

August - 26

TNPSC BITS

- ❖ An advanced neurosurgery unit was inaugurated at Cauvery Hospital in Chennai. It will provide comprehensive and advanced neuro and spine treatment using 3D and robotic technology.
- ❖ India has contributed \$1 million to United Nation Special Purpose Trust Fund (SPTF) for Resident Coordinator System.

TAMIL NADU

New law colleges

- ❖ Recently three new Government law colleges at Salem, Namakkal and Theni were inaugurated by the Tamil Nadu State Government.
- ❖ These colleges will function under the Tamil Nadu Dr. Ambedkar Law University.
- ❖ With these 3 colleges, Tamil Nadu has 13 Government Law colleges in the state.

Special Grievance Redressal Scheme

- ❖ The Chief Minister Inaugurated Special Grievance Redressal Scheme at Vanavasi and Konganapuram of Edappadi assembly constituency in Salem district.
- ❖ The complaints would be digitally recorded and sent to the departments concerned, who will take action on the grievances within a month.
- ❖ While the scheme was inaugurated in Edappadi, it will be implemented in all the 234 assembly constituencies.

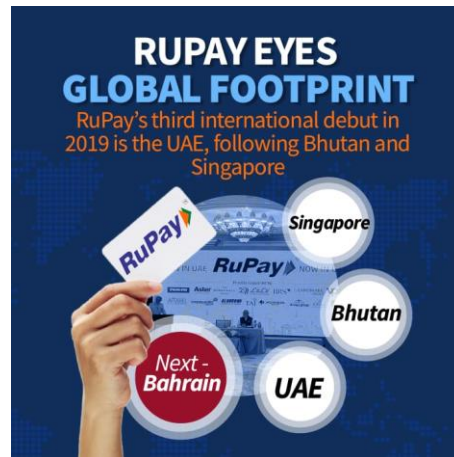
STAR 2.0

- ❖ The Chief Minister of Tamilnadu commissioned the extended services under Simplified and Transparent Administration of Registration - STAR 2.0 Project.
- ❖ It ensures quick, transparent and simplified registration process.
- ❖ It also eliminates middlemen.
- ❖ Through this, the documents relating to transfer of patta, will be sent to the revenue department offices once the document registration is over, thus saving time.

INTERNATIONAL

Modi in UAE

- ❖ The United Arab Emirates (UAE) honoured Prime Minister Narendra Modi with its highest civilian award the 'Order of Zayed'.
- ❖ The award in name of Sheikh Zayed bin Sultan Al Nahyan, founding father of UAE.
- ❖ UAE is India's 3rd-largest trade partner with an annual bilateral trade of about \$60 billion.
- ❖ UAE is also 4th-largest exporter of crude oil for India.
- ❖ Prime Minister launched the RuPay card here, making the UAE the first country in West Asia to initiate the Indian indigenous system of electronic payment.



About RuPay

- ❖ RuPay card scheme was launched in 2012 to fulfil the Reserve Bank of India's vision to have a domestic, open and multilateral system of payments.
- ❖ RuPay facilitates electronic payment at all Indian banks and financial institutions.
- ❖ India has already launched the RuPay card in Singapore and Bhutan.

WorldSkills event

- ❖ The 45th edition of a global skills competition called the WorldSkills, dubbed as 'Olympics of Skills', will begin in Kazan, Russia.
- ❖ It is the World's biggest international vocational skill competition.
- ❖ India, with a strong 48-member contingent, is one of the 63 countries participating in this event.

