

Factly Weekly

Compilation

2024

**For UPSC CSE Prelims
Exam**

**4th Week
August 2024**

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UPSC Syllabus: International Relations

Rail Force One

Why in News?

Recently, Prime Minister Narendra Modi travelled by train from Poland to Kyiv, Ukraine. The train is nicknamed "Rail Force One".

About Rail Force One



Figure 1. Source: IE

1. Rail Force One is a special train used by world leaders, including Prime Minister Narendra Modi to visit Kyiv, Ukraine, since air travel has been deemed unsafe due to the Russian invasion in February 2022.

2. It is operated by Ukrainian Railways (Ukrzaliznytsia). Rail Force One provides a vital and secure means for international leaders to

reach Kyiv during the conflict.

3. The train's name is inspired by "Air Force One," the U.S. President's aircraft, which emphasizes its significance in wartime diplomacy.

4. As the Ukrainian airspace was closed, rail travel has become the primary mode of transport for high-profile visitors. It has also marked a unique form of diplomatic engagement known as Iron Diplomacy.

About Iron Diplomacy

1. Iron Diplomacy refers to the strategic use of rail travel to maintain diplomatic relations and engage with Ukraine during the ongoing conflict.

2. The term was coined by Alexander Kamyshin, Ukraine's Strategic Industries Minister, who oversees Ukrzaliznytsia. It highlights how rail travel has become a crucial tool for international engagement despite the war.

3. Purpose of Iron Diplomacy: By traveling to Kyiv by train, world leaders such as U.S. President Joe Biden, French President Emmanuel Macron, and Canadian Prime Minister Justin Trudeau demonstrate their support for Ukraine, making a strong statement of solidarity.

UPSC Syllabus: Science and technology

Key Contributions of India's Space Sector

Why in News?

Recently, The Indian Space Research Organisation (ISRO) initiated a study to evaluate the socio-economic impact of the space sector from 2014-2023.

Key Contributions of India's Space Sector

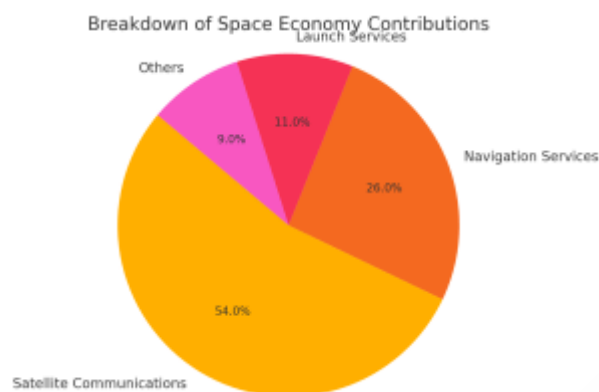


Figure 2. Source: Forum IAS

1. GDP Growth: India's space sector has directly contributed ₹20,000 crore (\$24 billion) to the country's GDP over the last 10 years.

2. Multiplier effect on Economy: For every dollar generated by the space sector, there is a multiplier effect of \$2.54 on the Indian economy.

3. Job creation: The sector has directly supported 96,000 jobs across public and private sectors.

4. India's space sector workforce is reported to be 2.5 times more productive than the broader industrial workforce.

5. Investment and Economic Impact: India has

invested \$13 billion in its space sector over the last decade, making it the 8th largest space economy globally in terms of funding.

6. Sector Growth: As of 2023, the space sector's revenues have grown to \$6.3 billion, comprising about 1.5% of the global space market. The sector now includes 700 companies, of which 200 are startups.

7. Industries supported by the Space Sector: Telecommunications receives 25% support from space sector activities. Information Technology gains 10% support, and administrative Services get supported by 7% from space-related activities.

8. Strategic Importance: The space sector has contributed significantly to India's national prestige, sovereignty, and international standing. The shift towards commercial space activities is becoming a priority.

9. Challenges: Regulatory reforms have yet to fully impact the sector, and limited venture capital access restricts funding for space technology startups.

BioE3 Policy for High-Performance Biomanufacturing

Why in News?

The Union Cabinet has approved the 'BioE3 (Biotechnology for Economy, Environment, and Employment) Policy' proposed by the Department of Biotechnology. This policy aims to foster **high-performance biomanufacturing** in India.

