

### NEWSPAPER HIGHLIGHT

700 likely value of the vote of a Member of Parliament in the presidential polls scheduled in July. The value came down from 708 due to the absence of a Legislative Assembly in J&K, officials said on Saturday. It is not for the first time that legislators of a State assembly will not be able to participate in the presidential elections. In 1974, the 182 member Gujarat Assembly was dissolved in March following the Navnirman Andolan and could not be constituted before the presidential election.

DNA samples collected from two human skeletons unearthed at a necropolis of a Harappan era city site in Haryana have been sent for scientific examination, the outcome of which might tell about the ancestry and food habits of people who lived in the Rakhigarhi region thousands of years ago. The skeletons of two women were found a couple of months ago at mound number 7 (named RGR 7 by the Archaeological Survey of India or ASI), believed to be nearly 5,000 years old. Pots and other artefacts were also found buried next to them in a pit, part of the funerary rituals back in the Harappan Civilisation era.

According to a 2021 report by the Ministry of Earth Sciences, 'Assessment of Climate Change over the Indian Region', all India averaged frequency of summer heatwaves is expected to rise to about 2.5 events per season by the mid 21st century, with a further slight rise to about 3.0 events by the end of 21st century under current trajectory of greenhouse gas emission.

Hearing loss due to aging, noise and certain cancer therapy drugs and antibiotics has been irreversible because scientists have not been able to reprogramme existing cells to develop into the outer and inner ear sensory cells — essential for hearing — once they die. The Northwestern Medicine scientists have now discovered a single master gene that programmes ear hair cells into either outer or inner ones, overcoming a major hurdle that had prevented the development of these cells to restore hearing.

An object that astronomers thought was a distant galaxy has now been discovered as the brightest extragalactic pulsar ever seen. Pulsars are

### SYSTEM FOR PENSION ADMINISTRATION(RAKSHA)

1. Recently, the Ministry of Defence (MoD) introduced a portal, System for Pension Administration (Raksha) (SPARSH), to directly transfer pension to the pensioners. SPARSH is implemented for meeting the pension sanction and disbursement requirements for Armed Forces viz. Army, Navy, Air Force and Defence Civilians.

**2. This web-based system processes pension claims and credits pension directly into bank accounts of defence pensioners without relying on any external intermediary.**

The receipt of pension to the pensioners is usually done by all banks acting as Pension Disbursing Agencies. **3.** The system would cater to all activities of the pension cycle namely, Initiation and Sanction; Disbursement; Revision; and Service and Grievance Request Management.

### PM MITRA PARKS SCHEME

1. A National Conference on PM MITRA Parks Scheme was organized by Ministry of Textiles. The PM Mega Integrated Textile Regions and Apparel Park (PM MITRA) Parks Scheme is implemented by the Ministry of Textiles.

2. The PM MITRA Parks are aimed at helping India to achieve the UN Sustainable Development Goal 9: "Build resilient infrastructure, promote sustainable industrialization and foster innovation". These Parks will have world-class industrial infrastructure which would attract cutting age technology and boost FDI and local investment in the textiles sector.

3. The PM MITRA scheme is Inspired by the 5F vision of Prime Minister - Farm to Fibre to Factory to Fashion to Foreign. PM MITRA Parks will offer an opportunity to create an integrated textiles value chain right from spinning, weaving, processing/dyeing and printing to garment manufacturing at 1 location. It is intended to generate ~1 lakh direct employment and 2 lakh indirect employment per park. Sites for PM MITRA Parks will be selected by a Challenge Method based on objective criteria.

### HATHI MITRAS

1. Hathi Mitras or 'friends of elephants' are the village residents of Chhattisgarh

dedicatedly track pachyderm movements to help prevent casualties and crop loss. These are the residents of villages affected by human-elephant conflict engaged by the state forest department to track elephants, warn people about their movement, etc.

2. Their services are important as Chhattisgarh has emerged as a new battleground for human-elephant conflict. Today, elephants enter Chhattisgarh from Odisha and Jharkhand in search of suitable habitats.

3. Hence, the central and northern parts of the state witness an escalation of casualties and crop damages.

### NATIONAL ANTI-PROFITEERING AUTHORITY

1. The National Anti-Profiteering Authority (NAA) is India's anti-profiteering watchdog. **The NAA is the statutory mechanism under GST law to check the unfair profiteering activities by the registered suppliers under GST law.**

2. The Authority's core function is to ensure that the commensurate benefits of the reduction in GST rates on goods and services done by the GST Council and of the Input tax credit are passed on to the recipients by way of commensurate reduction in the prices by the suppliers. The formation of NAA comes in the background of rate-reduction of large number of items by the GST Council.

3. At the meeting, the Council reduced rates of more than 200 items including goods and services. The Authority's main function is to ensure that the registered suppliers under GST law are not profiteering by charging higher prices from recipients in the name of GST.

4. The legal mandate of NAA is to examine and check such profiteering activities and recommend punitive actions including

among the few celestial objects that emit circular polarised light. So, the scientists used a computer programme that filters out other kinds of light. After the filtering process, the team could then spot the 'hidden' pulsar.

Researchers are calling on the United States government to issue clearer guidance about the experiments that it might fund to make pathogens more transmissible or deadly. Manipulating viruses help answer valid and important questions, but policymakers are yet to determine when the risk of creating a deadly pathogen outweighs the benefits.

Having a vertebral column endows vertebrates with many similar characteristics and one of these is a bilateral or left-right symmetry. For instance, if we draw an imaginary line dividing a vertebrate's body from head to tail through the centre, we will see symmetrically placed eyes, limbs, etc.

