



Sanskriti IAS



DAILY CURRENT AFFAIRS

Important Current News for UPSC & UPPSC



8th April 2026

TOPICS:-

- 1. Mission MITRA**
- 2. New Nematode Species**
- 3. Government e-Marketplace (GeM)**
- 4. Madras Hedgehog**
- 5. Psychedelics**
- 6. Tar Balls**
- 7. Other Important News of the day**
- 8. Uttar Pradesh in News**

DELHI CENTRE:
636, Mukherjee Nagar
New Delhi-110009

PRAYAGRAJ CENTRE:
1/1/8A, Stanley Rd,
Maharana Pratap Chauraha,
Civil Lines, Prayagraj, UP - 211002

 **9555-124-124**
 **sanskritiias.com**

MISSION MITRA

ISRO

MISSION MITRA by ISRO Mapping of Interoperable Traits and Response Assessment (MITRA)

April 03, 2026. The Crew safety & performance are the most critical elements of all Human Spaceflight Missions.



Why in News

- **ISRO** launched **Mission MITRA in Leh, Ladakh** to study astronaut performance in extreme conditions.

Operational Design and Scientific Objective

- The mission stands for **Mapping of Interoperable Traits and Response Assessment**.
- It is jointly conducted by **ISRO** and **IAF's Institute of Aerospace Medicine**.
- It examines **physiological, psychological and operational dynamics** of crew and ground teams.
- The focus is on **decision-making and team interoperability under stress conditions**.



Geographical and Experimental Significance

- **Ladakh's high-altitude terrain** acts as a terrestrial analogue for space-like conditions.
- The region features **low oxygen levels, extreme cold and isolation**, simulating space missions.

Strategic Relevance for Space Programme

- The mission involves **Gaganyaan astronauts (Gaganyatris)** and multidisciplinary experts.
- Findings will aid **long-duration human spaceflight missions and deep space exploration planning**.
- It strengthens India's capability in **human spaceflight behavioural science and mission readiness**.

NEW NEMATODE SPECIES

TOI The Times of India

ZSI discovers 2 new marine nematode species off TN coast

Kolkata: In a major boost to India's marine biodiversity records, researchers from the Zoological Survey of India (ZSI) have discovered two...



Why in News

- **Zoological Survey of India (ZSI)** discovered two new marine nematodes off **Tamil Nadu coast**.

Scientific Classification and Discovery

- New species identified as **Corononema dhriti** and **Epacanthion indica**.
- **Corononema dhriti** is only the **fourth species globally in its genus**.
- **Epacanthion indica** shows **predatory traits with specialized mandibles and teeth**.



Biological Characteristics of Nematodes

- Nematodes belong to phylum **Nematoda** and are **bilaterally symmetrical organisms**.
- They may possess a **pseudocoel (fluid-filled cavity)** aiding body structure.
- They are found in **soil, freshwater, marine environments and extreme ecosystems**.

Ecological Significance

- Marine nematodes aid in **nutrient recycling and sediment stability**.
- They act as **bio-indicators of environmental health and climate change impacts**.

GOVERNMENT E-MARKETPLACE (GEM)

Mint

GeM opens door for overseas sellers to bid for government orders

The public procurement platform now supports multi-currency bidding, and is tightening oversight of listings and seller behaviour using data...



Why in News

- **GeM portal** achieved cumulative **₹18.4 lakh crore GMV**, including **₹5 lakh crore in FY 2025–26**.

Institutional Framework and Governance Role

- Launched in **2016** by **Ministry of Commerce & Industry**.
- It is a national portal for **public procurement by government departments and PSUs**.



Digital Architecture and Features

- It is a **fully digital, cashless and system-driven platform**.
- It uses **AI tools, multilingual LMS and voice-enabled navigation**.
- It supports **MSMEs, startups and remote sellers through inclusive onboarding**.

Economic and Administrative Significance

- It ensures **transparency, efficiency and price discovery in procurement**.
- It promotes **ease of doing business and reduces corruption in public purchases**.

MADRAS HEDGEHOG

THE Hindu

First complete mitochondrial genome analysis of Madras hedgehog sheds new light on the enigmatic species

The first analysis of the complete mitochondrial genome of the Madras hedgehog (Paraechinus nudiventris), also known as the bare-bellied...



Why in News

- First **mitochondrial genome analysis** of **Madras Hedgehog (Paraechinus nudiventris)** was completed.

Biological and Taxonomic Features

- It is a small mammal known as **bare-bellied hedgehog or Mulleli**.
- It has **spines for defence and soft fur on its belly**.
- It is a **nocturnal insectivore** with lifespan of **5–6 years**.

Geographical Distribution and Habitat	Ecological Role and Importance	Threats and Conservation Perspective
<ul style="list-style-type: none"> ➤ It is endemic to peninsular India, especially Tamil Nadu, Kerala, Andhra Pradesh and Karnataka. ➤ It prefers dry scrublands, grasslands and thorn forests. 	<ul style="list-style-type: none"> ➤ It helps in insect population control and soil aeration. ➤ It supports ecosystem balance in arid and semi-arid regions. 	<ul style="list-style-type: none"> ➤ Threatened by hunting due to medicinal myths. ➤ Listed as Least Concern (IUCN) but requires awareness-based conservation efforts.

PSYCHEDELICS

 The Guardian

Scientists identify 'neural fingerprint' of psychedelic drugs in the brain

Analysis of more than 500 brain scans finds LSD, psilocybin and other psychedelics increase cross-talk between brain systems.



Why in News

- New research shows psychedelics can **alter brain patterns related to self-perception.**

Scientific Basis and Mechanism

- Psychedelics are **psychotropic substances affecting perception, mood and cognition.**
- They act by **binding to serotonin receptors (5-HT)** in the brain.

