

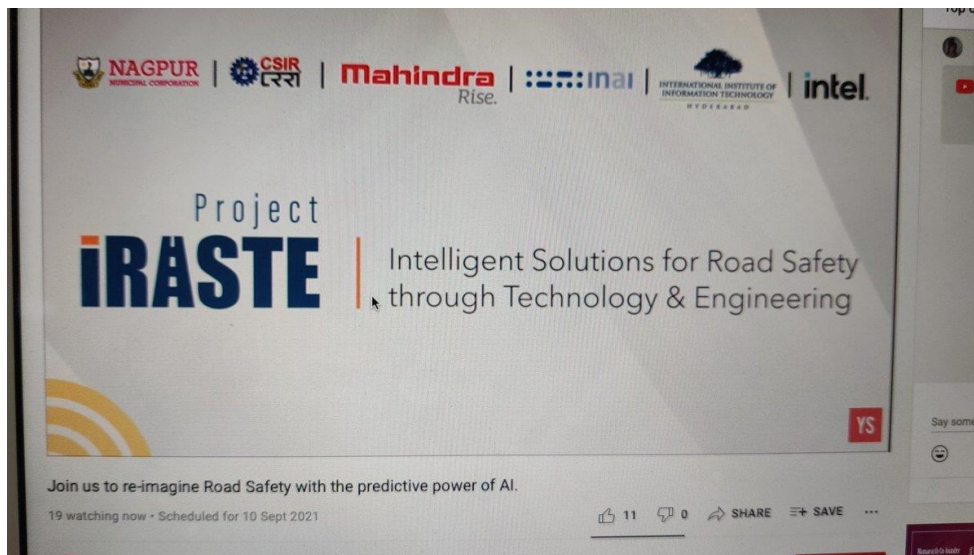
September - 20

TNPSC BITS

- ❖ The Union Cabinet has decided to allow 100% FDI (Foreign Direct Investment) through an automatic route in the telecom sector.
- ❖ The New Subject “Social Justice” will be introduced in the Madras University from the next academic year.
- ❖ A new short-term course “Annavin Tamiliyam” was introduced in the Tamilnadu Open University.
- ❖ The meeting on Heads of Tax Authorities of the BRICS countries was held under the Chairship of India.
 - It was held with the broad theme of “redefining business processes of tax administration amidst the challenges posed by COVID-19 and in the digital era”.
- ❖ The Union Cabinet of India has approved the Memorandum of Understanding (MoU) with Italy on Cooperation in the field of Disaster Risk Reduction and Management.

NATIONAL

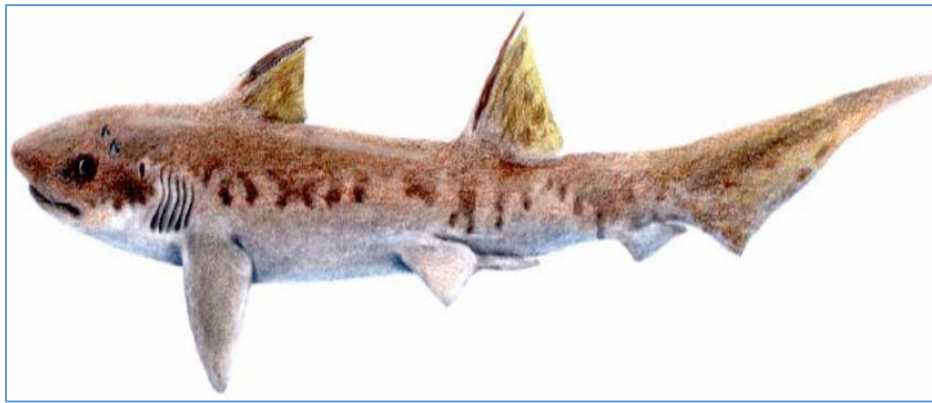
iRASTE



- ❖ Union Minister for Road Transport, Nitin Gadkari launched ‘iRASTE’.
- ❖ It is an Artificial Intelligence-powered project.

