

UPSC Daily Current Affairs| Prelim Bits 11-04-2025

India- Portugal Relationship

Prelims - Current events of national and international importance.

Mains (GS II) - India and its neighborhood- relations.

Why in News?

President Droupadi Murmu recently held extensive discussions with President Marcelo Rebelo de Sousa of Portugal and deliberated on various aspects of India-Portugal relations.

- Both sides agreed to further strengthen the ties in several areas, including trade and investment, IT, renewable energy and connectivity.
- Commemorative postage stamps** - Both sides launched commemorative postage stamps marking **50 years of diplomatic relations** between India and Portugal.
- The stamps reflect the rich artistic and cultural heritage of India and Portugal, and feature vibrant folk attire from both countries
 - Rajasthan's distinctive Kalbeliya costume, and
 - The traditional Viana do Castelo dress from Portugal.



- President of India visited the Church of Santa Maria and laid wreath at the tomb of Luis Vaz de Camoes, the national poet of Portugal.
- She toured the Monastery of Jeronimos, a masterpiece of 16th-century architecture in Portugal.
- President receives **“Key of Honour”** of Lisbon City in Portugal.
- Significance** - The relationship between India and Portugal enhances the overall strength of the India-European Union partnership.
- Currently, trade between the two nations stands at \$1.5 billion and has been experiencing consistent growth.

- Portugal was also the first country in Europe with whom India had signed a **Migration and Mobility Agreement**.
- It was during the Portuguese presidency of the EU in 2000 that the first India-EU summit was hosted by Portugal.

Reference

[Business Standard | India-Portugal relationship](#)

Acute Promyelocytic Leukemia (APL)

Prelims - *Current events of national and international importance| General Science.*

Mains (GS III) - *Science and Technology - Developments and their applications and effects in everyday life.*

Why in News?

The new test, RAPID-CRISPR developed using CRISPR technology can quickly and accurately diagnose acute promyelocytic leukemia (APL).

- It is a rare but serious **blood cancer** characterized by the abnormal accumulation of immature white blood cells called promyelocytes, often leading to severe bleeding and clotting problems.
- It is classified as a subtype of Acute Myeloid Leukemia (AML), a cancer of the blood-forming tissue (bone marrow).
- It accounts for about **10-15%** of newly diagnosed AML cases.
- **Common symptoms**
 - Sudden bleeding from the gums and nose
 - Fatigue
 - Unexplained fever
 - Bone pain
- While these symptoms may mimic those of other conditions, definitive diagnosis relies on histopathological assessments, including complete blood count (CBC) and cell morphology.
- APL results from a genetic mutation that causes an abnormal fusion of two genes, PML and RARA, which disrupts the normal production of blood cells.
- This genetic alteration leads to a significant decrease in white blood cells and platelets, hindering the body's ability to combat infections and manage bleeding.
- **Average Diagnosis age in India** - 34 years.
- **Affecting Ratio** - Male-to-female ratio of 1.5:1.
- **Severity** - The condition poses a particular risk due to the potential for sudden internal bleeding in critical organs such as the lungs and brain, which **can be life-threatening** within days if not addressed promptly.
- **Prognosis** - With appropriate treatment, APL is considered one of the most curable subtypes of AML, with high remission and cure rates.
- **Treatment** - Often treated with a combination of chemotherapy and non-

chemotherapy drugs like *all-trans-retinoic acid (ATRA)* and *arsenic trioxide (ATO)*.

Reference

[The Hindu | Acute Promyelocytic Leukemia \(APL\)](#)

Theobaldius Konkanensis

Prelims - *Current events of national and international importance| General issues on Environmental ecology & Bio-diversity.*

Mains (GS III) - *Conservation.*

Why in News?

A team of researchers from India and U.K. have discovered a species of land snail from the Konkan region of Maharashtra and named it, 'Theobaldius konkanensis'.

- It is a new species of cyclophorid (any snail in the family Cyclophoridae) land snail.
- **Endemic to** - Northern Western Ghats.
- **Habitat** - Found on the forest floor among leaf litter and on moist, decaying branches in tropical evergreen and semi-evergreen forests.
- **Behaviour** - It is active during the day and night.
- **Distinction** - It differs from all other Indian Theobaldius species.
- This species also tends to have a more elevated spire than other Theobaldius species.
- **Appearance** - Snail's shell is thick, conoidally depressed, widely umbilicated with regularly increasing whorls, corneous **yellow qin colour with brown striations**, collabrally striated periostracum that wears off in patches.