About BioE3 Policy

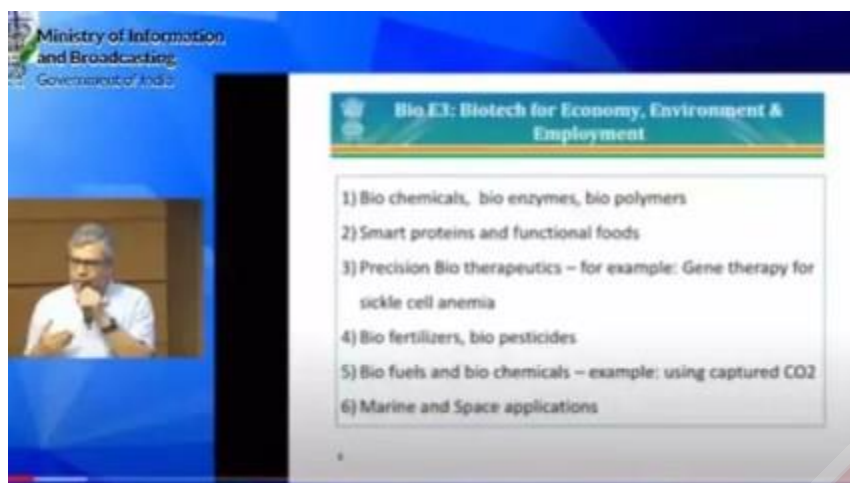


Figure 3. Source: TOI

1. High-performance biomanufacturing leads to the manufacturing of bio-based products through the integration of advanced biotechnological processes.

Aim: to build a resilient biomanufacturing ecosystem to tackle global challenges such as climate change mitigation, food security, and human health.

2. The policy focuses on industrializing biology to

promote sustainable and circular practices, which are crucial for addressing critical societal issues.

3. Focus: The BioE3 Policy concentrate on the following strategic sectors: 1) High-value bio-based chemicals, Biopolymers & enzymes; 2) Smart proteins & functional foods; 3) Precision biotherapeutics; 4) Climate-resilient agriculture; 5) carbon capture & its utilization; 6) marine and space research.

4. The BioE3 Policy supports the government's initiatives for achieving a 'Net Zero' carbon economy and promoting sustainable lifestyles.

5. The policy will guide India toward accelerated green growth by advancing circular bioeconomy practices, fostering a more sustainable and innovative future.

Key Features of the BioE3 Policy

1. Innovation Support: The policy encourages R&D and entrepreneurship across various sectors to drive technological development and commercialization.

2. Creation of Biohubs: It proposes establishing Biomanufacturing & Bio-AI hubs and Biofoundries to advance technology and strengthen the bioeconomy.

3. Regenerative Bioeconomy: The policy emphasizes models that promote green growth, sustainable development, and a circular bioeconomy.

4. Workforce Development: It focuses on expanding the skilled workforce and creating jobs in the biotechnology sector to boost economic growth.

About High-Performance Biomanufacturing

1. High-performance biomanufacturing refers to the advanced production of a wide range of products, from medicines to materials, along with addressing agricultural and food-related challenges.

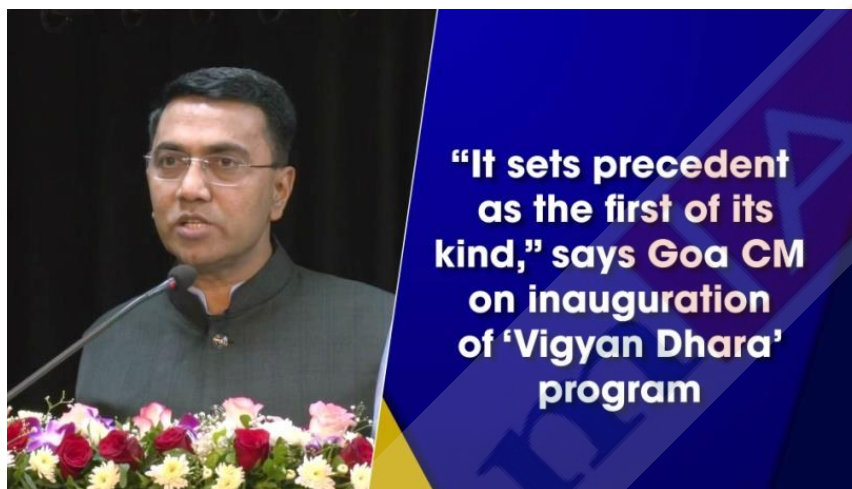
2. It focuses on promoting the development of bio-based products through the integration of cutting-edge biotechnological processes.

Vigyan Dhara Scheme

Why in News?