- ❖ The project aims to help reduce road accidents, understand the factors responsible for these events and come up with solutions to mitigate them.
- ❖ iRASTE stands for Intelligent Solutions for Road Safety through Technology and Engineering.
- ❖ It has been launched on a pilot basis in Nagpur, Maharashtra.
- ❖ It is launched jointly by the Centre, Intel, INAI, IIIT-Hyderabad, CSIR-CRRI (Central Road Research Institute), Mahindra & Mahindra and Nagpur Municipal Corporation (NMC).

Hybodont sharks



- ❖ These have been reported for the first time from the Jurassic rocks.
- ❖ The Jurassic period refers approximately, between 160 and 168 million-years-old.
- ❖ It is found at the Jaisalmer region of Rajasthan by a team of the Geological Survey of India (GSI).
- ❖ Hybodonts, an extinct group of sharks, was a dominant group of fishes in both marine and fluvial environments during the Triassic and early Jurassic time.
- ❖ They finally became extinct at the end of the Cretaceous time 65 million years ago.
- ❖ With this discovery, the genus Strophodus is discovered for the first time in the Indian subcontinent.
- ❖ It is only third such discovery from Asia after Japan and Thailand.
- ❖ The Geological Survey of India (GSI) was set up in 1851 primarily to find coal deposits for the Railways.
- ❖ Headquartered in Kolkata, GSI is an attached office to the Ministry of Mines.

INTERNATIONAL

First women head – UNCTAD



- ❖ Rebecca Grynspan will serve as the Secretary-General of UNCTAD (United Nations Conference on Trade and Development) for the period of four years from 2021.
- ❖ She became the first woman and Central American to hold such post.
- ❖ She is the former Vice-President of Costa Rica.
- ❖ She succeeded Dr. Mukhisa Kituyi.
- ❖ Kituyi was also the first Kenyan to head the UN trade agency from 2013 to 2021.

First all-tourist crew - “Earth circling trip”

- ❖ The SpaceX rocket blasted off from NASA’s Kennedy Space Centre.
- ❖ This crew included Chris Sembroski, Sian Proctor, Jared Isaacman and Hayley Arceneaux.
- ❖ The crew of the Inspiration4 is now officially in orbit, according to SpaceX.
- ❖ It is the first-ever orbital flight crewed entirely by tourists.
- ❖ The passengers will now spend three days aboard their 13-foot-wide Crew Dragon capsule in orbit at a 350-mile altitude.
- ❖ Dragon capsule is aimed for an altitude of 575 km, beyond the Hubble Space Telescope.

New in space tourism: Three rounds of Earth

SpaceX launched four civilians on a 3-day orbital excursion that many see as a harbinger of a new era in human spaceflight

FIRST ALL CIVILIAN SPACEFLIGHT

It was the first time a spacecraft circled Earth with an all-amateur crew and no professional astronauts. The flight was automated, but all crew members underwent 6-month extensive training.

JOURNEY TO SPACE

SPACECRAFT: SpaceX Crew Dragon, dubbed Resilience

LAUNCH LOCATION: Kennedy Space Center in Cape Canaveral, Florida

MISSION, INSPIRATION: The capsule's two men and two women are looking to spend three days going round and round the planet from an unusually high orbit — 160km higher than the International Space Station — before splashing down off in Florida this weekend.

MILLIONS SPENT

Isaeman, whose Shift4 Payments company is picking up the entire tab for the flight, won't say how many millions he paid. BUT Time magazine has put the ticket price for all four seats at \$200 mn

A SPACEX LEAP

Wednesday's launch marked the debut flight of SpaceX's new orbital tourism business for customers willing to pay a small fortune for the exhilaration - and bragging rights - of spaceflight.

