

WHAT IS INDIAai?

Recently, the INDIAai and Meta India signed a memorandum of understanding (MoU) to establish a framework for collaboration and cooperation in the field of artificial intelligence (AI) and emerging technologies.



About INDIAai:

- It is the **National artificial intelligence Portal of India** which was launched on 28th May 2020.
- It is a **knowledge portal, research organisation**, and an ecosystem-building initiative.
- It stands to unite and promote collaborations with various entities in India's AI ecosystem.
- It is a joint initiative by the **Ministry of Electronics and IT (MeitY), National e-Governance Division (NeGD) and NASSCOM**.
- **NeGD:** It was created in 2009 as an Independent Business Division under the Digital India Corporation (a not-for-profit company set up by MeitY).
- **NASSCOM:** It is a not-for-profit industry association and the apex body for the IT and IT-enabled products and services sector in India.
- It is the single central knowledge hub on artificial intelligence and allied fields for aspiring entrepreneurs, students, professionals, academics, and everyone else.

What is Artificial intelligence (AI)?

- It is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.

WHAT IS INS VIKRANT?



It is **India's first indigenously designed and manufactured aircraft carrier**.

- The ship has been **designed in-house** by Indian Navy's Warship Design Bureau and constructed by M/s Cochin Shipyard Limited.

- It will strengthen the country's standing as a 'Blue Water Navy' — a maritime force with global reach and capability to operate over deep seas.
- With it, **India also joins the elite group of nations – the US, Russia, France, the UK and China – who are capable of designing and constructing aircraft carriers.**
- **Features:**
 - **Dimension:** It has an approximate **length of 262 meters** (860 feet) and a **breadth of 62 meters** (203 feet).
 - **Displacement:** Its full-load displacement is **43,000 tonnes**.
 - **Propulsion:** It is powered by **four gas turbine engines**.
 - **Speed:** It has a top speed of **52 km/h (32 mph)**.
 - **Endurance:** **8,600 miles** (13,890 kilometres)
 - **Aircraft capacity:** It can **accommodate up to 30 fixed-wing aircraft**, including fighter jets, and rotary-wing aircraft, such as anti-submarine warfare helicopters and utility helicopters.

Historical facts about INS Vikrant:

- **INS Vikrant**, with pennant number R11, was the **first-ever aircraft carrier that was operated by the Indian Navy**.
- The ship was **officially laid down in 1943** and was **being built for the Royal Navy as HMS (Her Majesty's Ship) Hercules** when the constitution was put on hold after World War II ended.
- Like many other ships at the time, the under-construction HMS Hercules was **put up for sale by the United Kingdom and was purchased by India in 1957**.
- The **construction work was completed** and the ship was **commissioned in the Indian Navy as INS Vikrant in 1961**.
- The **plan for building an indigenous aircraft carrier started taking shape as the old INS Vikrant neared its decommissioning** in the late 1990s.

KEY FACTS ABOUT TUVALU

Tuvalu is on the list of islands that are most likely to disappear into the ocean in the near future due to rising sea levels.

About Tuvalu:



- It was formerly called as **the Ellice Islands**.
- It's an island country in the **west-central Pacific Ocean**, and sits around halfway between Hawaii and Australia.
- **Capital:** Funafuti
- Its **neighbours include Kiribati**, to the north, and Fiji, to the south.
- It is **composed of nine small coral islands** scattered in a chain lying approximately northwest to southeast
- **Language:** The Tuvaluans are Polynesian and they speak **Tuvaluan language** which is closely related to Samoan.
- **Government**
 - The government is a **parliamentary democracy** with a unicameral legislature elected by universal adult suffrage.
 - There are no political parties: the prime minister is chosen by and from the legislature.
 - Tuvalu is a member of the **South Pacific Forum**.
- **Economy**
 - Most people are **subsistence farmers** and are aided by remittances from relatives working overseas.
 - A small quantity of **copra is produced** for export, the sale of stamps accounts for modest earnings, and fees are collected from foreign fishing fleets.
- **Threats**
 - Due to its **low-lying geography**, Tuvalu is at acute risk **from natural disasters**, including rising storm surges, cyclones, and tsunamis.



WHAT IS "UREA GOLD"?

Prime Minister recently launched "Urea Gold", a new variety of Urea, during an event in Rajasthan's Sikar.



