

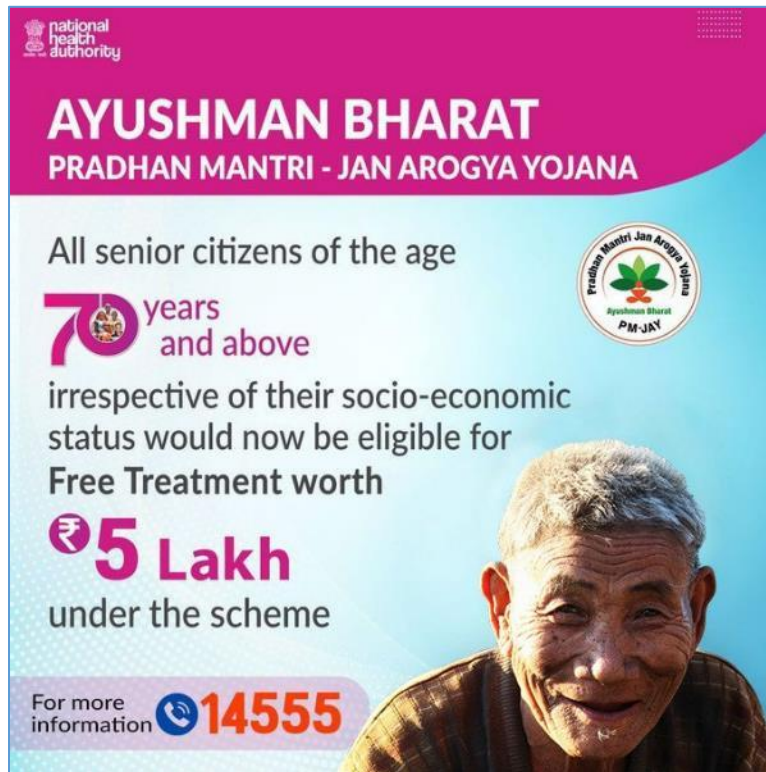
November - 03

TNPSC BITS

- ❖ Lahore has once again become the world's most polluted city, with an alarming AQI about 700.
- ❖ The Wagh Bakri Tea Group has received the "Generational Legacy Award for Outstanding Contribution to the Indian Economy" from Hurun India.
- ❖ The Centre has launched the 'International Incoming Spoofed Calls Prevention System' which identifies and blocks incoming international calls posing as Indian phone numbers.
- ❖ The 15th ITU Kaleidoscope Academic Conference, themed “Innovation and Digital Transformation for a Sustainable World”, was held New Delhi,

NATIONAL

Ayushman Vaya Vandana Card



national health authority

AYUSHMAN BHARAT
PRADHAN MANTRI - JAN AROGYA YOJANA

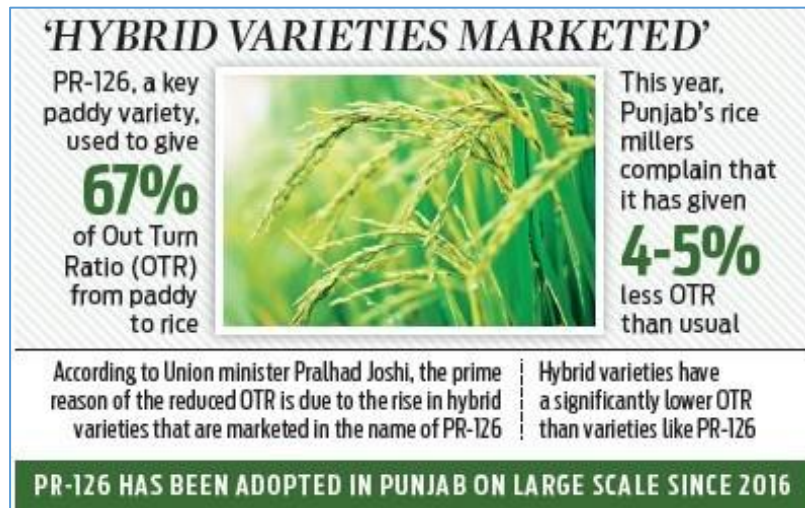
All senior citizens of the age
70 years and above
irrespective of their socio-economic
status would now be eligible for
Free Treatment worth
₹5 Lakh
under the scheme

For more information **14555**

- ❖ The Centre has extended his government's flagship health insurance scheme Ayushman Bharat to all senior citizens aged 70 years and above.
- ❖ These senior citizens will be issued the Ayushman Vaya Vandana Card.