"Some day NASA astronauts will be the exception, not the rule,"

—MASON PECK, former NASA chief technologist

CREW DRAGON: Three-day flight in orbit around the Earth

FARTHER THAN MOST: The capsule aims to orbit the Earth at an altitude of 158km, higher than ISS or Hubble Space Telescope -- the farthest any human will have flown since NASA's 1972 Apollo mission

CIRCLING THE EARTH: Crew Dragon will circle the globe once every 90 minutes

SPEED: Capsule will orbit at a speed of some 21,360 kph, or roughly 22 times the speed of sound

PASSENGERS

 JARED ISAACMAN, 38 (Mission Commander) American billionaire pilot who chartered the mission	 HAYLEY ARCENEAUX, 29 Cancer survivor, works as physician assistant at a children's hospital in Tennessee	 CHRIS SEMBROSKI, 42 Data engineer in Washington	 SIAN PROCTOR, 51 Community college educator in Tempe, Arizona
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RIVALS FAR BEHIND

Virgin Galactic and Blue Origin inaugurated their own private-astronaut services this summer, with their founding executives, Richard Branson and Jeff Bezos each going along for the ride. But those suborbital flights, lasting a matter of minutes, were short hops compared to Inspiration4.

420 KM INTERNATIONAL SPACE STATION

580 KM SPACEX INSPIRATION4

540 KM HUBBLE SPACE TELESCOPE

DOMES: Installed for this flight

DRAGON

Height: 33 m

SOLAR PANELS

Diameter: 4 m

FALCON 9 ROCKET HEIGHT: 70 M

TIME's 100 Most Influential People list



- ❖ TIME magazine has unveiled its annual list.
- ❖ The list is divided into six categories – Icons, Pioneers, Titans, Artists, Leaders and Innovators.
- ❖ Prime Minister Narendra Modi, West Bengal Chief Minister Mamata Banerjee and Serum Institute of India CEO Adar Poonawalla have been named among the list.
- ❖ Taliban Deputy PM Mullah Abdul Ghani Baradar also included into this listed.

- ❖ According to Time, India has had three pivotal leaders namely Jawaharlal Nehru, Indira Gandhi and Modi.

AUKUS

- ❖ United States, United Kingdom and Australia have announced this new partnership.
- ❖ It is a new trilateral security partnership for the Indo-Pacific region.
- ❖ The first project of AUKUS will be to help Australia acquire a nuclear-powered conventionally-armed submarine fleet.



ECONOMY

Army Chief's conclave

- ❖ The 8th edition of the Indian Army Chief's Conclave was organised at New Delhi.
- ❖ It is a gathering of serving and former Chiefs of Army Staff of the Indian Army.
- ❖ The invitation was extended to former Chiefs of the Nepali Army, who were also Chiefs of the Indian Army.



Notified Airport

- ❖ The Central Board of Indirect Taxes and Customs (CBIC) has declared Kushi nagar Airport as a Customs notified airport.
- ❖ This would also facilitate international passenger movements including that of Buddhist pilgrims.
- ❖ The Kushi nagar airport is an international airport in the state of Uttar Pradesh.

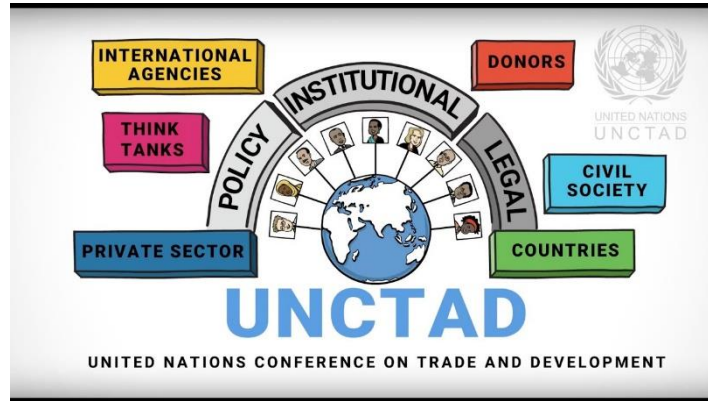
Equinox

Infosys
equinox

- ❖ Infosys launched Infosys Equinox to help the enterprises.
- ❖ It aims to securely deliver hyper-segmented, personalized omnichannel commerce experiences for B2B and B2C buyers.

