



Science And Technology

PSLV-C37

Why in the news?

Upper stage of the historic PSLV-37 mission re-enters Earth's atmosphere eight years after launch. on 6 Oct 2024.

About PSLV-C37:

- ❖ It was launched on 15 Feb 2017 with Cartosat-2D as the main payload along with another 103 satellites as co-passengers.
- Co-passengers included INS-1A, INS-1B, Al-Farabi 1, BGUSAT, DIDO-2, Nayif 1, PEASS, 88 Flock-3p satellites, and 8 Lemur-2 satellites.
- ❖ It created history as the first mission to launch 104 satellites with a single vehicle.



Schemes/Policies In News

Humsafar Policy

Why in the news?

On 8 October 2024, Union Minister for Road Transport and Highways Nitin Gadkari launched the Humsafar Policy.

Key provisions of the policy:

- ❖ The tagline of Humsafar policy is "सुखद यात्रा, हमारी प्राथमिकता"
- ❖ It aims to provide a comprehensive framework to ensure that commuters have access to standardized, well-maintained, and hygienic facilities by onboarding both existing and upcoming service providers along National Highways and Expressways.
- It includes clean toilets, baby care rooms, wheelchair provisions, EV charging stations, parking spaces, and dormitory services at fuel stations.
- ❖ Benefits for service providers:
 - Existing and upcoming service providers under the categories of Eateries, Fuel Station and Trauma Centres will be eligible to register under this policy.

- Registered service providers will benefit from waiver of fees for renewal for existing access permission and will be provided space on National Highways to put up signages of their establishment to increase visibility.
- In addition, the service providers will be featured on NHAI 'Rajmarg Yatra', a mobile app to boost their online visibility.

❖ Inspection and Monitoring:

- It also outlines rigorous provisions for 'Monitoring & Inspection' of the registered service providers for maintaining the standard of the facilities and ensuring quality services to the commuters.

Significance of this policy:

- ❖ It will offer a convenient, safe, and enjoyable experience for highway users, while empowering entrepreneurs, generating jobs, and enhancing livelihoods for service providers



National Anubhav Awards Scheme, 2025'

Why in the news?

The Government of India has notified the National Anubhav Awards Scheme, 2025.

❖ Participation in the scheme:

- To participate in the scheme, Central Government employees/pensioners are required to submit their Anubhav write-ups.
- Thereafter, the write-ups published after assessment by the concerned Ministries/Departments up to 31.03.2025 will be shortlisted for five Anubhav Awards and 10 Jury Certificate
- ❖ For the first time, apart from the employees of Central Government, employees of Central Public Sector Undertakings (CPSUs), including Public Sector Banks, will also be eligible to submit their write-ups.

ANUBHAV PORTAL

- ❖ The Department of Pension & Pensioners' Welfare launched an online platform named 'Anubhav' in March 2015 to enable 'eligible' retiring/retired government employees to share their experiences of working with the Government.
- An Annual Awards Scheme was devised in 2015 to incentivize and encourage the submission of the experiences through write-ups.

Miscellaneous

World's Highest Gamma Ray Telescope

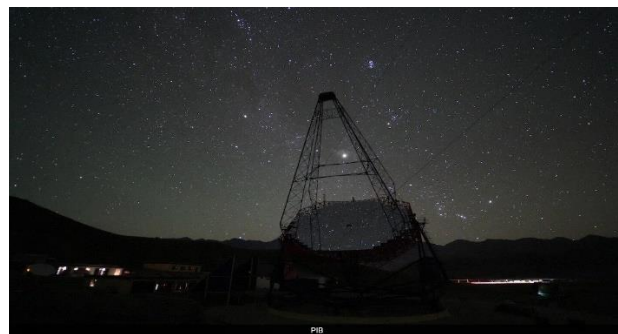
Why in the news?

Asia's largest imaging Cherenkov telescope, located at an altitude of almost 4,300 metres, has been inaugurated at Ladakh's Hanle.

- ❖ Hanle in Ladakh has been carefully chosen for its unique scientific advantages as it offers extremely low light pollution required for gamma-ray observations.

About the Telescope:

- ❖ The Major Atmospheric Cherenkov Experiment (MACE) observatory is the highest of its kind of telescope in the world.
 - It has been indigenously built by the Mumbai-based Bhabha Atomic Research Centre (BARC) with support from the Electronics Corporation of India Ltd (ECIL) and other Indian industry partners.
- ❖ It is touted to place India at the forefront of cosmic ray research globally by allowing scientists to study high-energy gamma rays.
- ❖ **Significance:** This will pave the way for deeper understanding of the universe's most energetic events, such as supernovae, black holes, and gamma-ray bursts.



Awards and Honors

Nobel Prize in Physics

Why in the news?

Professor Geoffrey E. Hinton (University of Toronto, Canada) and Professor John J. Hopfield (Princeton University, NJ, USA) have been jointly awarded the 2024 Nobel Prize in Physics.