- ❖ Regardless of their financial status or income, all people 70 years of age and above are eligible.
- ❖ Free health coverage up to Rs 5 lakh annually is under this expanded scheme.
- ❖ Ayushman Vaya Vandana Card is universal and there is no restriction on income, be it poor or middle class or upper class.
- ❖ PMJAY aims to provide health cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization.
- ❖ It covers approximately 55 crore beneficiaries corresponding to 12.34 crore families of the bottom 40% of India's population.

Paddy Variety PR-126

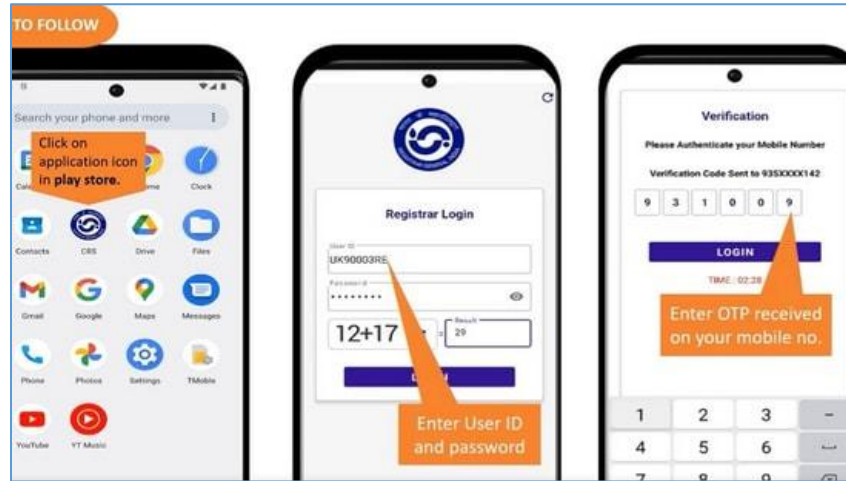


- ❖ It was, introduced in 2016, the short-duration paddy variety PR-126 widely cultivated in Punjab region.
- ❖ The variety became popular among farmers for its shorter growth period, high yield, minimal pesticide requirements, and excellent OTR.
- ❖ It offers an average yield of over 30 quintals per acre.
- ❖ The state has seen a record-high area under paddy cultivation (roughly 32 lakh hectares) in the 2023-24 and 2024-25 seasons.
- ❖ Now it turned out for its lower out-turn ratio (OTR, which refers to the post milling yield).

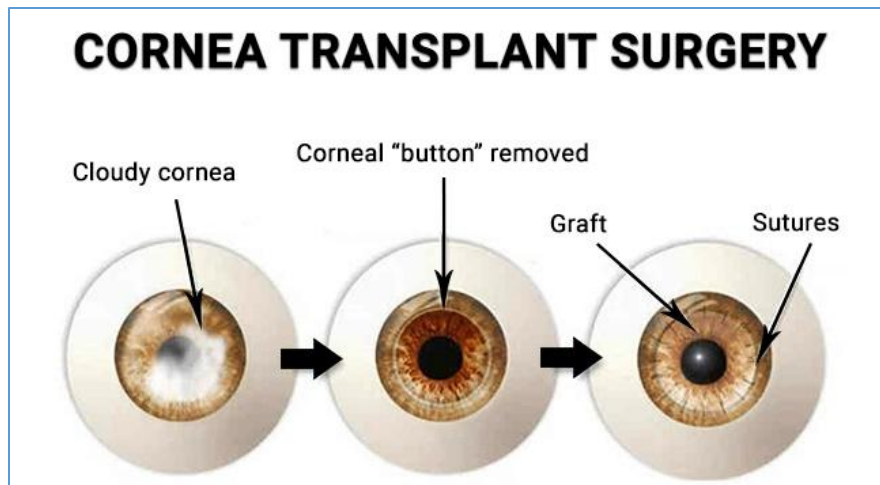
CRS Mobile App

- ❖ The Centre launched the Civil Registration System (CRS) mobile application to “integrate technology with governance”.