Trade and Development report 2021

- ❖ The UNCTAD report has noted that India's GDP growth rate is expected to grow at 7.2% in 2021.
- ❖ With this growth rate, India will be the fastest growing economy after China
- ❖ In 2022, even with a slower growth rate of 6.7%, the country will still be the fastest-growing major economy.



ENVIRONMENT

India's first plant to capture CO₂



- ❖ Tata Steel has commissioned India's first carbon capture plant.
- ❖ It extracts CO₂ directly from the blast furnace gas, at its Jamshedpur Works.

- ❖ With this achievement, Tata Steel has become the country's first steel company to adopt such a carbon capture technology.
- ❖ The plant can capture 5 tonnes of CO₂ per day (5 tonne per day - TPD).
- ❖ This project has been executed with technological support from Carbon Clean, a global leader in low-cost CO₂ capture technology.

SPORTS

Virat Kohli



- ❖ Indian skipper Virat Kohli will step down as the T20 captain of the Indian cricket team after the men's T20 World Cup in Dubai in October 2021.
- ❖ He will remain the captain for the ODI and Test formats.

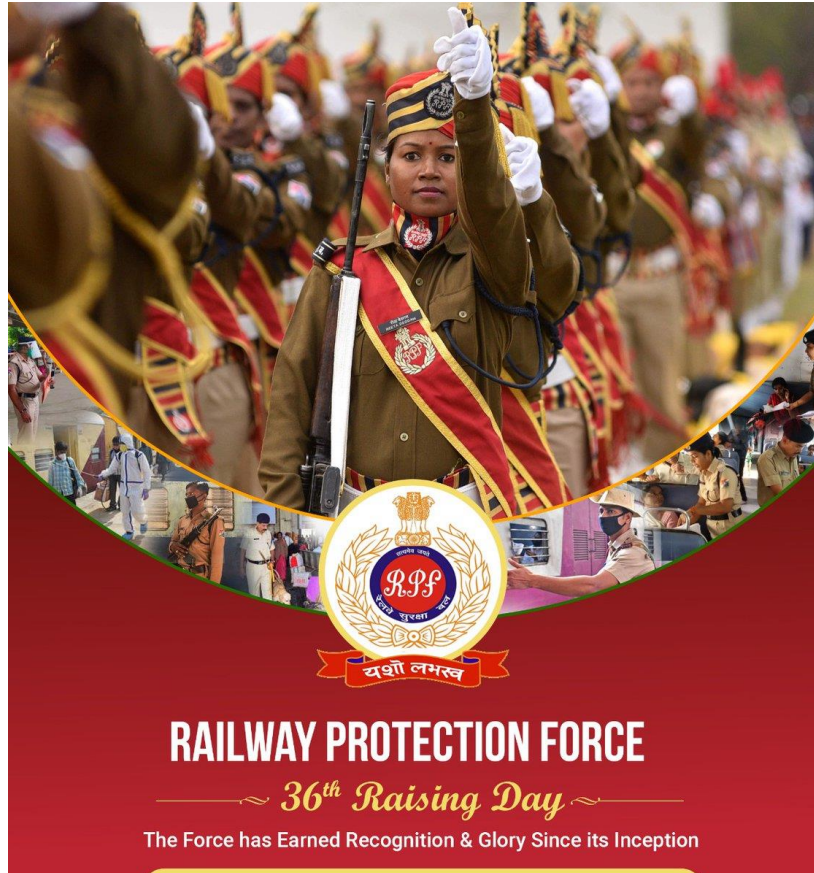
IMPORTANT DAYS

International Day of University Sport – 20 September

- ❖ The International University Sports Federation (FISU) proposed to UNESCO to internationally recognize a day dedicated to university sport in 2015.
- ❖ This date coincides in most countries around the world with the beginning of the academic year.
- ❖ It is also the date of the first Student World Championships in 1924.



Railway Protection Force (RPF) Day – 20 September





- ❖ It was celebrated to commemorate the conferring of the Armed Force status to RPF.
- ❖ It is on par with the other paramilitary forces of the Union of India on September 20, 1985.
- ❖ It is a security force, established by the Railway Protection Force Act, 1957.
- ❖ It is under the authority of Ministry of Railways.

