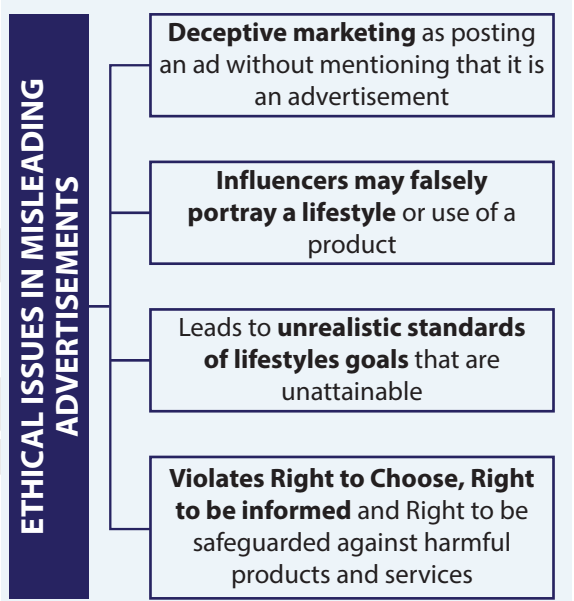


# NEWS TODAY

## CENTRE RELEASES GUIDELINES FOR CELEBRITIES, INFLUENCERS, AND VIRTUAL INFLUENCERS ON SOCIAL MEDIA PLATFORM

- **Ministry of Consumer Affairs, Food & Public Distribution** has released a set of guidelines called '**Endorsements Know-hows**' which ensures that
  - **Individuals do not mislead their audiences** when endorsing products and services.
  - Endorsements are in **compliance with Consumer Protection Act (CPA), 2019**.
- Guidelines provides clarification with reference to '**Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022**' which are issued under **CPA 2019**.
- **Need for Guidelines**
  - **Increased use of social media for promotional activities** and influencer violations comprising almost **30% of ads taken up by Advertising Standards Council of India**.
  - India's social media influencer market **expected to reach ₹ 2,800 crores by 2025 (from ₹ 1,275 crore in 2022)**.
- **Key highlights**
  - Endorsements must be made in **simple, clear language**.
  - Terms including **advertisement, sponsored, collaboration and paid promotion** can be used which must be indicated **as hashtag or headline text**.
  - Individuals **must not endorse** any product and service that they have **not personally used, experienced** or in which **due diligence has not been done** by them.
  - **Failure to disclose** any material connection or non-compliance of **CPA 2019 and Rules** made thereunder would make such violators **liable for strict action** under law.



## ODISHA REPORTS 542 FOREST FIRES IN 7 DAYS: FSI SURVEY

- According to Forest Survey of India's (FSI) fire alerts system, based on **SNPP (Suomi National Polar-orbiting Partnership)**, large forest fires were reported from several forests of Odisha including Similipal Tiger Reserve.
- Forest Fire can be described as **any uncontrolled and non-prescribed combustion or burning of plants in a natural setting** such as a forest, grassland, which **consumes natural fuels and spreads based on environmental conditions** (e.g., wind, topography).
  - As per Ministry of Environment, Forest and Climate Change, Odisha reported 51,968 forest fires between November 2020 and June 2021 — highest in India.
- **Causes of forest fires**
  - **Lightning, especially "hot lightning"**. Hot lightning or Long Continuing Current (LCC) are lightning discharges in which a **continuing electrical current flow for more than 40 milliseconds**.
  - **Extreme heat and dryness**, friction created by rubbing of branches with each other initiate fire.
  - **Man-made factors like** Spark from a cigarette butt, or a carelessly discarded lit matchstick, intentional fire etc.
- **Impact of forest fire**: Deforestation, loss of biodiversity and wildlife habitat, soil erosion affecting productivity of soils etc.

### STEPS TAKEN TO PROTECT FOREST FIRES

- **National Action Plan on Forest Fires (NAPFF)**, 2018.
- FSI Van **Agni Geo-portal** for single point of information on forest fire.
- **Wildlife (Protection) Act, 1972** prohibits setting fire in wildlife sanctuaries.

