

May - 15

## TNPSC BITS

- ❖ The Indian Army is set to receive the first Hermes-900 Starliner drone soon.
  - The Hermes-900 known as the Drishti-10 drone is being supplied to Indian Army and Navy by Adani Defence Systems.
- ❖ The United Nations General Assembly has overwhelmingly voted to support a Palestinian bid to become a full UN member by recognising it as qualified to join and recommending the UN Security Council.

## NATIONAL

### High-Yielding Wheat Variety - HD 3386

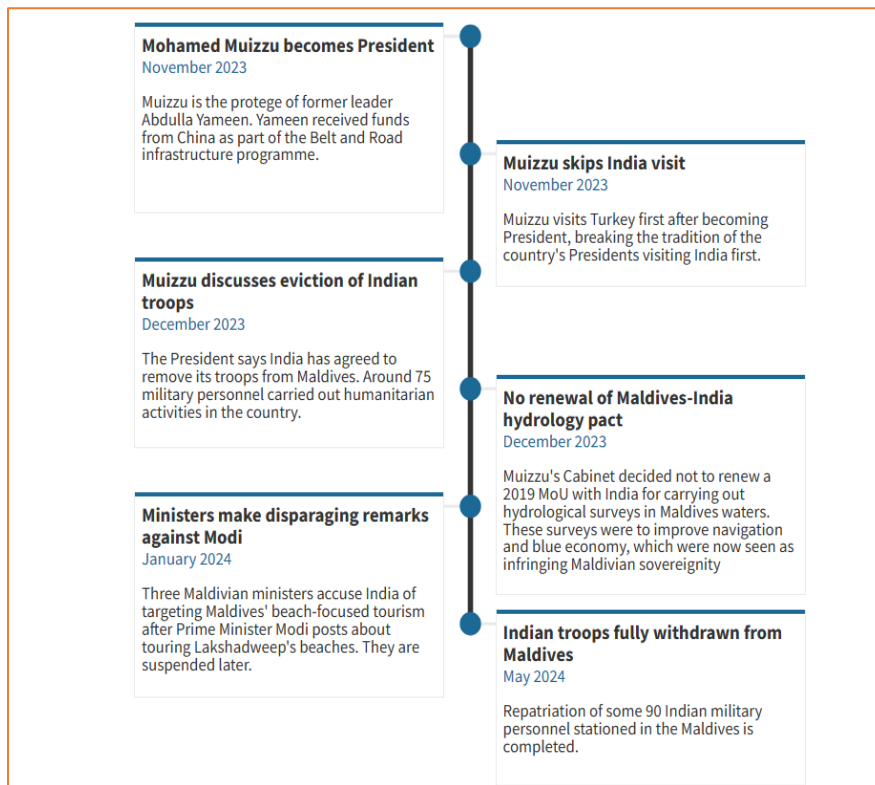


- ❖ The Indian Agricultural Research Institute has introduced a new high yielding variety of wheat seed variety.
- ❖ The new seed variant – HD 3386 was recently approved by the central seed committee.
- ❖ It is resistant to yellow, and leaf rust diseases mostly reported in the key wheat growing region of northwest region – Punjab, Haryana, Uttar Pradesh and Rajasthan.
- ❖ It is aimed at replacing the currently used seed HD2967 also developed by IARI in 2010.

- ❖ In terms of yield, the existing variety has productivity of around 22 quintal/acre while the new variant has productivity of 25 quintal/acre.

### **Military Withdrawal from Maldives**

- ❖ India and the Maldives had agreed to withdraw the remaining Indian troops before May 10.
- ❖ India has withdrawn all its soldiers from the Maldives ahead of the deadline set by President.
- ❖ The Indian military personnel were stationed in the Maldives to operate and maintain two helicopters and Dornier aircraft India gifted earlier.
- ❖ Maldives' new President Mohamed Muizzu's famous "India Out" campaign aimed to reduce Indian influence in the country.



## **INTERNATIONAL**

### **70<sup>th</sup> anniversary of the Hague Convention**

- ❖ UNESCO is commemorating the 70th anniversary of the Hague Convention for the Protection of Cultural Property in Armed Conflict.