CROSS & CLIMB ROHTAK



- It is a **new variety of Urea coated with Sulphur.**
- It is being introduced to **address the Sulphur deficiency in soil and save input costs for the farmers.**
- Urea Gold **surpasses the existing Neem-coated urea in terms of both economic viability and efficiency.**
- **How Urea Gold Is Better Than Others?**
 - Sulphur-coated urea facilitates a **gradual release of nitrogen**, thereby **enhancing its availability and uptake by crops.**
 - The **inclusion of humic acid** in Urea Gold further **extends its lifespan as a fertilizer.**
 - This product **not only substitutes traditional urea consumption** but also **reduces overall fertilizer usage.**
 - According to the report, 15 kg of Urea Gold provides comparable benefits to 20 kg of conventional urea, making it a more efficient and effective choice for farmers.

What is Neem-coated urea?

- Urea is a **commonly used nitrogen-based fertilizer** that provides essential nutrients to plants to promote healthy growth.
- **Neem-coated urea** is a specialized form of **urea fertilizer that has been coated with neem oil.**

Benefits:

- The neem coating on urea **slows down the release of nitrogen into the soil.** This controlled release **helps reduce nitrogen leaching and volatilization**, leading to **improved nitrogen use efficiency by plants.**
- It would **bring down the quantity of urea per acre** and consequent **reduction in input cost to farmers.**
- The **emission of nitrous oxide** is also brought down significantly.
- **Neem oil**, derived from the neem tree (*Azadirachta indica*), **has natural pesticidal properties.**

THE JAN VISHWAS (AMENDMENT OF PROVISIONS) BILL 2023

Why in News?

- Among the Bills set to be taken up during the Monsoon Session of the Parliament, is the Jan Vishwas (Amendment of Provisions) Bill 2023.

About the Jan Vishwas (Amendment of Provisions) Bill 2023:

- It seeks to **redefine the regulatory landscape of the country** with decriminalisation of minor offences under 42 Acts to reduce compliance burden and promote ease of living and doing business in the country.
- It was tabled in Parliament by the **Union Ministry of Commerce and Industry** last year and later referred to a **Joint Parliamentary Committee (JPC)** for review.
- The JPC presented its report with **recommendations** to Parliament during the Budget Session.
- As per reports, most recommendations of the JPC have been approved by the Union Cabinet, clearing the way for its passing.

What does the Bill Propose?

- **Decriminalising of 180 offences** across 42 laws governing environment, agriculture, media, industry and trade, publication, etc.
- **It seeks to completely remove or replace imprisonment** clauses with monetary fines, to provide a boost to the business ecosystem and improve the well-being of the public.
- **The Bill also proposes compounding of offences in some provisions.**
- The Bill removes all offences and penalties under the **Indian Post Office Act, 1898.**
- **Changes in grievance redressal mechanisms** and the appointment of one or more Adjudicating Officers for determining penalties.
- **A periodic revision of fines and penalties** (an increase of 10% of the minimum amount every 3 years) for various offences in the specified Acts.

Some Key Laws Covered in the Draft Legislation:

- The Indian Forest Act, 1927
- The Air (Prevention and Control of Pollution) Act, 1981

- The Information Technology Act, 2000
- The Environment (Protection) Act, 1986
- The Copyright Act, 1957
- The Motor Vehicles Act, 1988
- The Railways Act, 1989
- The Cinematograph Act, 1952
- The Agricultural Produce (Grading & Marking) Act, 1937
- The Food Safety and Standards Act, 2006
- The High Denomination Bank Notes (Demonetisation) Act, 1978, etc.

Significance of the Bill:

- **Reducing compliance burden** gives impetus to business process reengineering and improves ease of living of people.
- **It would accelerate investment decisions** due to smoother processes and attracting more investment.
- **The Bill is also aimed at reducing judicial burden.** As per the National Judicial Data Grid, out of a total of 4.4 crore pending cases, 3.3 crore cases are criminal proceedings.

Are There any Concerns w.r.t. the Bill?

- The monetary fines or penalties are not a good enough attempt at ‘decriminalisation’. Hence, the Bill undertakes ‘**quasi-decriminalisation.**’
- **The blanket removal of imprisonment provision** might also remove the deterrence effect of the environmental legislation, especially for large corporations profiteering from the offence.
- **Adjudicating Officers** may lack the technical competence necessary to decide all penalties under the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act 1986.
- Many offences proposed to be removed in the Bill have nothing to do with its objective of decriminalisation to promote ease of doing business - **like theft or misappropriation of postal articles.**

THE CINEMATOGRAF (AMENDMENT) BILL 2023

Why in News?