- **Distribution** - Theobaldius currently numbers 20 species and were distributed in India (9 species), Sri Lanka (11 species) and Sumatra (1 species) island in Indonesia.
 - **Species in India** - T. nivicola and T. orites - North-east India.
 - T. anguis, T. deplanatus, T. maculosus, T. ravidus, T. stenostoma, and T. tristis - endemic to the Western Ghats;

- *T. annulatus* - occurs in both Sri Lanka and the Western Ghats.
- **Mating** - Most of the operculate land snails have separate sexes and ***majority of land snails are hermaphrodite*** (having both sex).
- Land snail and slug breed only in rainy season. They reproduce by cross-fertilisation as well as *self-fertilisation*.
- **Lifespan** - 2 to 7 years.
- **Significance** - Land snails are excellent bioindicators and are susceptible to climatic fluctuations.

Reference

[The Hindu | Theobaldius konkanensis](#)

Magnetic Nanoparticles for Cancer Treatment

Prelims - *Science and Technology*.

Mains (GS III) - *Science and Technology - Developments and applications of science and technology and their effects on everyday life*.

Why in news?

Scientists from the Institute of Advanced Study in Science and Technology (IASST), Guwahati, in collaboration with NIT Nagaland, used magnetic nanoparticles to treat cancer.

- The magnetic system is developed with newly synthesized nanocrystalline cobalt chromite magnetic nanoparticles.
- It can treat cancer by increasing temperature of tumour cells through a procedure called ***magnetic hyperthermia***.

Magnetic Hyperthermia

- Magnetic hyperthermia is a *non-invasive technique* to treat cancer, where magnetic nanoparticles are introduced into the body and guided to the tumour site.
- When subjected to an alternating magnetic field, these particles generate *localized heat*, raising the temperature of tumour cells to around 46°C, leading to *necrosis* (cell death) of cancerous cells without affecting nearby healthy tissue.

- **Material used** - Scientists developed *nanocrystalline cobalt chromite* magnetic nanoparticles using the chemical co-precipitation method.
- These nanoparticles are doped with *Gadolinium (Gd)* to enhance magnetic and heat-generating properties.
- They act as *nano-heaters* when introduced into the body in fluid form.
- Under an alternating magnetic field, they produce *localized self-heating*.
- This heating can raise the *tumour temperature to 46°C*, leading to cancer cell death (necrosis).
- **Advantages** - Targeted and localized treatment of cancer.
- External control through magnetic fields.

- Minimally invasive and potentially cost-effective therapy.
- Fewer side effects compared to chemotherapy and radiation.

Reference

[PIB | Magnetic Nanoparticles for Cancer Therapy](#)

Chintan Shivir 2025

Prelims - *Current events of national and international importance| Economic and Social Development.*

Mains (GS II) - *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

Why in News?

Chintan Shivir has been organized across various ministers for developmental programs.

- **Chintan Shivir** - It is a mission-oriented platform for Constructive Dialogue, Ideation, and Exchange of Best Practices.

Ministry of Social Justice & Empowerment

- **Key pillars** - Education, Economic development, Social protection, and Accessibility.
- Department of Empowerment of Persons with Disabilities (DEPwD) presented progress under schemes such as
 - Assistance to Disabled persons (ADIP),
 - Scholarships for PwDs, and
 - Initiatives for skill development and digital inclusion.
- It focused on educational empowerment under schemes such as *Pre-Matric and Post-Matric Scholarships* for marginalized sections, and [PM-YASASVI](#).
- **Key livelihood-oriented schemes** - [Pradhan Mantri Anusuchit Jaati Abhyuday Yojana](#) and [Scheme for Economic Empowerment of DNTs \(SEED\)](#) were reviewed, showcasing successful models of asset creation, cluster development, and entrepreneurship support.
- The [NAMASTE Scheme](#) discussions underscored the importance of modernizing sanitation work and eradicating manual scavenging through a blend of technology, legal safeguards, and skill development.
- The focus remained on ensuring dignity and financial independence for sanitation workers, particularly women, through sustained collaboration and inter-agency coordination.

Ministry of Mines

- It has organized Chintan Shivir to engage with stakeholders and drive reforms in the mining sector to propel growth and development.
- **Key topics**

- Increasing mineral production and operationalization of mineral blocks.
- Circular economy.
- Encouraging private exploration and access to geo-scientific data.
- Developing a local ecosystem for mining equipment manufacturing.

Ministry of Women and Child Development (MoWCD)

- **Key Initiatives** - Mission Vatsalya, [Mission Shakti](#), and Mission Saksham Anganwadi and Poshan 2.0.