- ❖ This application will make registration of births and deaths seamless and hassle-free by allowing citizens to register at any time, from any place, and in their State's official language.
- ❖ All reported births and deaths in the country occurring from October 1, 2023 are to be digitally registered through the Centre's portal dc.crsorgi.gov.in.



Cornea Transplantation

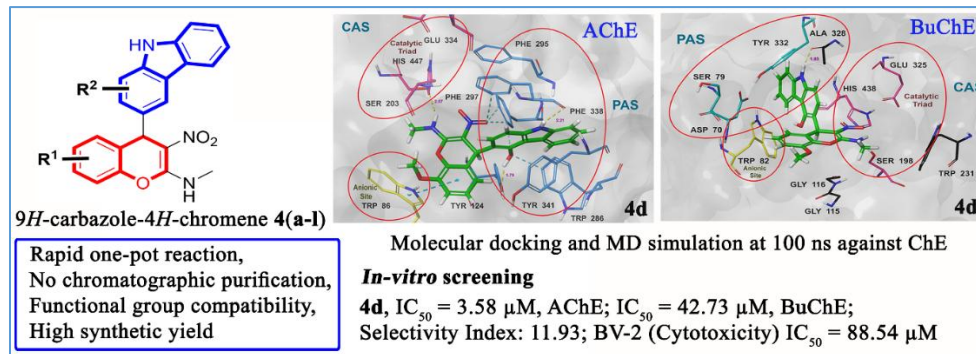


- ❖ The Ministry of Health and Family Welfare may amend the Transplantation of Human Organs and Tissues Act (THOTA), 1994.
- ❖ It aims to facilitate the retrieval of cornea from all Indian patients who die in hospitals, without consent from the family.
- ❖ Going by the new initiative, corneas could be retrieved from all citizens who die in hospitals without the consent of the family.
- ❖ This means that every person dying in a hospital would be presumed to be a cornea donor.

- ❖ However, those not willing to donate cornea should have registered their unwillingness to donate while alive
- ❖ Currently the country is being able to meet only 50% of the requirement by donation.

SCIENCE AND TECHNOLOGY

New non-toxic molecules treatment



- ❖ Scientists at the Agharkar Research Institute in Pune have developed new non-toxic molecules for treating Alzheimer's disease.
- ❖ The team utilised a combination of synthetic, computational, and in vitro studies that could be effective in the treatment of neurodegenerative diseases.
- ❖ Alzheimer occurs due to an imbalance in certain hormones.
- ❖ It is the most common form of dementia and affects 60 to 70 percent of the 55 million people worldwide.
- ❖ The newly developed molecules were found to effectively target cholinesterase enzymes, enhancing the availability of acetylcholine, which is crucial for memory and learning.

New target for cancer therapy

- ❖ Researchers have found a promising new target for cancer therapy, for patients who develop resistance to existing treatments.
- ❖ The scientists focused on a DNA repair enzyme, TDP1, which may be key to a new combination therapy.
- ❖ Current cancer drugs like Camptothecin, Topotecan, and Irinotecan target the enzyme Topoisomerase 1 (Top1) crucial for DNA replication.
- ❖ However, cancer cells often become resistant to these drugs.

- ❖ But these two proteins, Cyclin-dependent kinase 1 (CDK1) and Tyrosyl-DNA phosphodiesterase 1 (TDP1), play critical roles in this repair process.

