



November - 01

TNPSC BITS

- ❖ Researchers identified *Osbeckia assamensis*, a new pink-flowering plant species belonging to the Melastomataceae family, in the grasslands of Manas National Park, Assam.
- ❖ Scientists formally identified *Victoria colombiana*, the fourth scientifically recognised species of the genus *Victoria* in the Nymphaeaceae family, in the Inirida region of Guainía Department, Colombia, South America.
- ❖ The Indian Naval Academy unveiled an indigenously built twin-drone system for maritime Search and Rescue (SAR) operations, with both drones communicating through long-range Radio Frequency (RF) and having an operating radius of 10 km each.
- ❖ Tamil Nadu approved 680 road projects worth ₹138.11 crore under the Chief Minister's Integrated Urban Development Mission (CMIUDM) 2026–27, including the ₹131-crore beautification of the 4.8-km Airport–Kathipara stretch.
- ❖ ISRO successfully launched the 2,250-kg NVS-03 navigation satellite aboard the GSLV-F18 rocket, placing it in its intended Geosynchronous Transfer Orbit (GTO) from Satish Dhawan Space Centre, Sriharikota.
- ❖ Indian-origin pilot Captain Smit Machchhar received the UAE's First-Class Order of Zayed II on 27 October 2026 for his bravery during an attack aboard flydubai Flight FZ1073.
 - He is the third Indian recipient of this honour; former Indian ambassadors Navdeep Singh Suri (2019) and Sunjay Sudhir (2025) were earlier recipients.
- ❖ The Tamil Nadu government increased the upper age limit for direct recruitment to government posts by 5 years, effective from 30 October 2026, for a period of five years.
 - The revised limits cover Group I, Group II/IIA and Group IV posts, with additional concessions for reserved categories, persons with disabilities and destitute widows.

NATIONAL NEWS

Tobacco-Free Youth Campaign 4.0

- ❖ The Union Minister of State for Health and Family Welfare, Prataprao Jadhav, launched the fourth edition of the Tobacco-Free Youth Campaign (TFYC 4.0) in New Delhi.

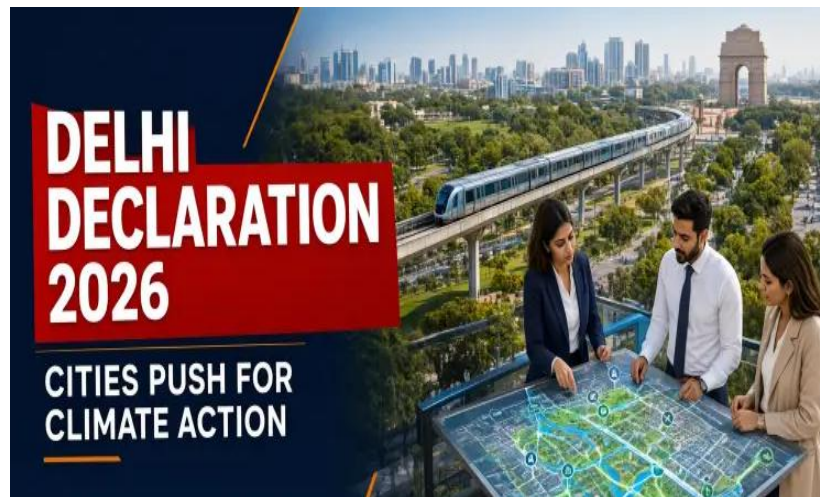
- ❖ The nationwide campaign will run for 60 days, from 28 October to 26 December 2026.
- ❖ It is organised by the Ministry of Health and Family Welfare, in collaboration with MY Bharat and the Ministry of Education.
- ❖ Its six-pronged strategy includes public awareness, tobacco-free educational institutions, tobacco-free villages, enforcement of tobacco-control laws, social media engagement, and participation by universities and colleges.
- ❖ It focuses on youth participation, tobacco-free campuses and tobacco-free villages.
- ❖ It promotes enforcement of the Cigarettes and Other Tobacco Products Act (COTPA), 2003 and the Prohibition of Electronic Cigarettes Act (PECA), 2019.



Delhi Declaration 2026 on Local Climate Action

- ❖ The ARISE (Accelerating Resilience in Cities through Inclusive and Sustainable Environments) Cities Forum 2026 adopted the Delhi Declaration on Local Action for Global Climate Goals in New Delhi.
- ❖ The forum was organised by ICLEI (Local Governments for Sustainability) South Asia with the National Institute of Urban Affairs (NIUA), with support from the Ministry of Housing and Urban Affairs.
- ❖ The declaration calls for stronger cooperation between national, state and local governments and recognises cities as important partners in global climate action.

