

October - 14

TNPSC BITS

- ❖ The Greater Chennai Corporation launched 24-hour helpline, 1913 to report instances of illegal dumping of construction debris, sewage, and waste in public spaces and waterbodies.
- ❖ INS Nirdeshak, the second in a series of four Survey Vessels (Large) was delivered to the Indian Navy.
- ❖ Bihar will develop Kaimur Wildlife Sanctuary as its second tiger reserve due to Valmiki Tiger Reserve reaching capacity.
- ❖ Hurricane Milton made landfall on the west coast of Florida (USA).
- ❖ The 100th birth anniversary of Immanuel Sekaran (October 9) was observed recently.
 - He participated in the freedom struggle through the quit India movement while he was just 18 and was murdered in 1957 when he was only 33.

TAMIL NADU

CyStar initiative



- ❖ IIT Madras has established the Centre for Cybersecurity, Trust, and Reliability (CyStar) to bolster India's cybersecurity capabilities.

- ❖ It will focus on both fundamental and applied research, addressing the growing cybersecurity needs of critical sectors such as finance, healthcare, automotive, and electronics.
- ❖ CyStar will develop a comprehensive, multi-faceted strategy to address the emerging cybersecurity challenges driven by artificial intelligence and the post-quantum era.

NATIONAL

Trachoma Free India



- ❖ India has eliminated trachoma as a public health problem, becoming the third country in the South-East Asia region to reach this milestone.
- ❖ Trachoma is a highly contagious bacterial eye infection caused by Chlamydia Trachomatis.
- ❖ It was once a leading cause of blindness in India, particularly in underprivileged communities living in poor environmental conditions.
- ❖ India's works against trachoma began in 1963 with the launch of the National Trachoma Control Program.
- ❖ In 1971, blindness due to Trachoma stood at 5%, but now that figure dropped to less than 1%.

- ❖ According to the WHO, around 150 million people worldwide are affected by the trachoma.

INTERNATIONAL

China's 'Anaconda Strategy'

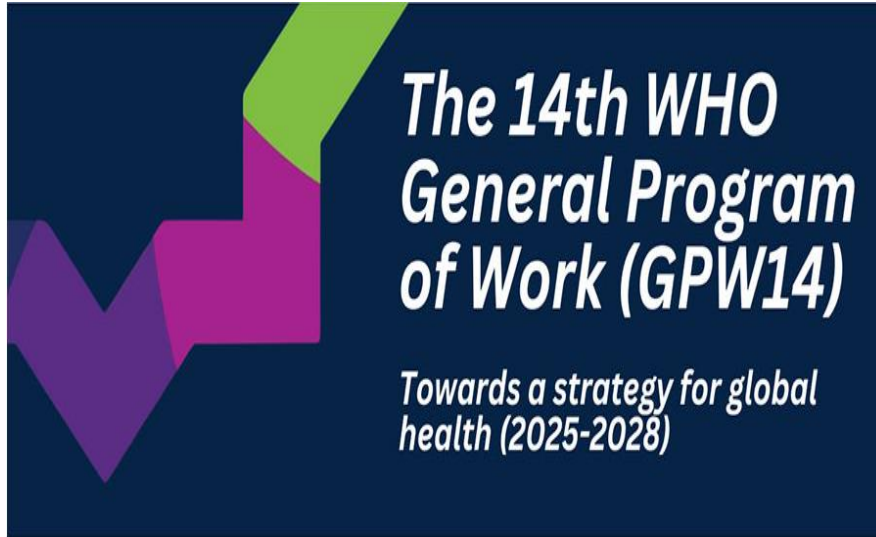
- ❖ Taiwan recently claimed that the People's Liberation Army (PLA) is using an 'anaconda strategy' to squeeze the island nation.
- ❖ "Slowly, but surely" China is enhancing its military presence around Taiwan.
- ❖ The 'Anaconda Plan' refers to a military strategy proposed by Union General Winfield Scott during the early stages of the American Civil War.
- ❖ The primary objective of this strategy was to suffocate the Confederacy economically and militarily, similar to how an anaconda snake coils around and asphyxiates its prey.
- ❖ There has been a steady increase in the number of ships China operates around Taiwan, from 142 at the beginning of the year to 282 in August.