The first step towards targeted chemotherapy

IACS researchers have discovered a new target for killing cancer cells

- The new target that has been discovered is used by cancer cells to regulate DNA repair during cell division

- Cancer cells can develop resistance to treatment by using intrinsic DNA repair mechanism

- A combinatorial targeting of two key molecules — the CDK1 protein and the TDP1 enzyme — may lead to novel anti-cancer therapeutics

- Currently, anti-cancer drugs target a molecule (Top1) involved in DNA replication and transcription

- While drugs that target Top1 can disrupt its activity leading to the death of cancer cells, cancer cells can activate their repair mechanisms to counteract the drug effects

- Targeting another protein (CDK1) that disrupts the Top1-mediated repair process can potentially kill the cancer cells



IACS researchers are currently using mouse models to test the combination drug therapies using in vivo tumours

- Combining CDK1 inhibitors with Top1 inhibitors can prove lethal for cancer cells

ENVIRONMENT

Snowless Mount Fuji

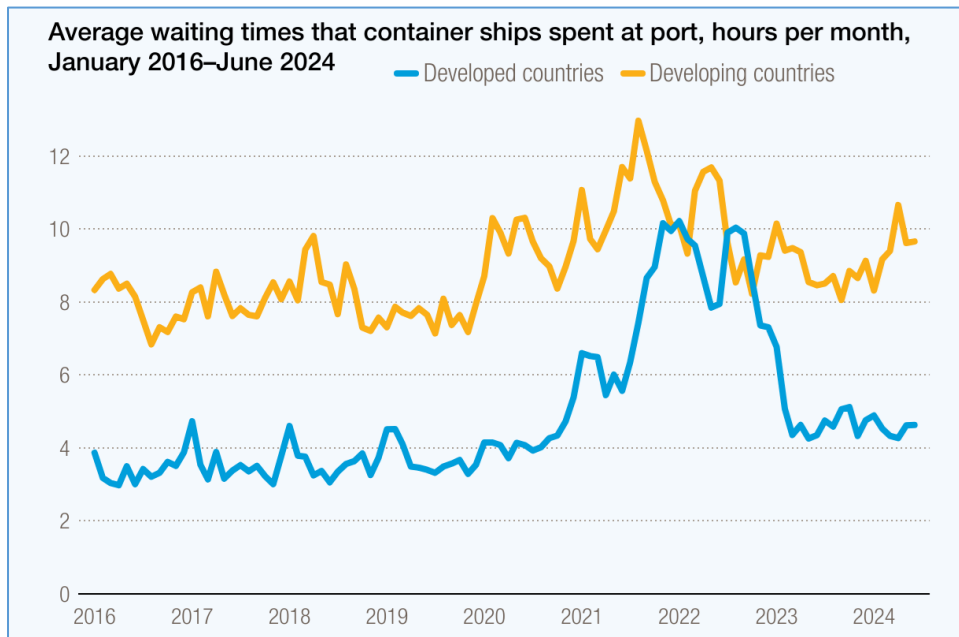


- ❖ Until November, Japan's famous Mount Fuji remains snowless.
- ❖ This is making it the latest time in the year, the mountain has remained bare since records began 130 years ago.

- ❖ The latest date beats the previous record set on October 26 in both 1955 and 2016.

REPORTS AND INDICES

Review of maritime transport 2024



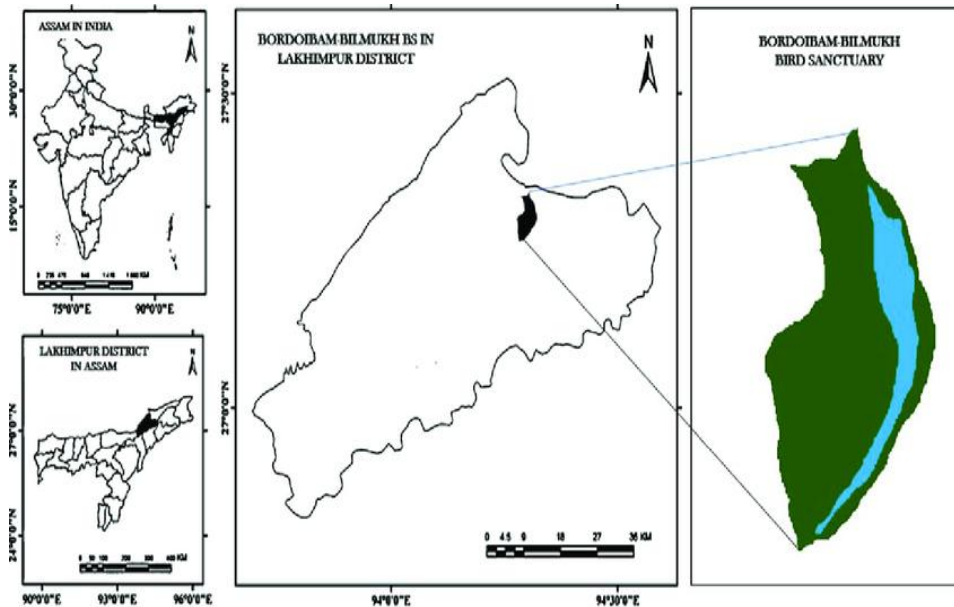
- ❖ The Review of Maritime Transport 2024 has been released by the UN Trade and Development (UNCTAD).
- ❖ Maritime trade, which grew by 2.4% in 2023 to reach 12,292 million tons, had begun to recover after a contraction in 2022.
- ❖ The report noted that Container trade, which grew by just 0.3% in 2023, is expected to rebound by 3.5% in 2024.
- ❖ The supply of container ship capacity grew by 8.2% in 2023.
- ❖ Global ton-miles rose by 4.2% in 2023, driving up costs and emissions.
- ❖ Key maritime chokepoints, like the Suez and Panama Canals faced unsettling disruptions.