- ❖ It contains 10 commitments, including climate adaptation, circular economy, just energy transition, climate finance, scientific data, youth participation and community leadership.
- ❖ The declaration will be taken forward to COP31 (31st Conference of the Parties) in Antalya, Türkiye.
- ❖ The forum also launched the Delhi Biodiversity Map, developed by ICLEI South Asia.



Extreme Poverty Decline: India



- ❖ The World Bank's October 2026 Poverty and Equity Brief reported that India's extreme poverty rate fell from 27.1% in 2011 to 2.6% in 2023.



- ❖ Around 496 million people moved out of extreme poverty during this period.
- ❖ At the lower-middle-income poverty line of USD 4.20 per day (2021 Purchasing Power Parity – PPP), poverty declined from 57.7% to 16.1%.
- ❖ The decline was mainly linked to consumption growth, increased employment, particularly among women, and social transfers such as food subsidies.
- ❖ Around 57% of India's poor population is concentrated in a belt stretching from Uttar Pradesh to West Bengal.
- ❖ The Multidimensional Poverty Index (MPI) declined from 53.8% in 2005–06 to 16.4% in 2019–21, according to the Oxford Poverty and Human Development Initiative (OPHI).

INTERNATIONAL NEWS

UNGA Resolution on Cuba

The 193-member General Assembly adopted the resolution calling for an end to the economic, commercial and financial embargo imposed by the U.S. against Cuba, with 130 countries voting in favour, 17 against and 25 abstaining on October 28, 2026.

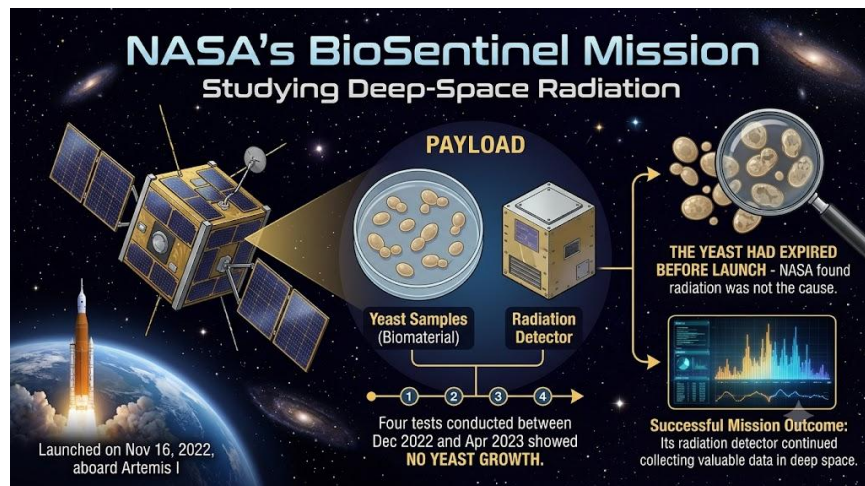
- ❖ India voted in favour of a United Nations General Assembly (UNGA) resolution calling for an end to the economic, commercial and financial embargo imposed by the United States on Cuba.
- ❖ The 193-member UNGA adopted the resolution with 130 votes in favour, 17 against and 25 abstentions.
- ❖ India called for lifting the restrictions, stating that they affect Cuba's development and violate the sovereignty of other states through their extraterritorial effects.
- ❖ The restrictions have contributed to shortages of over 60% of essential medicines and a decline of more than 50% in Cuba's food production over five years, according to the UN report cited by India.

- ❖ The resolution is not legally binding on member states.

SCIENCE AND TECHNOLOGY NEWS

NASA BioSentinel Mission

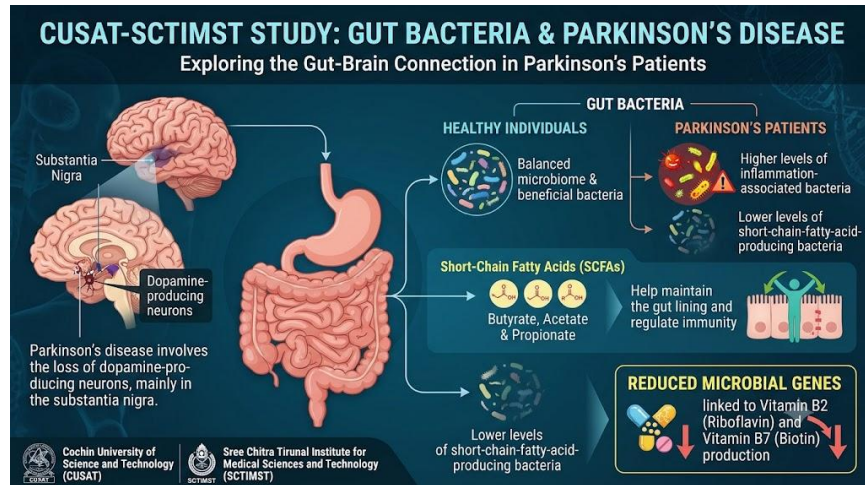
- ❖ NASA's BioSentinel spacecraft studied deep-space radiation, but its yeast experiment failed because the cells had probably expired before launch.
- ❖ Launched on 16 November 2022 aboard Artemis I to study radiation effects on living cells.
- ❖ It carried yeast samples and a radiation detector.
- ❖ Four tests conducted between December 2022 and April 2023 showed no yeast growth.
- ❖ NASA found that radiation was not the cause.
- ❖ Its radiation detector continued collecting data in deep space.