WHO core program for 2025-2028

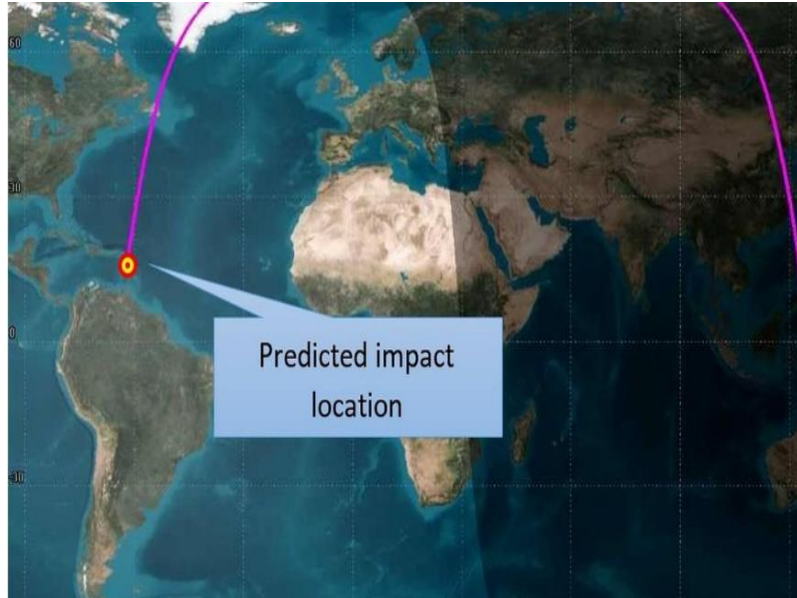
- ❖ India has now committed to give more than \$300 million for the organisation's core program of work from 2025 to 2028.
- ❖ The biggest sum of \$250 million will be spent on the Centre of Excellence for Traditional Medicine.
- ❖ India has committed the largest amount of funds so far in southeast Asia.

- ❖ So far, WHO has received contribution pledges for over \$2.2 billion towards a \$7.1 billion funding gap.



SCIENCE AND TECHNOLOGY

PSLV-37 mission Re-entry



- ❖ ISRO's upper stage of the Polar Satellite Launch Vehicle C-37 (PSLV C-37 mission) re-entered the Earth's atmosphere successfully.
- ❖ The PSLV-C37 mission was launched on February 15, 2017 with Cartosat-2D as the main payload along with another 103 satellites as co-passengers.

- ❖ The space agency has created history as it was the first mission to launch 104 satellites with a single vehicle.
- ❖ The atmospheric re-entry of the rocket body within eight years of its launch is fully compliant with the international debris mitigation guidelines.
- ❖ The guideline of Inter-Agency Space Debris Coordination Committee (IADC) recommends limiting the post-mission orbital life of a defunct object in Low-Earth orbit (LEO) to 25 years.

Lunar Polar Exploration Mission

- ❖ The National Space Commission, the apex body that decides on space missions, cleared the fifth lunar mission — the Lunar Polar Exploration Mission or Lupex.
- ❖ This will be jointly implemented by India and Japan.
- ❖ It is part of India's lunar series that eventually aims to send an Indian to the Moon and bring her/him back.
- ❖ Both Chandrayaan-4 and Lupex will happen parallel to each other.



MACE Project

- ❖ India inaugurated Asia's largest imaging Cherenkov telescope at Ladakh's Hanle.
- ❖ It is situated at an altitude of almost 4,300 metres.
- ❖ The Major Atmospheric Cherenkov Experiment (MACE) observatory is also the world's highest telescope of its kind.

- ❖ Gamma rays do not reach Earth's surface because the atmosphere absorbs them.
- ❖ However, they create high-energy particles that emit Cherenkov radiation, similar to a sonic boom, as they travel faster than light through the atmosphere.
- ❖ MACE's mirrors and cameras capture this radiation, which is then traced back to its cosmic source.



ENVIRONMENT


2024 Wild Ass Population Estimation

- ❖ The number of Indian wild asses in Gujarat has increased over 26 per cent in the past five years.
- ❖ The total population of the wild ass is estimated to be at 7,672, compared to 6,082 counted in 2020.
- ❖ Earlier they found in northwest India and Pakistan to arid regions of Central Asia.
- ❖ But, now primarily found in the deserts of Little Rann of Kutch and Great Rann of Kutch.
- ❖ In 1976, their number was only 720, which rose to 2,072 in 1990 and 4,451 in 2014.

- ❖ They were classified as Near threatened animals by IUCN.