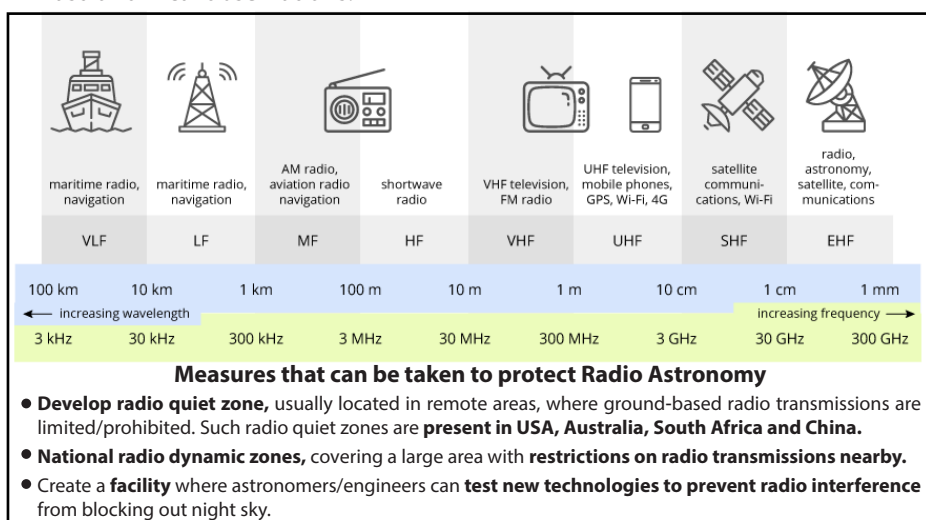
# INDIA TO LAUNCH INTERNATIONAL BIG CAT ALLIANCE (IBCA)

- India will **lead the IBCA** and provide **guaranteed funding of \$100 million for five years** to IBCA.
- IBCA aims to protect and conserve the seven major big cats** — tiger, lion, leopard, snow leopard, puma, jaguar and cheetah. (refer image)
  - India is the **only country in world to have 5 big cats in wild** (except pumas and jaguar).
  - IUCN Status: Endangered** (Royal Bengal Tiger, Asiatic Lions); **Vulnerable** (Snow Leopards, African Cheetahs); **Least Concerned** (Common Leopard).
- IBCA Membership:** Open to **97 “range” countries**, which contain natural habitat of these big cats, as well as other interested nations, international organisations, etc.
- IBCA’s governance structure**
  - General Assembly** consisting of **all member countries**.
  - Council** of **at least seven** but **not more than 15 member countries** elected by General Assembly for 5 years term.
  - Secretariat.** Upon recommendation of Council, **General Assembly will appoint IBCA Secretary General for a specific term**.
- Rational behind protecting big cats**
  - Big cats are apex predators whose loss can set off **“trophic cascade,”** wherein prey populations may explode, resulting in overgrazing and degrading health of landscape.
  - Protecting tiger habitats** means protecting forests which facilitates **fighting climate change**.
  - Supports economies** through ecotourism.



## RADIO INTERFERENCE FROM SATELLITES IS THREATENING ASTRONOMY

- Scientists has identified that **overcrowding of radio spectrum i.e., radio spectrum pollution can affect astronomers’ works on black holes, evolution of galaxies etc.**
  - Radio astronomy is a **subfield of astronomy that studies celestial objects at Radio Frequencies (RF)**.
  - Radio Spectrum Pollution** is straying of waves in radio spectrums outside their allocations that causes problems for some activities. It is a **specialized form of light pollution**, and particular concern to radio astronomers.
- Radio waves are longest wavelength emissions** on electromagnetic spectrum. **RF are divided up into blocks, or bands**, designated for different types of uses (refer image).
- RF bands** ranges between **3 kHz and 300 GHz**.
- Radio signals arriving on Earth from astronomical objects are **extremely weak and easily masked by man-made interference**.
  - Increasing use of electronic devices** with radio transmitters such as mobile phones, computer systems emit **undesirable radio signals** which interfere with astronomical observations.