- ❖ It was created on the 14 May 1954.
- ❖ It is also the 25th Anniversary of its Second Protocol, which was opened for signature on 24 March 1999.
- ❖ It is the first and the most comprehensive multilateral treaty dedicated exclusively to the protection of cultural heritage in times of peace as well as during an armed conflict.
- ❖ In pursuance of this, the Blue Shield, formerly the International Committee of the Blue Shield was founded in 1996.
- ❖ The Blue Shield network is often referred to as the cultural equivalent of the Red Cross.
- ❖ India is party to Hague Convention 1954.

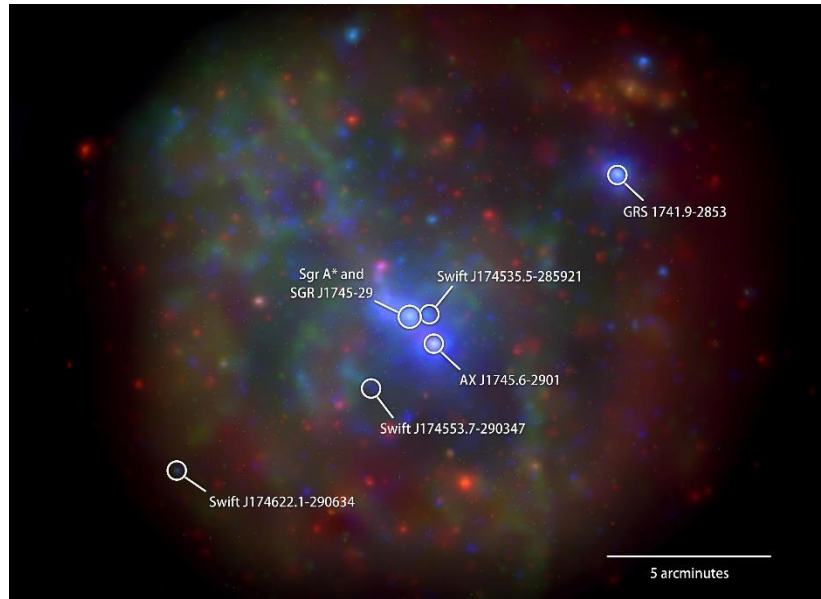


## **SCIENCE AND TECHNOLOGY**

### **Swift Spin of Sagittarius A**

- ❖ The Recent research unveiled that Sagittarius A\*, the colossal black hole at the galaxy's core, spins rapidly, reshaping space-time around it.

- ❖ The Space-time is an amalgamation of the one-dimensional time and three-dimensional space.
- ❖ It functions as a continuum, altering and curving under the influence of massive celestial bodies.
- ❖ This black hole is situated 26,000 light-years away from Earth.



