

October - 10

TNPSC BITS

- ❖ Vivek Lal, an Indian-origin General Atomic Global Corporation Chief Executive, is honoured with the Lifetime Achievement Award by US President Joe Biden.

TAMIL NADU

Swachh Survekshan national rankings



- ❖ Chennai slipped a rank to 44 in this year's Swachh Survekshan national rankings among urban local bodies.
- ❖ It is ranked just behind Bruhat Bengaluru Mahanagara Palike.
- ❖ Three Tamil Nadu cities managed to find a place on the list.
- ❖ Coimbatore was ranked 42 followed by Chennai at 44 and Madurai at 45.
- ❖ Last year, Chennai was at 43 and was ranked 45 in 2020.
- ❖ Indore has been ranked the cleanest city for the sixth consecutive year.
- ❖ The State was ranked fifth in implementing SUJALAM 1.0 scheme for water management.

NATIONAL

Extension of AFSPA

- ❖ The Central government has extended the Armed Forces Special Powers Act (AFSPA) in three districts of Arunachal Pradesh and nine districts of Nagaland for six months.
- ❖ The AFSPA gives armed forces the power to prohibit a gathering of five or more people in a "disturbed area".

- ❖ It also allows security personnel to use force and even open fire after due warning in the case of a breach of law and order.



INTERNATIONAL

Anti - AUKUS resolution



- ❖ China withdrew a draft resolution at the IAEA against the AUKUS grouping seeking to provide Australia with nuclear-powered submarines.
- ❖ The AUKUS (Australia, the UK and the US) security partnership was announced in last September.



- ❖ It would facilitate Australia getting technology to build nuclear-powered submarines.
- ❖ China argued that this initiative was in violation of their responsibilities under the Nuclear Non-Proliferation Treaty (NPT).
- ❖ It also criticised the role of IAEA in this regard.
- ❖ There are 35 members at the IAEA including India.

SCIENCE AND TECHNOLOGY

Light Combat Helicopter - Prachanda

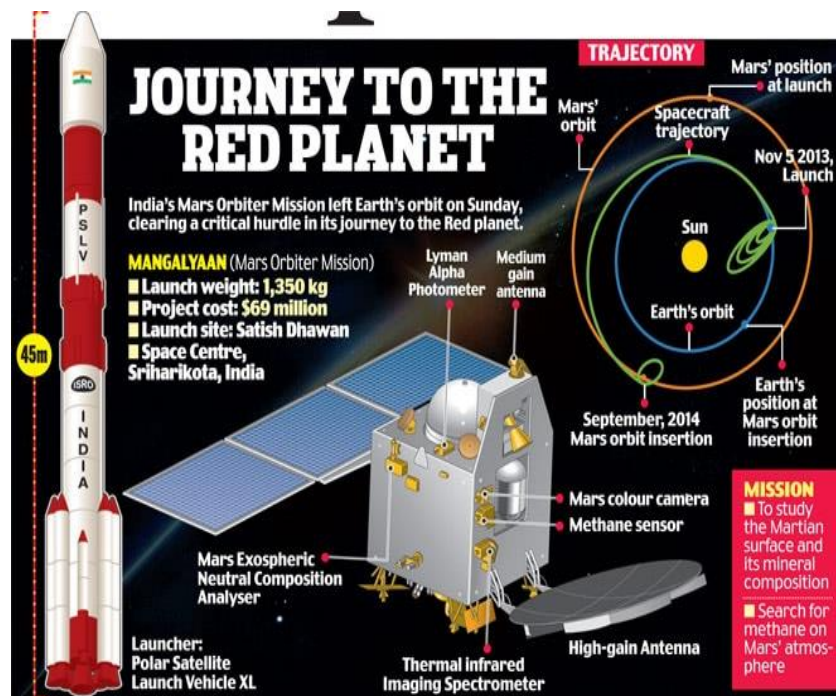
- ❖ The first indigenously-developed multirole light combat helicopters named Prachanda were inducted into the Indian Air Force.
- ❖ The name Prachanda means “fierce”.
- ❖ It was designed and developed by the state-owned defence company Hindustan Aeronautics Limited.



Mangalyaan mission

- ❖ India's Mars orbiter has retired after 8 long years of work in the interplanetary mission.
- ❖ It was launched in November 2013 and successfully entered Mars' orbit in September 2014.
- ❖ It was designed to function for a mere 6 months but worked for a long 8 years.
- ❖ Before India's Mangalyaan, only the US, Soviet Union, and Europe Space Agency had explored Mars.