About

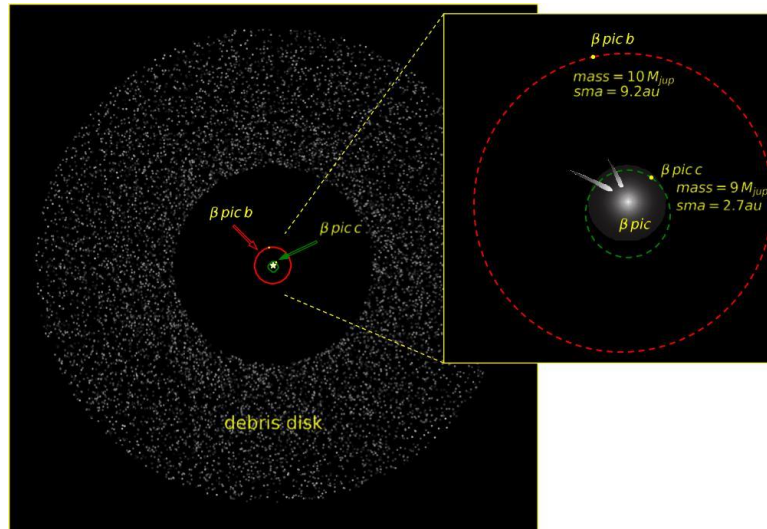
- ❖ WorldSkills organises the world championships of vocational skills.
- ❖ It is held every two years in different parts of the world.
- ❖ WorldSkills International, formerly known as the International Vocation Training Organisation (IVTO), was founded in the 1940s.
- ❖ It emerged from a desire to create new employment opportunities for young people in some of the economies that were devastated by the Second World War.
- ❖ currently it has 79 Member countries and regions.