***Mission Vatsalya** is to ensure the welfare and rehabilitation of children in difficult circumstances, with a focus on child rights, advocacy, and strengthening the juvenile justice system.*

***Saksham Anganwadi and Poshan 2.0** is an Integrated Nutrition Support Programme, seeks to address the challenges of malnutrition in children, adolescent girls, pregnant women and lactating mothers.*

- These sessions aim to address critical issues and chart a way forward for strengthening the welfare of women and development of children in India.

Ministry of Youth Affairs and Sports

- Focused on Preparation for Los Angeles 2028 and Discussed Roadmap to Host 2036 Olympics.
- **Key topics** - Fresh emphasis should be given to promoting school sports, production of quality coaches and welfare of athletes.
- **National Sports Repository System** is being upgraded to enable close monitoring and systematic development of every registered athlete.
- The program will help the NSRS and the [Khelo India Rising Talent Identification \(KIRTI\) program](#).
- Welfare of coaches and their holistic skilling were also discussed.
- States to utilize the Khelo India State Training Centres to train and excel at the global level.

Ministry of Coal

- **Key Topics** - Coal PSUs and industry partners to adopt state-of-the-art technologies and implement rigorous safety standards to safeguard the lives of workers and ensure the well-being of the workforce.
- It necessitated developing robust mechanisms for mine closures, focusing on biodiversity conservation, land reclamation, and transforming mined-out areas into hubs of community activity and ecological balance.
- It targets 2 billion tonnes of coal production, improving coal transportation systems, and adopting cleaner technologies like coal gasification to align with India's energy transition goals.
- **Key Initiatives** - Special Campaign 4.0. & iGOT Karmayogi platform, a learning

platform aimed at promoting capacity development among civil services, part of Mission Karmayogi.

Reference

[PIB | Chintan Shivir 2025](#)

One Liners 11-04-2025	
Geography	
GI Tags for Products in West Bengal	
Recently, West Bengal has earned Geographical Indication (GI) tag for 7 products.	
GI Tagged Products	Description
Nolen Gurer Sandesh	Sweet made from <i>fresh curdled milk</i> and the season's prized <i>date palm jaggery</i> (nolen gur).
Baruipur Guavas	Specific variety of guava, often described as <i>sweet and seedless</i> .
White Bonde	Mild sweet, dry and <i>milky-white boondi</i> .
Chhanabara	Sweet made from <i>cottage cheese</i> , sugar syrup, known for its unique and crispy texture.
Motichur Laddoo	Sweet made from gram flour, ghee and sugar syrup.
Radhunipagal Rice	Brownish white colored small grain aromatic rice, known for its <i>sweetish taste</i> and potential medicinal properties.
Nistari Silk Yarn	<i>Naturally yellow</i> (Bombyx Silk), high-quality silk yarn, known for its fine texture and durability.
• With these additions, a <i>total of 32 items</i> entered into the GI list from West Bengal.	
International Relations and Issues	
India-UK Economic and Financial Dialogue (EFD)	
Recently, an India-UK EFD was held at London.	
<ul style="list-style-type: none"> • It is the <i>13th Ministerial meeting</i> of the India-UK Economic and Financial Dialogue (13th EFD). • Proposal – UK announced <i>400 million euros in export and investment deals</i> with India. • Commitment – To continue collaboration in <i>financial services sector</i>, FinTech and Digital economy. • Collaboration at bilateral and multilateral fora to address mutual and global economic issues. • They welcomed the recent announcement of UK universities establishing campus in India and the recent release the India-UK Financial Partnership (IUKFP) report on direct listing in IFSC GIFT City. 	
Economy	

Co-lending Arrangement (CLA) in India

Recently, the Reserve Bank of India (RBI) proposed a draft framework for co-lending arrangements between all regulated entities.

- **CLA in India**- It involves the act of 2 financial institutions that are eligible under the RBI directions, issuing loans based on a pre-determined proportion of lending.
- Banks that co-lend to priority sector can claim priority sector status.
- **Current regulation** - It deals only with co-lending between banks and non-banking financial companies and they are restricted to priority sector loans.
- **Proposed changes** - CLA will now be applicable for all commercial banks, NBFCs and will exclude RRBs, SFBs and Local Area Banks.
- Credit policy of the banks that indulge in co-lending will have to disclose customer segment targetted, terms and conditions of loan, internal limit on borrower portfolio among others.

International Monetary Fund (IMF)-World Bank Report on Financial Regulators Authority in India

IMF and World Bank reports suggested changes to the Indian financial system based on a recent assessment.