- ❖ They have been awarded for foundational discoveries and inventions that enable machine learning with artificial neural networks.
- ❖ They have used tools from physics to develop methods that are the foundation of today's powerful machine learning.
 - John Hopfield created an associative memory that can store and reconstruct images and other types of patterns in data.
- ❖ Geoffrey Hinton invented a method that can autonomously find properties in data, and so perform tasks such as identifying specific elements in pictures.

Nobel Prize

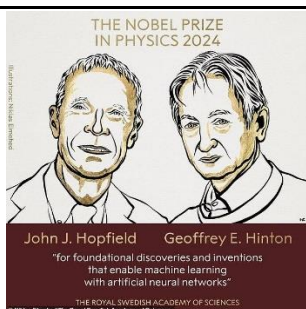
- ❖ It was created in the will of Swedish dynamite inventor and businessman Alfred Nobel.
 - The first Nobel Prizes were awarded in 1901.
 - The Nobel Prize in Economics, officially known as the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, was first awarded in 1969.
 - Since 1901, the Nobel Prizes have been awarded 621 times to about 1000 individuals and organizations.
 - The awards are presented during Nobel Week, culminating in a ceremony on December 10, the anniversary of Alfred Nobel's death.
 - The ceremonies take place at the Stockholm Concert Hall in Sweden and Oslo City Hall in Norway.
- ❖ Each Nobel Prize can be awarded to

up to three individuals who will share the prize money.

- ❖ Winners receive a prize sum of 11 million Swedish crowns (\$1.1 million).

Awarding Institutions:

- ❖ The Royal Swedish Academy of Sciences awards the Nobel Prizes in Physics and Chemistry.
- ❖ The Karolinska Institutet awards the Nobel Prize in Physiology or Medicine.
 - It is the first prize among all Nobels announced every year.
- ❖ The Swedish Academy is responsible for the Nobel Prize in Literature.
- ❖ The Nobel Peace Prize is decided by a committee of five individuals selected by the Norwegian Parliament.
 - It is awarded in Oslo, Norway, at the annual Nobel Prize Award Ceremony.



70th National Film Awards

Why in the news?

The 70th National Film Awards ceremony was held at the Vigyan Bhawan in New Delhi on 8th October 2024.

- ❖ The announced awards for 2022 were presented to the winners by the President of India, Droupadi Murmu.
 - Due to Covid pandemic-related delays, the National Awards are a year behind schedule.
- ❖ The names of the winners were announced on August 16, 2024.
- ❖ Actor Manoj Bajpayee received his fourth National Film Award.
 - At the 70th National Film Awards, he was honored in the 'Special Mention' category for 'Gulmohar'.
 - Previously, he won awards for 'Satya' in 1999, 'Pinjar' in 2004 and 'Bhonsle' in 2021.

Dadasaheb Phalke Lifetime Achievement Award	Mithun Chakraborty
Best Feature Film	Malayalam film Aattam (Director: Anand Ekarshi)
Best Actor award	Rishab Shetty for his performance in Kantara.
Best Actress award	It was shared by Nithya Menen for the Tamil film Thiruchitrambalam and Manasi Parekh for the Gujarati film Kutch Express
Best Director award	Sooraj R Barjatya for his work in Uunchai.



Important Days/ Dates

World Mental Health Day

Why in the news?

It is observed on October 10 every year.

- ❖ **Objective:** To promote awareness about mental health issues.
- ❖ **History of this day:** It was Initiated by the World Federation for Mental Health (WFMH) in 1992
- ❖ **Theme 2024:** "Mental Health at Work".



News in Short

- ❖ **Nijut Moina scheme:** It is the flagship scheme of the Assam government which aims to encourage girl students to pursue higher studies and combat child marriage.
 - As part of the initiative, monthly financial assistance will be provided to girl students from HS to PG levels in government and government-aided educational institutions.

❖ **Haryana Assembly Elections Results:**

Total Strength of the Assembly: 90

- The ruling BJP party secured a historic third term in Haryana, winning 48 assembly seats.
- The Congress has won 37 seats, Independents won 3 and the INLD won 2 seats.

❖ **Jammu and Kashmir Election Results: Total Strength: 90**

- The National Conference-Congress alliance achieved a remarkable victory in Jammu and Kashmir, winning 48 seats (NC: 42 and Congress: 6).
- The BJP emerged as the second-largest party with 29 seats.
- Independents secured 7 seats, PDP managed to win 3 seats, AAP, CPI (M) and JPC managed to win one seat each.

❖ **IIT Madras has launched the "Cybersecurity Centre" to address critical security challenges.**

- Through its 'Centre for

Cybersecurity, Trust and Reliability' (CyStar), IIT Madras aims to work towards advancements in blockchain, security for AI models, cryptography, quantum security, and IoT security.