SCIENCE AND TECHNOLOGY

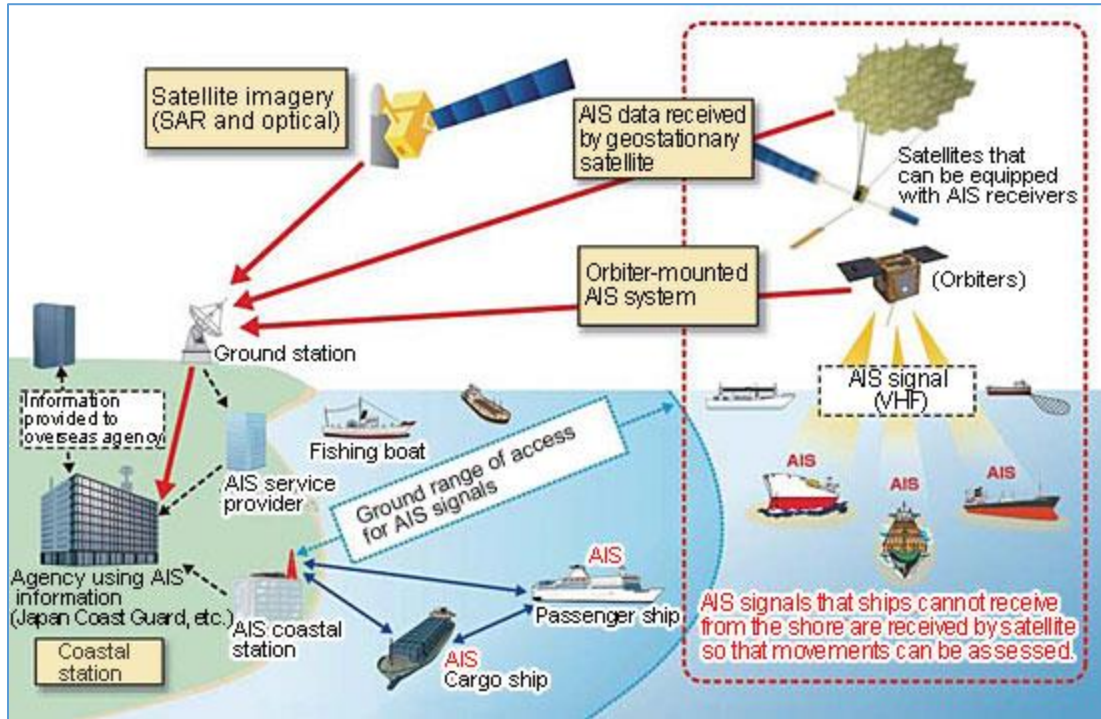
A New Planet for Beta Pictoris

- ❖ Astronomers have announced a new giant planet Beta Pictoris c for the Beta Pictoris system, 60 light-years from Earth.
- ❖ It is the second exoplanet orbiting young debris disk Beta Pictoris.
- ❖ It has a mass around 9 Jupiter masses, and orbits at around 2.7 au from Beta Pictoris.
- ❖ Beta Pictoris is located approximately 63 light-years away from Earth in the constellation of Pictor.
- ❖ Beta Pictoris c was detected indirectly through 10 years of observation of radial velocity data from the High Accuracy Radial Velocity Planet Searcher (HARPS) spectroscope.
- ❖ It is the project of the European Southern Observatory's ESO 3.6 m Telescope at La Silla Observatory in Chile.



World's first space-based automatic identification system (AIS)

- ❖ The world's first space-based automatic identification system (AIS) to track merchant ships on a real-time basis will be built and operated jointly by India and France.
- ❖ French space agency CNES and ISRO signed an agreement recently to start development and production of a constellation of satellites.
- ❖ The constellation carrying telecommunications (AIS), radar and optical remote-sensing instruments will be capable of monitoring ships in the Indian Ocean.
- ❖ The satellite-based AIS will significantly boost India's coastal surveillance mechanism and maritime security.
- ❖ The International Maritime Organization's International Convention for the Safety of Life at Sea (SOLAS) requires AIS to be fitted aboard all ships of 300 gross tonnage and upwards engaged on international voyages, cargo ships of 500 gross tonnage and upwards not engaged on international voyages and all passenger ships irrespective of the size.
- ❖ India has installed a Long-Range Identification and Tracking system (LRIT) for ships as well as a terrestrial-based AIS, but their range and functionality is limited.
- ❖ LRIT can predict the position of a ship every six hours or at least four times a day while the terrestrial-based AIS has a coverage range of 40 nautical miles.



IIT Jodhpur - hydrogen sensor

- ❖ A sensor that can detect hydrogen gas even when present at extremely low concentration of 1 part per million (ppm) has been developed by researchers at the Indian Institute of Technology (IIT) Jodhpur in collaboration with IIT Hyderabad.
- ❖ The sensor has 30% sensitivity to detect hydrogen at 1 ppm concentration and as high as 74% sensitivity when the concentration of the gas is 100 ppm.
- ❖ It takes about 25 seconds to detect hydrogen.
- ❖ Hydrogen gas is a pollution-free, renewable source of energy and is seen as a fuel of choice in the future.
- ❖ However, hydrogen is highly explosive and flammable in nature.
- ❖ It is a small molecule and can readily mix with air but detecting hydrogen gas leakage become quite difficult particularly as it is colourless and tasteless.
- ❖ So, a sensor that can detect it even when present at very low concentration becomes essential.

Waterproofing material using fly ash

- ❖ Researchers at the Indian Institute of Technology (IIT) Hyderabad have developed a cheap waterproofing material by coating fly ash.
- ❖ Fly ash is a waste by-product from coal-based thermal power plants, with stearic acid, which is a surfactant.
- ❖ While fly ash is extremely water-loving (hydrophilic), it turns into a highly water-repelling surface once coated with stearic acid.
- ❖ Fly ash varies in size from 100 nanometres to a few microns and can thus provide surfaces with different roughness based on the size of the particles chosen.
- ❖ Stearic acid-coated fly ash surface can be made to behave like rose petals or lotus leaves.

PERSONALITIES, AWARDS, AND EVENTS

Arun Jaitley passed away

- ❖ Former Finance Minister Arun Jaitley passed away on August 24 in New Delhi.
- ❖ Jaitley served as the Minister of Finance and Corporate Affairs of the Government of India from 2014 to 2019.
- ❖ From 2009 to 2014, he served as the Leader of the Opposition in the Rajya Sabha.
- ❖ He oversaw the introduction of the Goods and Services Tax which brought the country under one GST regime, demonetization, merger of Railway budget with general budget and introduction of Insolvency and Bankruptcy Code.