- ❖ Mangalyaan was a huge milestone which helped to study Martian landscapes including surface geology, morphology, atmospheric processes, surface temperature, and atmospheric escape process.
- ❖ Mangalyaan used 5 instruments for this task:
 - Mars Colour Camera (MCC),
 - Thermal Infrared Imaging Spectrometer (TIS),
 - Methane Sensor for Mars (MSM),
 - Mars Exospheric Neutral Composition Analyser (MENCA), and
 - Lyman Alpha Photometer (LAP).



ENVIRONMENT

18th meeting of Stockholm Convention

- ❖ The 18th meeting of the Persistent Organic Pollutants (POP) Review Committee (POPRC-18) to the Stockholm Convention was held in Rome, Italy.
- ❖ It included five more chemicals for listing them under the convention.
- ❖ Three of the listed chemicals (chlorpyrifos, chlorinated paraffin (beyond prescribed) and long-chain perfluoro carboxylic acids) were already nominated at the POPRC-17.
- ❖ Two chemicals — dechlorane plus, a flame retardant and UV-328, a stabilizer used in some personal care products — will be evaluated at this session.

- ❖ The UNEP's proposal to list chlorpyrifos as POP was resisted by India.
- ❖ India argued that
 - Chlorpyrifos is not a carcinogen, and its concentrations are low.
 - Some of the studies in the POPRC-17 proposal showing adverse effects of chlorpyrifos were not peer reviewed.

Chlorpyrifos and India

- ❖ Chlorpyrifos was registered under the Insecticide Act of 1968 since 1977.
- ❖ Also, Anupam Verma Committee recommended its review for continued use in 2015.
- ❖ Chlorpyrifos was approved for agricultural use in 2021.
- ❖ Approval includes its use as a pesticide against pests affecting Bengal gram, rice and cotton.
- ❖ It was approved for 18 crops in India.
- ❖ It is one of the ten pesticides banned by Punjab and Haryana governments in August 2022.
- ❖ China and India are among the largest producers of chlorpyrifos.



STATES

Hike in ST reservation

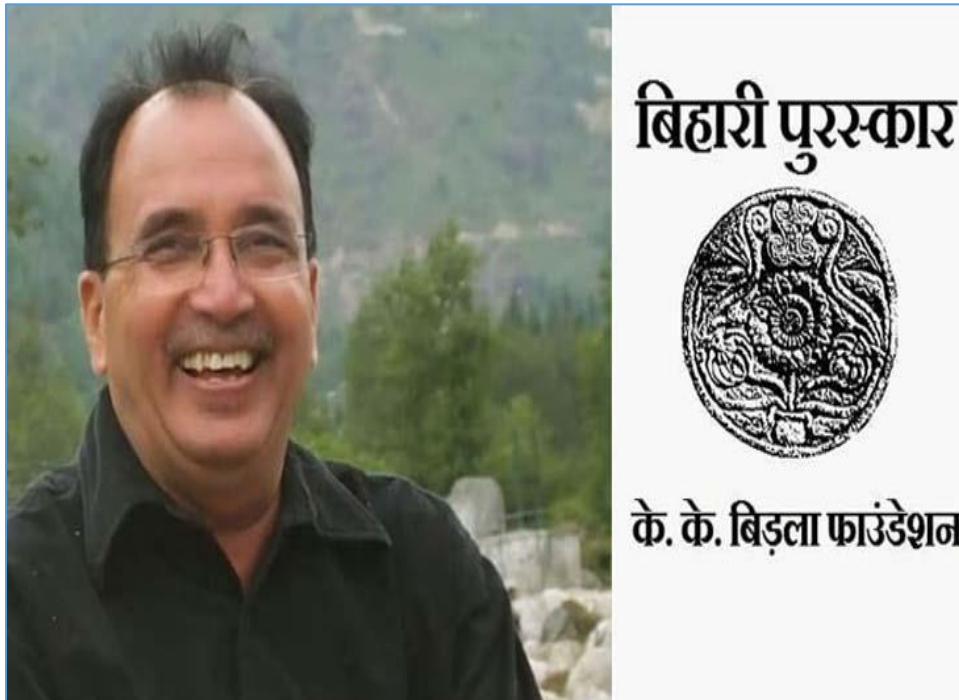
- ❖ Telangana state government increased a reservation for the Scheduled Tribe communities from 6 per cent to 10 per cent.