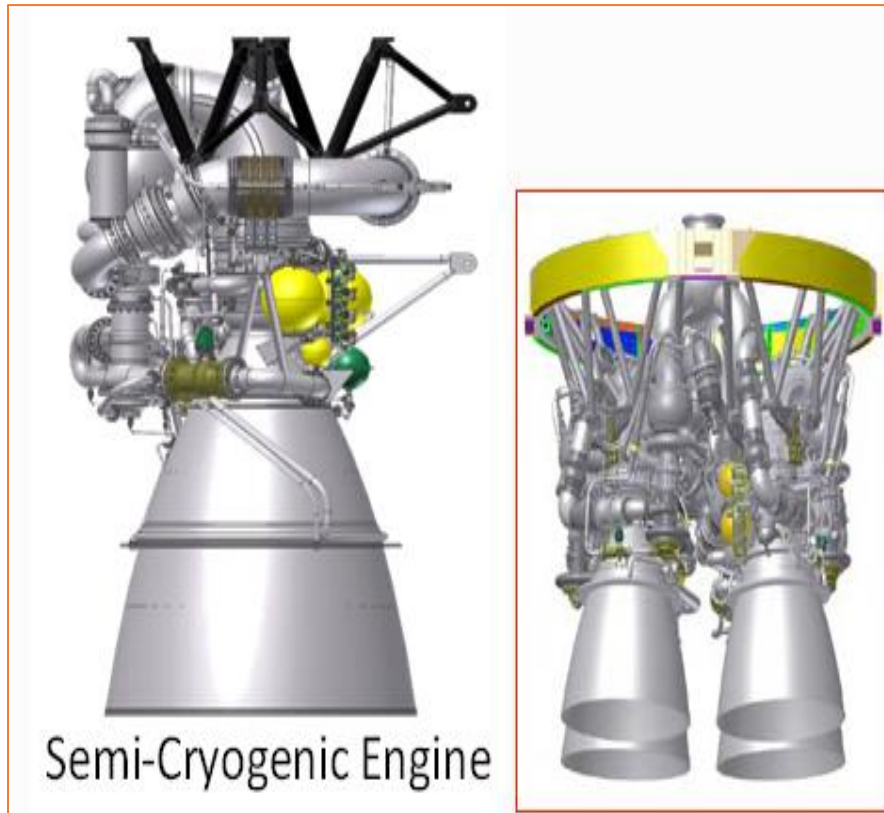
## **Nancy Grace Roman telescope**



- ❖ NASA's upcoming Nancy Grace Roman Space Telescope is poised to embark on a groundbreaking mission.

- ❖ It will start hunting for primordial black holes dating back billions of years to the Big Bang.
- ❖ The mission is set to launch in late 2026.
- ❖ "Primordial black holes," if proven to exist, could challenge our understanding of the universe's early epochs some 13.8 billion years ago.
- ❖ Hawking's theory of Hawking radiation proposes that black hole "leak" radiation and eventually evaporate.
- ❖ For primordial black holes to survive billions of years without evaporating, they must defy Hawking's predictions.

### **Semi-Cryogenic Engine**

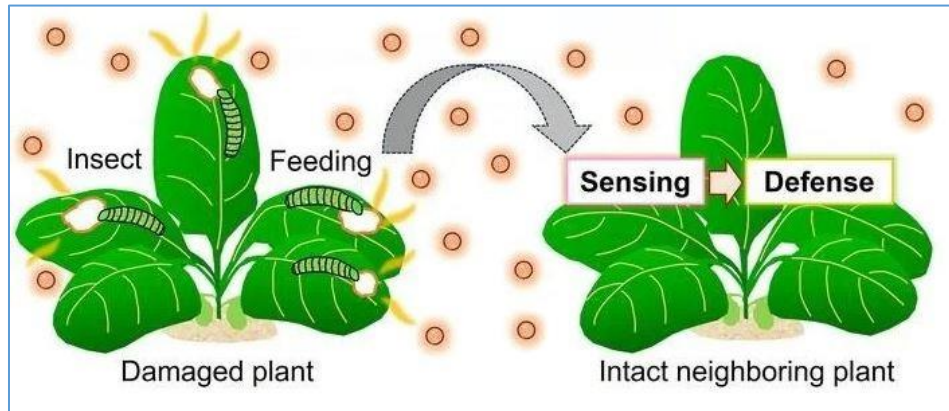


- ❖ ISRO conducted the first ignition trial for SCE-200 (semi-cryogenic engine-200) at the semi-cryo integrated engine test facility (SIET) in Mahendragiri.
- ❖ Semi-cryogenic engine ignition is achieved using a start fuel ampule which uses a combination of Triethylaluminium and Triethylboron.
- ❖ This is used for the first time in ISRO in the 2000 kN semi-cryogenic engine.
- ❖ The SCE-200 is a 2MN thrust class liquid rocket engine developed by ISRO's Liquid Propulsion Systems Centre (LPSC).

- ❖ This next generation rocket engine is designed to enhance the payload capability of ISRO's Launch Vehicle Mark-III launcher and other future launch vehicles.