- **Current laws** - It allow government to control senior managements and boards of financial regulators.
- Ministry of Finance (MoF) is the appellate authority for the RBI and has the power to overturn the latter's supervisory decisions.
 - In 2019, the government overturned the RBI's decision to revoke the licence of a small urban cooperative bank.
- **Report recommendations** - The power and independence of financial regulators needs to be strengthened with legislative and institutional changes.
- It recommended transferring the appellate authority power from MoF to an independent agency.
- Insurance Regulatory and Development Authority of India (IRDAI) should have power to take critical supervisory actions against the dominant State-owned life insurer.

Digital Portal for National Waterways

The Digital Portal for National Waterways was launched recently by Ministry of Ports, Shipping and Waterways.

- **Developed by** - Inland Waterways Authority of India (IWAI).
- **Aim** - To facilitate Ease of Doing Business and encouraging private investment in Inland Water Transport (IWT).
- It issued 1st NoC to Mumbai-based Marina India Infrastructure Private Limited, is the 1st-of-its-kind NoC issued digitally to any private entity for construction of a terminal on any national waterway in the country.

No Objection Certificate (NOC) is a legal document issued to say that the issuer has no objection to the details mentioned in the document.

National Waterways (Construction of Jetties/Terminals) Regulations, 2025

Recently, National Waterways (Construction of Jetties/Terminals) Regulations, 2025 was introduced by the Ministry of Ports, Shipping and Waterways.

- **Regulations** – It lays out a framework for private players to invest in the construction and operation of jetties and terminals across India's national waterways network.
- Any entity can develop or operate an inland waterway terminal on a National Waterway by securing a 'No Objection Certificate' (NoC) which are issued through new digital portal by the Inland Waterways Authority of India (IWAI).
- **Significance** – It brings both existing & new terminals and permanent or temporary terminals under a unified framework.
 - **Permanent terminals** – Operates for a lifetime.
 - **Temporary terminals** – Operates initially for 5-year term.

Zirakpur Bypass

Recently, cabinet approved the construction of 6 lane access control of Zirakpur bypass with length of 19.2 km worth in Punjab and Haryana on Hybrid Annuity Mode (HAM).

- It starts from the junction with NH-7 and terminates at the junction with NH-5 covering Punjab and Haryana.
- **Aim** – To reduce the travel time and ensure hassle-free traffic movement in the congested urban section of,
 - **NH-7** – Chandigarh-Bathinda in Zirakpur (Punjab).
 - **NH-5** – Zirakpur-Parwanoo in Panchkula (Haryana).
 - **NH-152** – Narwana to Panchkula (Haryana).
- To avoid the highly urbanized and congested stretch of Zirakpur in Punjab and Panchkula in Haryana.

Hybrid Annuity Model (HAM) is a public-private partnership (PPP) approach for road infrastructure in India, combining elements of Engineering, Procurement, and Construction (EPC) and Build, Operate, Transfer (BOT) models.

Environment

Joint Nilgiri Tahr Census

The synchronised survey of Nilgiri Tahr is set to be conducted to commemorate the 50th anniversary of Eravikulam National Park.

- **Survey by** – Kerala and Tamil Nadu, spanning
 - 89 blocks in – Kerala.
 - 176 blocks in – Tamil Nadu.
- **Coverage** – Across the contiguous Nilgiri Tahr habitats, covering areas both inside and outside protected forest zones.
- **Methodology** – Camera traps would be deployed and pellet samples collected from selected blocks for scientific analysis, including studies on genetic variation.

Nilgiri Tahr

Kerala and Tamil Nadu is set to conduct a joint Nilgiri Tahr census from April 24-27.

- It is the only mountain ungulate (large mammals with hooves) in southern India amongst the 12 species present in India.
- **Endemic to** – Western Ghats, is primarily found in the highlands of southern India.
- Eravikulam National Park is in Kerala which hosts the largest population of this species.
- **State animal of Tamil Nadu** – The State celebrates October 7 as Nilgiri Tahr Day.
- **Conservation status**
 - IUCN – Endangered.
 - Wildlife (Protection) Act of India, 1972 – Schedule I.

Science

Homeopathic Medicine

Recently, World Homoeopathy Day is celebrated on April 10th, to raise awareness about the role of homoeopathy in healthcare.

- It supports the body's natural ability to heal instead of just covering up symptoms.
- **Homoeopathic pills** – They are easy on the stomach and do not weaken the body's natural defences.
- **Treatment** – It focuses on finding and treating the main cause of the illness.
- **Advantages** – It can be used along with other medical methods.
- It is usually safe and gentle as they are made from natural and non-toxic sources.

World Homoeopathy Day is linked to the birth of Dr. Samuel Hahnemann who was born on April 10, 1755.