FOALING RATES DECLINING

- The wild ass population is increasing, but the foaling rates are declining
- The genetic diversity of the wild ass is low and could be reduced further if the sanctuary population gets isolated
- Wild asses are exposed to diseases, from livestock. Surra outbreaks have been reported
- They are also vulnerable to road accidents on highways

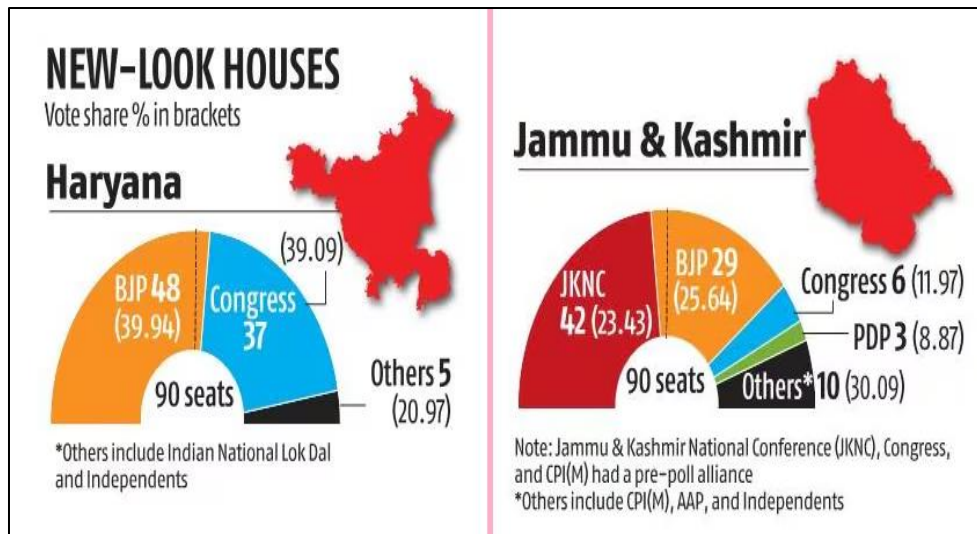


Canal water brings invasive weeds that displace native vegetation of the Rann

- Wild asses come into conflict with humans, especially due to crop raiding. Electric fencing fragments their habitats
- Agriculture around the Rann has expanded and shifted to cash crops, which use more water and chemicals

STATES

Haryana and Jammu & Kashmir elections



- ❖ The alliance of the National Conference (NC) and Congress has won the Jammu and Kashmir assembly polls.

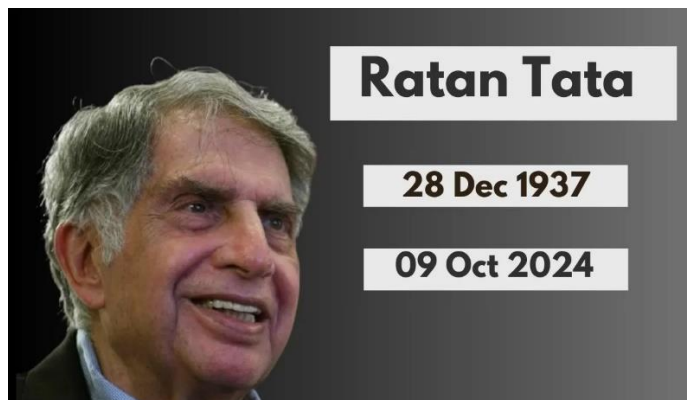


- ❖ This is the first assembly elections since 2014, first as a Union Territory and first after the removal of Article 370.
- ❖ In Haryana, the BJP has created history by retaining the state for the record consecutive third term.
- ❖ The BJP has won 48 seats while the Congress has secured 37.
- ❖ In J&K's 90 seats, the NC and Congress have won in 49, the BJP in 29 and the PDP in three.

PERSONALITIES, AWARDS, AND EVENTS

Ratan Tata

- ❖ Ratan Tata, a former chairman of Indian conglomerate Tata Sons passed away recently.
- ❖ Tata received the Padma Bhushan, one of India's most distinguished civilian awards, in 2000 and "Padma Vibhushan" in 2008.
- ❖ Tata Group is a sprawling collection of nearly 100 companies, including the country's largest automaker and the largest private steel company etc.
- ❖ Tata pioneered commercial aviation in India when it launched an airline in 1932 that later became Air India.



Nobel Prize in Chemistry 2024

- ❖ The Nobel Prize in Chemistry 2024 has been awarded to David Baker, Demis Hassabis and John M Jumper.
- ❖ Baker won "for computational protein design", the American Jumper and Briton were honoured for "protein structure prediction".
- ❖ Baker has achieved the extraordinary feat of designing entirely new proteins.

- ❖ Demis Hassabis and John Jumper have developed an artificial intelligence (AI) model to solve a 50-year-old challenge: predicting the complex three-dimensional structures of proteins.



WAZA Awards 2024



- ❖ For the first time, a conservation-breeding program of a zoo in India is shortlisted as a finalist for the 2024 Conservation & Environmental Sustainability Awards, by the World Association of Zoos and Aquariums (WAZA).
- ❖ The Red Panda Conservation Breeding and Augmentation Programme of the Padmaja Naidu Himalayan Zoological Park.



- ❖ The breeding programme began with four red pandas from the wild taken into the Darjeeling Zoo in 1990.