- ❖ The Telangana Assembly passed a Bill in April 2017 enhancing the reservation of the ST population to 10 per cent.
- ❖ The Bill was sent to the Government of India for the President's assent the same year.
- ❖ But even after six years, it is still pending before President.

PERSONALITIES, AWARDS, AND EVENTS

32nd Bihari Puraskar

- ❖ Writer Madhav Hada will be awarded the 32nd Bihari Puraskar.
- ❖ This is for his 2015 literary criticism book 'Pachrang Chola Pahar Sakhi Ri'.
- ❖ This book focuses on the life of medieval devotee poet Meera.
- ❖ He has also been a member of the general Council of the Sahitya Akademi and the Hindi Advisory Board.



SASTRA Ramanujan Prize 2022

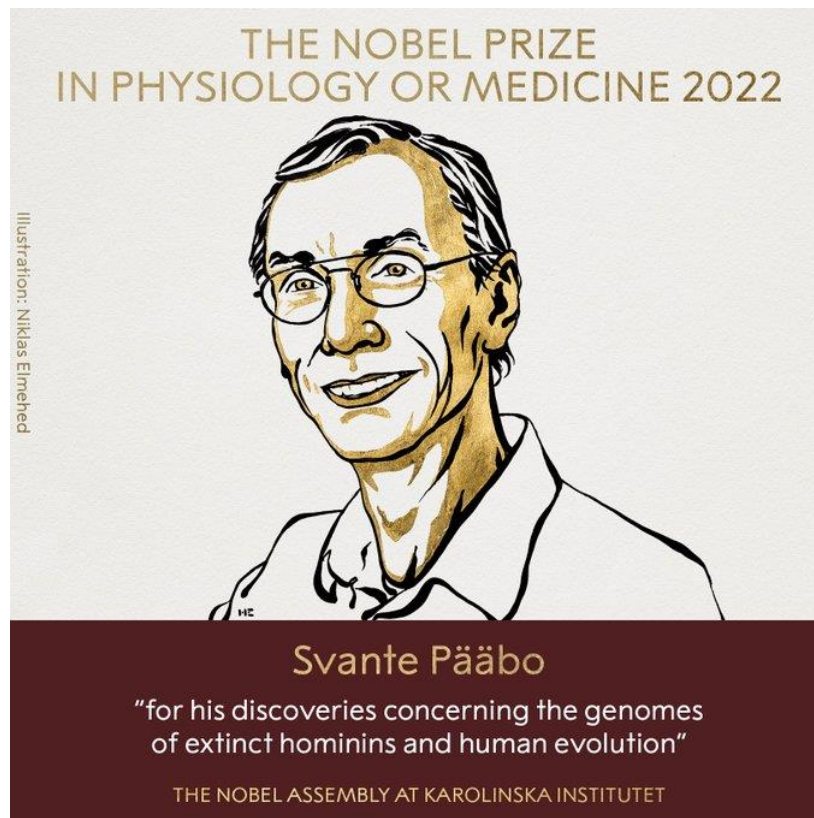
- ❖ The SASTRA Ramanujan Prize for 2022 will be awarded to Yunqing Tang.
- ❖ Yunqing Tang is an Assistant Professor with the University of California, Berkeley, U.S.A.



- ❖ The award was instituted by the Shanmugha Arts, Science, Technology & Research Academy (SASTRA) in 2005.
- ❖ It is presented annually to individuals aged 32 and below, who made outstanding contributions in the field of mathematics.



Nobel Prize in Medicine



- ❖ Svante Paabo was awarded the 2022 Nobel Prize in Medicine.
- ❖ This is for his extraordinary discovery which proved modern humans share DNA with extinct relatives Neanderthals and Denisovans.

- ❖ The Swedish scientist provided key insights into our immune system and what makes us unique compared with our extinct cousins.
- ❖ Svante Paabo is the son of Sune Bergstrom, who won the Nobel prize in medicine in 1982.

Nobel Prize in physics

- ❖ The 2022 Nobel Prize in physics was awarded to Alain Aspect, John F Clauser and Anton Zeilinger.
- ❖ This is awarded for them “experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science”.
- ❖ They have conducted experiments using entangled quantum states, where two particles behave like a single unit even when they are separated.