CUSAT-SCTIMST Study

- ❖ A Cochin University of Science and Technology (CUSAT) and Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) study found differences in gut bacteria between people with Parkinson's disease and healthy individuals.
- ❖ The study found higher levels of inflammation-associated bacteria and lower levels of short-chain-fatty-acid-producing bacteria in patients.
- ❖ Short-chain fatty acids (SCFAs), such as butyrate, acetate and propionate, help maintain the gut lining and regulate immunity.
- ❖ The study also reported reduced microbial genes linked to Vitamin B2 (riboflavin) and Vitamin B7 (biotin) production.

- ❖ Parkinson's disease involves the loss of dopamine-producing neurons, mainly in the substantia nigra.



ENVIRONMENT NEWS

WMO Greenhouse Gas Bulletin 2026



- ❖ The World Meteorological Organization (WMO) reported that global greenhouse gas concentrations reached record levels in 2025.
- ❖ Carbon dioxide (CO₂) reached 426.8 parts per million (ppm), methane (CH₄) 1,948 parts per billion (ppb) and nitrous oxide (N₂O) 339.1 ppb.
- ❖ Their levels were respectively 53%, 167% and 26% above pre-industrial levels.

- ❖ CO₂ contributed about 81% of the increase in warming caused by long-lived greenhouse gases between 1990 and 2025.
- ❖ Methane mainly comes from agriculture, waste and fossil-fuel activities, while nitrous oxide is linked to fertilisers, biomass burning and industrial processes.
- ❖ Sulphur hexafluoride (SF₆), used in electrical equipment, has a global warming potential about 24,300 times that of CO₂ over 100 years.

Biodiversity Initiatives at COP17

- ❖ India released four key publications on biodiversity conservation, biosafety and Access and Benefit-Sharing (ABS) at the 17th Conference of the Parties (COP17) to the Convention on Biological Diversity (CBD) in Yerevan, Armenia.
- ❖ The publications were released by the Ministry of Environment, Forest and Climate Change in partnership with the National Biodiversity Authority (NBA) and United Nations Development Programme (UNDP).
- ❖ The four publications are: India's Other Effective Area-Based Conservation Measures (I-OECMs) Guidelines 2026, 5th National Report on Cartagena Protocol on Biosafety, CBD Handbook and India's ABS Success Story.
- ❖ The Nagoya Protocol provides a framework for fair and equitable sharing of benefits arising from the use of genetic resources.
- ❖ India highlighted the Kunming-Montreal Global Biodiversity Framework, sustainable financing and international cooperation for biodiversity conservation.



Owl Diversity in Guwahati

- ❖ A scientific study recorded eight owl species in Guwahati, Assam, during surveys conducted from November 2023 to July 2025.

- ❖ The study recorded owls in 24 of 33 surveyed grid cells, each covering one square kilometre.
- ❖ The Barn Owl and Spotted Owlet were the most frequently detected species.
- ❖ The other six species were Brown Hawk Owl, Brown Fish Owl, Collared Scops Owl, Mountain Scops Owl, Oriental Scops Owl and Asian Barred Owlet.
- ❖ All eight species are classified as Least Concern (LC) on the International Union for Conservation of Nature (IUCN) Red List.
- ❖ Owls belong to the order Strigiformes, which includes two living families: Tytonidae and Strigidae; they help control rodent populations naturally.



STATE NEWS

First Himalayan Yak Festival - Sikkim

- ❖ Sikkim hosted its first Himalayan Yak Festival in Gnathang Valley to promote yak conservation, herders' livelihoods and tourism.
- ❖ Gnathang Valley is located near the India-China border, and around 400–500 yaks participated in the festival.
- ❖ The domestic yak belongs to the Bovidae family and provides milk, meat, fibre and transport to high-altitude communities.

- ❖ The Sikkimese yak is recognised as a distinct breed by the National Bureau of Animal Genetic Resources (NBAGR), based in Karnal, Haryana; Sikkim has an estimated 5,312 yaks.
- ❖ Yak herding faces declining animal numbers, shrinking grazing grounds, unpredictable weather and reduced interest among younger generations.



Sikkim Hosts First-Ever Himalayan Yak Festival as Indigenous Sikkimese Yak Receives Official Breed Registration