Classification

- **Classical psychedelics** include **LSD, psilocybin and DMT.**
- **Non-classical psychedelics** include **ketamine and MDMA.**

Legal and Policy Framework in India

- Regulated under **Narcotic Drugs and Psychotropic Substances Act, 1985.**
- Their use is largely **prohibited except for controlled research purposes.**

Medical and Ethical Issues

- Being studied for **treatment of depression and mental health disorders.**
- Raises concerns on **drug regulation, ethics and therapeutic safety standards.**

TAR BALLS

 The Times of India

Centre proposes rules to manage environmentally hazardous tar balls, space tech to be used for surveillance

India News: NEW DELHI: The Centre has, for the first time, come out with dedicated rules to manage tar balls - weathered product of oil...



Why in News

- **MoEFCC** released draft rules for managing **tar balls along Indian coasts.**



Formation and Composition

- Tar balls are formed by **weathering of crude oil in marine environments**.
- They contain **toxic substances like heavy metals and persistent organic pollutants (POPs)**.

Geographical Impact in India

- Frequently found along **western coast from Gujarat to Goa** during **April–September**.

Environmental and Health Implications

- They threaten **marine biodiversity including seabirds, fish and turtles**.
- They pose **human health risks through toxic exposure**.

Governance and Environmental Management

- Requires **coastal regulation, oil spill response systems and monitoring mechanisms**.
- Integration with **Marine Pollution Rules and Coastal Regulation Zone (CRZ) norms** is needed.

OTHER IMPORTANT NEWS OF THE DAY

Person In
News

GURU TEGH BAHADUR

Why in News

- Prime Minister paid tribute on **Parkash Purab of Guru Tegh Bahadur**.



Historical and Religious Significance

- **Guru Tegh Bahadur (1621–1675)** was the **9th Sikh Guru**.
- He is revered as **“Hind Di Chadar”** for **defending religious freedom**.

Life, Contributions and Philosophy


- Born as **Tyaga Mal** and renamed for his **valour by Guru Hargobind**.
- Contributed **over 100 hymns to Guru Granth Sahib**.
- Promoted the concept of **saint-soldier (Miri-Piri tradition)**.

Geographical and Cultural Legacy

- Founded **Anandpur Sahib (Punjab)**, later central to **Khalsa formation (1699)**.
- Provides ethical grounding for **pluralism, tolerance and rights-based governance**.

**Environ-
ment**

INDIAN CRESTED PORCUPINE

 The Times of India

Porcupines push saffron to brink in Kashmir

India News: SRINAGAR: A prickly pest stalks Kashmir's "red gold". Farmers in Pampore now live on pins and needles. Across Pampore's saffron...



Why in News

- The **Indian Crested Porcupine** has damaged **saffron crops in Kashmir** by feeding on underground corms.

Taxonomy and Biological Features

- Scientific name is **Hystrix indica**, belonging to family **Hystricidae**.
- It possesses **sharp quills for defence** and cannot throw them but uses backward attacks.
- It is a **nocturnal, burrowing mammal** with a lifespan of **18–20 years**.



Habitat and Distribution Dynamics

- It inhabits **rocky hills, forests, scrublands and grasslands** up to **2400 metres altitude**.
- It is distributed across **South Asia, Middle East and Indian subcontinent**.

Ecological and Agricultural Interface


- It has a **herbivorous diet**, feeding on roots, grains and plant material.
- Crop damage highlights **human-wildlife conflict and agricultural vulnerability**.

Conservation Status and Policy Insight

- Listed as **Least Concern** under **IUCN Red List**.
- Mitigation requires **crop protection strategies and wildlife management integration**.

Science and Technology

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

 Down To Earth

Stricter rules to protect European waters: EU Parliament sets stricter standards to curb pollution in rivers, lakes and groundwater



List of pollutants to be monitored have been updated to include PFAS, microplastics, pesticides and medicines. Stricter rules to protect...

Why in News

- **EU Parliament** added **PFAS** to the monitored pollutants list under new water standards.



Chemical Nature and Classification

- PFAS are **synthetic fluorinated chemicals known as “Forever Chemicals”**.
- Key types include **PFOS and PFOA**, listed under **Stockholm Convention (POPs)**.

Environmental Persistence and Exposure Pathways

- They resist degradation due to **strong carbon-fluorine bonds**.
- Exposure occurs via **contaminated water, food, air and consumer products**.

Health and Ecological Impact

- Linked to **cancer risk, hormonal disruption, developmental issues and high cholesterol**.
- They contribute to **long-term water and soil contamination**.

Global Governance and Policy Relevance

- Regulated under Stockholm Convention on Persistent Organic Pollutants.
- India requires stronger monitoring standards and industrial regulation frameworks.

UTTAR PRADESH IN NEWS

DR B. R. AMBEDKAR MURTI VIKAS YOJANA

📌 The Indian Express

Uttar Pradesh: To beautify statues of Ambedkar, reformers, govt sets aside Rs 403 crore

The state government has launched a Rs 403-crore "Dr B R Ambedkar Murti Vikas Yojana" to beautify, develop and maintain statues of Ambedkar...



Why in News

- **UP Government** launched a **₹403 crore** scheme to develop Ambedkar statues before **2027 elections**.

Key Features

- **₹1 crore** per constituency for **403 Assembly constituencies**.
- Covers **10 statues per constituency** with a cap of **₹10 lakh per statue**.
- Includes icons like **Ambedkar, Ravidas, Kabir, Phule, Valmiki**.



Implementation Focus

- Works include **canopies, boundary walls, lighting and beautification**.
- Covers statues installed till **December 2025**.

Significance

- Aims to strengthen **Dalit outreach and social justice narrative**.
- Reflects constitutional values under **Article 14 and Article 17**.