## LANDFILL FIRES AND MANAGEMENT

- In recent years, number of landfill fires in metropolitan cities has surged across India which raises questions on landfill management practices.
- Landfills are **site that has been prepared for dumping waste, debris** to reduce its impact on human health and environment.
  - As per CPCB, in 2022, **India’s garbage is 47% treated, 16% landfilled (scientifically), and 26% dumped (unscientifically) at dumpsites**.
- Landfill fires emit **toxic gases** such as formaldehyde, hydrogen cyanide, hydrogen sulfide, nitrogen oxides etc.
  - It’s source of **persistent organic pollutants (POPs)** and harms human health due to air pollution, groundwater pollution.
- Causes for Landfill fires:** Indiscriminate dumping of **mixed municipal solid waste**; Biodegradable waste generates **methane** (a flammable gas); **Hot weather conditions**; **Failure** in dumpsite **remediation** work etc.
- Steps to manage landfill fires**
  - Swachh Bharat Mission-Urban (SBM-U) 2.0** to make **all cities Garbage Free by 2026**.
  - Effective implementation of **segregation of waste at source** under **Solid Waste Management Rules 2016**.
  - Adopting **zero landfill model** based on principles of circular economy.
  - Prepare **city waste management plan**.

# NSIL TARGETS 10 COMMERCIAL SMALL SATELLITE LAUNCH VEHICLE (SSLV) LAUNCHES BY 2026

- **NewSpace India Limited (NSIL)**, under Department of Space and commercial arm of Indian Space Research Organisation (ISRO), is the **sole nodal agency responsible for providing end-to-end SSLV Launch services** for customer satellites.
- SSLV is a **3 stage Launch Vehicle** configured with **three Solid Propulsion Stages** and **liquid propulsion-based Velocity Trimming Module (VTM)** as a terminal stage.
  - It is **2m in diameter** and **34m in length** with a **lift-off weight of around 120 tonnes**.
  - It is capable of **launching Mini, Micro, or Nanosatellites (10 to 500 kg mass) to a 500 km Low Earth Orbit**. (refer image)
  - It aims to cater to **emerging market for launch of small satellites into LEOs**.
    - India's share in global space economy of \$360 billion can be increased to over 10% with SSLV (currently around 2%).
- **Advantages of SSLV**
  - **Reduced turnaround time, cost-effective, and launch on demand.**
  - Requires **lesser infrastructure and manpower**.
  - Unlike PSLV and GSLV, SSLV can be **assembled both vertically and horizontally**.

## DIFFERENT TYPES OF ORBITS

### Geostationary orbit (GEO)

- Satellites in GEO circle Earth above the equator from west to east following Earth's rotation. This makes satellites in GEO appear to be 'stationary' over a fixed position.

### Low Earth orbit (LEO)

- An orbit that is relatively close to Earth's surface. It is normally at an altitude of less than 1000 km but could be as low as 160 km above Earth.

### Polar Orbit

- Satellites in polar orbits usually travel past Earth from north to south rather than from west to east, passing roughly over Earth's poles.

### Sun-synchronous orbit (SSO)

- It is a particular kind of polar orbit. Satellites in SSO, travelling over the polar regions, are synchronous with the Sun.

## ALSO IN NEWS



### Court martials

- Army court has recommended **life imprisonment for a Captain** over killing of three men in J&K in 2020.
- When Army wants an allegation against its personnel investigated, **it first sets up a Court of Inquiry** which may lead to **court martial (trial and punishment)**.
- **Under Army Act, Indian Army courts can try personnel** for all kinds of offences **except for murder and rape of a civilian**, which are tried by a civil court.
- **President has power** (Article 72 of Constitution) to grant pardons, reprieves, respites or remissions of punishment or to **suspend, remit or commute the sentence awarded by a court Martial**.



### Aadhaar authentication of prisoners

- Ministry of Home Affairs has **authorized state governments to carry out Aadhaar authentication** of prison inmates on a **voluntary basis**.
  - It will **enable prison inmates to get health care, skilling, vocational training, legal aid, etc.**
- It is notified under **Rule 5 of Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Rules, 2020, and Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016**.
- **Aadhaar Authentication** is a process by which Aadhaar **number along with demographic information** of an individual is submitted to UIDAI's Central Identities Data Repository for its verification.