In January, a person in the United States became the first recipient of a pigheart transplant. He died two months later, and doctors now say the genetically edited pig heart carried a porcine virus that could have contributed to his death. The main concern is that the virus can damage the heart.

As many as 60 people were feared to have been killed in the Russian bombing of a village school in the eastern Ukrainian region of Luhansk, the regional governor said. Governor said Russian forces dropped a bomb on Saturday afternoon on the school in Bilohorivka where about 90 people were sheltering, causing a fire that engulfed the building.

Ahead of Home Minister's tour of Assam from Monday, various groups in the Northeast have threatened to resume their agitation against the CAA if the Centre tries to implement it.

The U.K., U.S. and Irish governments have urged rival parties in Northern Ireland to come together to resurrect its power sharing government after Irish nationalist party Sinn Fein scored a historic victory to become the biggest party in Northern Ireland's Assembly. Sinn Fein, which seeks union with Ireland, won 27 seats.

Syrian President Bashar Assad met with Iranian leaders in Tehran, Iranian and Syrian media reported, marking his second trip to major wartime ally Iran since Syria's civil war erupted in 2011.

cancellation of Registration.

### **SOFIA TELESCOPE**

1.The NASA has decided to pull the plug on the SOFIA Telescope - by September 30, 2022. The telescope of the Stratospheric Observatory for Infrared Astronomy (SOFIA) mission is the world's largest flying telescope. The SOFIA mission is the collaboration between National Aeronautics and Space Administration (NASA) and the German Space Agency (DLR).

2.SOFIA is a 2.7-meter infrared telescope sitting inside a Boeing 747SP airplane, flying at an altitude of 38,000-45,000 feet above the surface. Since its inception in 2014, SOFIA has been collecting data to understand star birth and death and the formation of new solar systems. It has also been keeping a close eye on planets, comets and asteroids in our solar system, nebulae and galaxies, celestial magnetic fields and black holes at the centre of galaxies.

3.The SOFIA is the only instrument after Herschel that has the capability of observing singly ionized carbon, which is now understood to be an important tracer of the molecular gas in the local universe.

4.**Important discoveries-In 2020, NASA announced that SOFIA discovered water molecules (H<sub>2</sub>O) on the sun-facing side of the Moon.The site is the Clavius Crater, located in the Moon's southern hemisphere.** India's Chandrayaan-1 mission and NASA's ground-based Infrared Telescope Facility found evidence of hydration in the sunnier regions, they couldn't confirm whether hydrogen was in the form of H<sub>2</sub>O or OH. In 2019, SOFIA also discovered helium hydride - the first molecule formed in the Universe almost 14 billion years ago.

5.Many crucial processes in the history of the universe leave their signatures in the far-infrared and SOFIA is the only observatory that can probe this important wavelength range for the next decade. They can guide the flow of gas and affect the quantity and size of the densest pockets of gas that will eventually collapse to form stars.

### **INDIA'S BID FOR PERMANENT MEMBERSHIP IN REFORMED UNSC, NSG**

1.Prelims: International Relations/Institutions. Mains: Important International institutions, agencies and fora, their structure, mandate. Context: France has reiterated its commitment to support India's bid for permanent membership in a reformed UN Security Council and New Delhi's entry into the Nuclear Suppliers' Group. The demand has been supported by: Four out of the five permanent members of the UN Security Council have bilaterally expressed support for India's candidature.

2.**India is the founding member of the UN. India, till now has been elected for multiple terms for a two-year non-permanent member seat. India has almost twice the number of peacekeepers deployed on the ground than by P5 countries.** India being the largest democracy and second-most populous country (soon to become most populous) in the world, are the primary reasons for it to be granted permanent membership in UNSC.

3.India's acquired status of a Nuclear Weapons State (NWS) in May 1998 also makes India a natural claimant as a permanent member similar to the existing permanent members who are all Nuclear Weapon States. India is the undisputed leader of the Third world countries, as reflected by its leadership role in the Non-Aligned Movement.

4.The 48-member NSG is an elite club of countries that deals with the trade-in nuclear technology and fissile materials besides contributing to the non-proliferation of nuclear weapons. Brought in 1974- in response to the Indian nuclear test (Smiling Buddha). It is a Group of nuclear supplier countries that seek to prevent nuclear proliferation by controlling the export of materials, equipment and technology that can be used to manufacture nuclear weapons. The NSG first met in November 1975 in London, and is thus popularly referred to as the "London Club". Its guidelines are not binding.

### **ROE V. WADE, WHICH WAS IN NEWS IS A**

1.Landmark judgment delivered by the US Supreme Court in 1973. It legalised abortion in the country. Why in the News? According to reports, the US Supreme Court is set to overturn the judgment.

2.Since there is no federal law protecting the right to abortion in the US, the overturning of Roe would leave abortion laws entirely

**John Lee, a hardline security chief who oversaw a crackdown on Hong Kong's prodemocracy movement, was elected as the city's next leader on Sunday in a vote cast by a largely pro-Beijing committee.**

**Prime Minister Narendra Modi is scheduled to dedicate to the nation the prestigious gas based urea manufacturing plant of Ramagundam Fertilizers and Chemicals Limited (RFCL) at Ramagundam this month end.**

up to the states. Conservative states could bring back restrictive laws that prohibited abortions before the Supreme Court set the foetal viability standard in 1973.

**3.** Pregnancy Termination in India: India's Medical Termination of Pregnancy Act, 1971 allows abortion until 20 weeks of pregnancy. Through an amendment in 2021, the ceiling for abortions was raised to 24 weeks, but only for special categories of pregnant women such as rape or incest survivors, that too, with the approval of two registered doctors.

**4.** In case of foetal disability, there is no limit to the timeline for abortion, but that is allowed by a medical board of specialist doctors set up by the governments of states and union territories.