- The Rajya Sabha passed the Cinematograph (Amendment) Bill 2023 that introduces stringent anti-piracy provisions, expanding the scope of the law from censorship to also cover copyright.

About the Cinematograph (Amendment) Bill 2023:

- The Bill (introduced by the Ministry of I&B) seeks to amend **the Cinematograph Act 1952**, which authorises the Central Board of Film Certification (CBFC) to require cuts in films and clear them for exhibition in cinemas and on television.
- The Board may also refuse the exhibition of a film.

Salient Provisions of the Cinematograph (Amendment) Bill 2023:

- **Additional certificate categories:** The Bill adds certain additional certificate categories based on age.
 - Under the Act, film may be certified for exhibition:
 - without restriction ('U'),
 - without restriction, but subject to guidance of parents or guardians for children below 12 years of age ('UA'),
 - only to adults ('A'), or
 - only to members of any profession or class of persons ('S').
 - **The Bill substitutes the UA category** with the following three categories to also indicate **age-appropriateness** [in line with the Shyam Benegal committee (2017)]: UA 7+, UA 13+ or UA 16+.
- **Separate certificate for television/other media:** Films with an 'A' or 'S' certificate will require a separate certificate for exhibition on television, or any other media prescribed by the central government.
 - The Board may direct the applicant to carry appropriate deletions or modifications for the separate certificate.

- **Unauthorised recording and exhibition to be punishable:** The Bill prohibits carrying out or abetting - the unauthorised recording and unauthorised exhibition of films - **in order to stop piracy.**
 - Certain exemptions (use of copyrighted content without owner's authorisation in case of reporting of current affairs, etc) under the Copyright Act 1957 will also apply to the above offences.
 - The above offences will be punishable with: **imprisonment between 3 months and 3 years**, and a fine between 3 lakh rupees and 5% of the audited gross production cost.
- **Certificates to be always valid:** Under the Act, the certificate issued by the Board is valid for 10 years. The Bill provides that the certificates will be perpetually/always valid.
- **Revisional powers of the central government:**
 - The Act empowers the central government to examine and make orders in relation to films that have been certified or are pending certification.
 - The Board is required to dispose of matters in conformance to the order.
 - **The Bill removes this power of the central government.**

WHAT IS UREILITE?

In a recent discovery, a collaborative team of scientists from Allahabad University and the University of Bern, Switzerland, revealed that the Dhala crater resulted from the collision of an exceptionally rare and ancient meteorite, known as Ureilite.



About Ureilite:

- 'Ureilites' are a rare class of primitive meteorites that constitute just a tiny fraction of meteorites on Earth.
- It is named after the locality where the first specimen was discovered, the Novo Urei village in Russia.
- **Composition:**
 - They consist of silicate rock, mostly olivine and pyroxene, interspersed with less than 10% of carbon (diamond or graphite), metal sulphides and a few fine-grained silicates.

- They contain **elongated cavities** generally stretched in the same direction.
- **Lack of Chondrules:** Unlike many other stony meteorites, ureilites do not contain **chondrules**, which are small, spherical grains that formed in the early solar system.
- **Primitive Nature:** Ureilites are considered primitive meteorites because their composition closely resembles the material from which the solar system formed.

Key Facts about Dhala Crater:

- It is the **oldest and the largest impact crater in India.**
- It is estimated to have **formed some 2500 million years ago.**
- **Named after the village Dhala**, the crater is an eroded leftover of the original impact structure.
- **Location:** It is located in **Shivpuri district in Madhya Pradesh.**
- **Size:** It is a massive **11 km in diameter**, making it the **largest in Asia.**

What's the difference between a meteor, a meteoroid, and a meteorite?

- **Meteoroids:** They are **objects in space** that range in size from **dust grains to small asteroids.**
- **Meteors:** When meteoroids enter Earth's atmosphere (or that of another planet, like Mars) at high speed and **burn up**, the **fireballs** or "**shooting stars**" are called meteors.
- **Meteorite:** When a meteoroid survives a trip through the atmosphere and hits the ground, it's called a meteorite.