheat variety called PBW RS1.
- ❖ It contains high levels of amylose starch.
- ❖ RS is short for resistant starch.
- ❖ It is known to reduce the risk of type-2 diabetes and cardiovascular diseases.
- ❖ The consumption of chapatis made from this wheat won't lead to an immediate and rapid rise in glucose levels.
- ❖ High-amylose starch has unique functional properties and nutritional values in food applications.
- ❖ This form of starch is resistant to enzymatic digestion in the gastrointestinal tract and contains a higher fraction of resistant starch.
- ❖ The high amylose and resistant starch make sure that glucose is released more slowly into the bloodstream.
- ❖ This slow digest also increases a feeling of satiety.

- ❖ The new wheat has a total starch content which is almost equivalent to 66-70 per cent in other wheat varieties.
- ❖ However, it has 30.3 per cent resistant starch content as against only 7.5-10 per cent for other varieties, including PBW 550, PBW 725, HD 3086 and PBW 766.
- ❖ The field trials have been recorded at 43.18 quintals per hectare.

### **Osteo HRNet**



- ❖ IIT Guwahati researchers develop AI-based model framework called Osteo HRNet to predict knee osteoarthritis from X-ray images.
- ❖ This AI-based model can be used to detect the severity level of the disease and assist medical practitioners remotely for a more accurate diagnosis.
- ❖ Knee osteoarthritis has a prevalence of 28 per cent in the country and there is no possible cure for the condition.
- ❖ Total joint replacement at an advanced stage is the only possible solution.
- ❖ Hence an early diagnosis is essential for pain management and behavioral corrections.

### **First regional AI news anchor 'Lisa'**

- ❖ An Odia-based news station Odisha TV introduced its first AI news anchor to the world, Named Lisa.
- ❖ Lisa is capable of speaking multiple languages and can present news in Odia, English, and other languages.

- ❖ Earlier, in March, the India Today Group also introduced their first AI news anchor, Sona.



## **PERSONALITIES, AWARDS, AND EVENTS**

### **Forbes' 100 richest self-made women list**



- ❖ Four Indian-origin women, including Jayshree Ullal and Indra Nooyi, have made it to Forbes' list of America's 100 most successful self-made women.
- ❖ Jayshree Ullal, president and CEO of computer networking firm Arista Networks, ranked 15<sup>th</sup> on the list.
- ❖ Neerja Sethi, co-founder of Syntel has been ranked 25th on the list.
- ❖ Narkehe, co-founder of cloud company Confluent, is ranked 50th on the list.
- ❖ The former chair and CEO of PepsiCo Indra Nooyi ranked 77th on the Forbes list.



- ❖ Building supply distributor Diane Hendricks, retained the top spot for the sixth year in a row.

## IMPORTANT DAYS

### **Bastille Day 2023 - July 14**

- ❖ French National Day (Bastille Day) commemorates the Storming of the Bastille Prison in 1789 during the French Revolution.
- ❖ The Indian PM is the Guest of Honour at the Bastille Day Parade in France.
- ❖ 269-member Indian tri-services contingent will participate in the parade.
- ❖ Indian Air Force contingent led by Sindhu Reddy as the Squadron Leader.
- ❖ This year marks the 25th anniversary of our strategic partnership.