## ENVIRONMENT

### Green Leaf Volatiles



- ❖ Recently, for the first time, scientists visualise the plants sensing compounds called green leaf volatiles (GLVs) released by other plants in danger.
- ❖ The Plants have two major defence mechanisms, involving a chain of molecular reactions.
- ❖ The reactions are triggered when a plant is damaged and GLVs are released as by-products.
- ❖ The Scientists are considering harnessing this process to fight agricultural pests without having to use pesticides.
- ❖ Volatiles are elements or compounds that change from solid or liquid state into vapour at relatively low temperatures.

### Genome of *Lepidopygopsis typus*

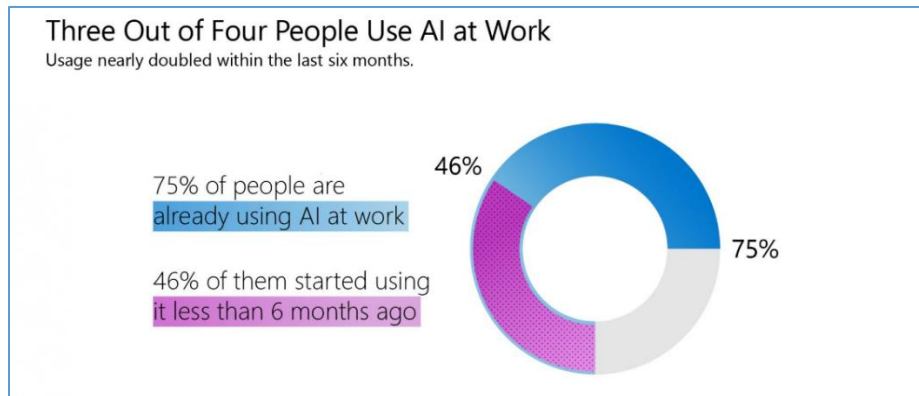
- ❖ Scientists have decoded for the first time the mitochondrial genome of *Lepidopygopsis typus*.
- ❖ It is a unique freshwater fish species of the Western Ghats.
- ❖ It is known to occur only inside Kerala's Periyar Tiger Reserve.
- ❖ *Lepidopygopsis typus* is an example of a monotypic species (a genus having only a single species).
- ❖ The purpose of mitogenome sequencing is to help understand the evolution of a species and how different they are from its relatives.

- ❖ *Lepidopygopsis typus* is also a species that has been listed as ‘endangered’ on the IUCN Red List.



## REPORTS AND INDICES

### 2024 Work Trend Index



- ❖ The 2024 Work Trend Index Annual Report is released by Microsoft and LinkedIn.
- ❖ Artificial Intelligence (AI) is influencing the way people work, lead and hire around the world.
- ❖ In the last six months, the use of Artificial Intelligence has “nearly doubled.”
- ❖ While 79 per cent of leaders agree that “the AI adoption is critical to remain competitive”, 59 per cent “worry about quantifying the productivity gains of AI.”
- ❖ According to the report, 75 per cent of people are already using AI at work, while 46 per cent of them started using AI less than six months ago.

- ❖ From the employer's perspective, 66 per cent of leaders have admitted they would not hire someone without AI skills.

## STATES

### **Nerium oleander – Kerala**



- ❖ After the death of a 24-year-old woman, two Kerala government-controlled temple boards, which together manage 2,500-odd temples in the state, have banned use of oleander (*arali*) flowers.
- ❖ Nerium oleander, commonly known as oleander or rosebay, is a plant cultivated worldwide in tropical, subtropical, and temperate regions.
- ❖ It is known for its drought tolerance; the shrub is often used for ornamental and landscaping purposes.
- ❖ There are different varieties of oleander, each with a flower of a different colour.
- ❖ An oil prepared from the root bark can be used to treat skin diseases.
- ❖ Even though it is prescribed in some ayurvedic formulations, oleander's toxicity has also long been recognised across the world.
- ❖ Moreover, ingestion or inhalation of smoke from burning oleander can also be intoxicating.

### **Tirthahalli Arecanut**

- ❖ The arecanut grown in the Tirthahalli region emerged as the best quality areca among the varieties grown in Karnataka.
- ❖ Tirthahalli is a traditionally areca growing area.





- ❖ The climate conditions also add value to the product.
- ❖ It will not be the same if it is taken out from the region and cultivated somewhere else.