### Hindu rate of growth

- An Indian Economist **Raj Krishna** coined the term "Hindu Rate of Growth" in 1982.
- It was then used to **refer to the growth rate of period**, which was **stagnant at 3.5-4%** for a long period.
  - This rate of growth remained steady through **changes in governments, wars, famines, and other crises**.



### Mission 'Har Payment Digital'

- It was **launched by Reserve Bank of India (RBI)** during Digital Payments Awareness Week (6th to 12th of March) 2023 **to encourage digital payments adoption**.
  - RBI **appealed to all stakeholders** - banks, **payment system operators (PSOs)**, digital payment users, etc. - to **adopt digital payments and teach others** about merits of using digital payments.
- RBI also launched '**75 digital villages programme**' to **adopt 75 villages and convert them into digital payment enabled villages**.
  - **PSOs** will adopt these villages and **conduct awareness camps and onboard merchants** for digital payments.





### Exercise Frinjex-2023

- It is the maiden Joint Military Exercise between **Indian Army and French Army**.



### Global Greenhouse Gas Monitoring Infrastructure (GGGMI)

- United Nations' **World Meteorological Organisation** has come up with a new GGGMI to provide better ways of **measuring planet-warming pollution** and help inform policy choices.
- GGGMI will **integrate space-based and surface-based observing systems**, and seek to clarify uncertainties about where greenhouse gas emissions end up.
  - GGGMI will **build on and expand WMO's long-standing activities in GHG monitoring**, implemented as part of Global Atmosphere Watch, and via its Integrated Global Greenhouse Gas Information System.
  - Three major GHGs are **carbon dioxide, methane and nitrous oxide**.



### National Consortium for Research and Development on Therapeutic for Rare Diseases (NCRDTRD)

- Delhi High Court asked NCRDTRD to give **recommendations regarding funding of clinical trials for rare diseases**.
- National Policy for Rare Diseases, 2021** provides for NCRDTRD with an expanded mandate to include research & development, technology transfer and indigenization of therapeutics for rare diseases.
- It is convened by **Department of Health Research, within Ministry of Health and Family Welfare** with Indian Council of Medical Research as a member.



### Bio-computers

- Scientists at John Hopkins University have planned research on "**organoid intelligence (OI)**" to **create biocomputers**.
  - Organoids are **tiny, self-organized three-dimensional cells or tissues** derived from stem cells.
  - Planned research will use **brain organoids**, i.e., **cultures of brain cells**, as biological hardware.
- Biocomputers are defined as **computers that use components of biological origin (such as molecules of DNA) instead of electrical components**.
- Potential Benefits: Greater Energy and Data efficiency; Multitasking** via parallel computation; **improved AI capabilities; ability to self-organize and self-repair, decode pathology of drug development** for neuro-developmental and degenerative diseases etc.



### Assam's Moidams

- Moidams in **Charaideo** in Assam **meet UNESCO technical requirements for World Heritage Site status**. Charaideo has more than **90 moidams**.
- Moidams (or Maidams) represent **late medieval (13th-19th century CE) mound-burial tradition of Tai Ahoms in Assam**, which lasted almost 600 years.
  - Ahom kings used to be **buried along with their treasures and articles** of their day-to-day use.
- Maidam consists of three major features:** A vault or chamber, hemispherical earthen mound, an octagonal boundary wall.



### Personalities in news

- G. N. Ramachandran (8 October 1922 – 7 April 2001)**
- Birth centenary celebrations of G. N. Ramachandran call for remembering his unique pursuits and outstanding achievements in science.
  - Born in **Ernakulam near Cochin in Kerala**, G N Ramachandran was a **famous biophysicist of India**.
  - Major Contributions**
    - Discovered **triple helical structure of collagen**, most abundant protein in our body, in **1954** along with **Gopinath Kartha**.
    - Development of Ramachandran plot in 1963, used as a **standard description of protein structure**.
    - Development of the theory of image reconstruction** from shadowgraphs using **Convolution Technique**.
  - He was the founding member of **World Cultural Council in 1981**.
  - Awards: Shanti Swarup Bhatnagar Award for physics in 1961**.
  - Virtues: Scientific temper with curiosity**.