STATES

Assam's Bordoibam-Bilmukh Bird Sanctuary


- ❖ Recent surveys in the Bird Sanctuary indicate a drop of over 70% in bird species.

- ❖ Of 167 recorded species, only 47 remain.
- ❖ India has 1,377 recorded species and in those Assam is home to over 900 bird species.
- ❖ Assam lies along two major migratory flyways - the Central Asian and East Asian-Australasian routes.



U-WIN portal

HOW DOES U-WIN WORK



- Children between 0-5 years will be registered on U-Win. Vaccines given at birth are also recorded.
- A list of children, who are scheduled to receive their vaccine doses, is generated through U-Win.
- The e-record helps children get vaccinated in different places without carrying a booklet. The portal sends SMS alerts to parents.
- The portal also records birth weight and details of physical deformities, if any. This can be used for other government programmes.

- ❖ Union government launched the U-WIN portal digital platform for streamlining Haryana's immunisation services.

- ❖ The portal follows the successful rollout of the eVIN and Co-WIN platform.
- ❖ It provides the universal and equitable access to essential health services for all citizens, which will aid the state's Universal Immunisation Programme (UIP).

SPORTS

Under-23 World Wrestling 2024

- ❖ India capped a rich haul of nine medals.
- ❖ Chirag Chikkara became the Under-23 world champion.
- ❖ He becomes the second Indian man, after Paris Olympics bronze medallist Aman Sehrawat, to win the gold at the U23 Championships.
- ❖ Iran has topped the team rankings with 158 points followed by Japan (102), Azerbaijan (100) and India (82).
- ❖ The Indian women's wrestling team also excelled earlier, bringing home one silver and three bronze medals.
- ❖ Anjali claimed silver in the 59kg category, while Neha Sharma (57kg), Shiksha (65kg), and Monika (68kg) each secured bronze.



IMPORTANT DAYS

State Formation Day 2024 - November 01

- ❖ November 1 marks the formation day for eight Indian states - Andhra Pradesh, Chhattisgarh, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab and Tamil Nadu.

- ❖ Tamil Nadu was created on 1 Nov 1956 with the name Madras State.
- ❖ It was renamed later to Tamil Nadu in July (18) 1967.
- ❖ Andhra Pradesh was formed on 1 Nov 1956 after it was bifurcated from United Andhra Pradesh.
- ❖ Chhattisgarh was formed as a state on 1 Nov 2000.
- ❖ Haryana was formed as a state on 1 Nov 1966 after it was carved out of the former state of East Punjab on a linguistic basis.
- ❖ Karnataka came into existence on 1 Nov 1956 as Mysore state.
- ❖ It was later renamed Karnataka in 1973.
- ❖ Kerala was formed on 1 Nov 1956 following the passage of the States Reorganisation Act.
- ❖ Madhya Pradesh state was formed on 1 Nov 1956 following the reorganisation of the states.
- ❖ Punjab Day is also celebrated across the state on November 1 marking the formation of the state under the Punjab Reorganisation Act (1966).