The Union Cabinet has approved the continuation of three umbrella schemes under a unified central sector scheme named 'Vigyan Dhara' by the Department of Science and Technology (DST).

About Vigyan Dhara Scheme



Source: msn

Aspects	Description
About	1. Vigyan Dhara is a central sector scheme that integrates multiple existing DST schemes. 2. All programs under 'Vigyan Dhara' align with the 5-year goals of DST to achieve the vision of a developed India by 2047. 3. The R&D component of the scheme will be aligned in line with the Anusandhan National Research Foundation (ANRF) .
Aim	The merger of three schemes into 'Vigyan Dhara' aims to improve fund utilization efficiency and synchronize various sub-schemes and programs.
Three main components	The Vigyan Dhara scheme has three broad components : i) Building human and institutional capacity ii) Fostering research and development iii) Promoting innovation, technology development, and deployment
Objectives	To enhance S&T capacity building, advance research, foster innovation, and drive technology development to strengthen the Science, Technology, and Innovation ecosystem in the country.
Benefits	i) Strengthen S&T Capacity: Enhance India's STI ecosystem by developing advanced R&D labs in academic institutions.

	<p>ii) Boost Research & Innovation: Support research in areas like sustainable energy and water, and foster international collaboration.</p> <p>iii) Develop Human Resources: Build a skilled workforce to increase the number of Full-Time Equivalent (FTE) researchers.</p> <p>iv) Achieve Gender Parity: Increase women's participation in S&T through targeted initiatives.</p> <p>v) Encourage Innovation: Promote innovation from grassroots to industry, including startups.</p> <p>vi) Promote Collaboration: Enhance partnerships between academia, government, and industry to strengthen research and innovation.</p>
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Read More: [Rashtriya Vigyan Puraskar \(RVP\)](#)

Vaccine-derived poliovirus

Why in News?

Recently, a two-year-old child from Tikrikilla in Meghalaya has been confirmed to be suffering from vaccine-derived polio.

About Vaccine-Derived Polio Virus

1. Vaccine-Derived Poliovirus (VDPV)- It is a **rare form of poliovirus**, which generally originates from the Oral Polio Vaccine (OPV). These mostly emerge in communities with low sanitation and immunity levels.

2. Occurrence and Transmission-

a. The OPV contains an **attenuated (weakened) virus**. This virus replicates in the intestines and triggers the body's immune response without causing the disease.

b. After vaccination, the **weakened virus is excreted in the stool**. In areas with poor sanitation and low immunization coverage, this virus can spread to others in the community.

3. Concerns- If the excreted virus continues to circulate in an under-immunized population, it can undergo genetic changes over time. These changes may lead the virus to revert to a form capable of causing paralysis, similar to the wild poliovirus.

4. Types of Vaccine-Derived Poliovirus: There are three types of VDPVs:

i) Circulating Vaccine-Derived Poliovirus (cVDPV): This type can spread in communities and cause outbreaks, especially in areas where vaccination rates are low.

ii) Immunodeficiency-Related Vaccine-Derived Poliovirus (iVDPV): Occurs in individuals with primary immunodeficiencies, where the weakened immune system cannot clear the vaccine virus, allowing it to mutate.

iii) Ambiguous Vaccine-Derived Poliovirus (aVDPV): Cases where the source of the virus is unclear and does not fit into the other two categories.

5. Characteristics

a. VDPV is extremely rare. Since 2000, billions of OPV doses have been administered globally, with only a few hundred cases of VDPV reported.

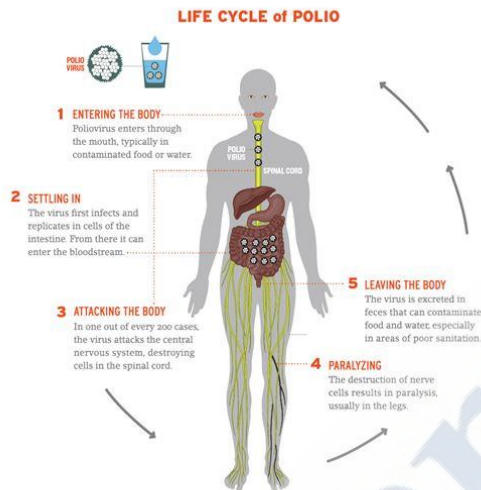
b. The risk of VDPV outbreaks is highest in communities with low polio vaccination coverage. Further the low sanitation coverage and immunity levels, allow the excreted virus to spread and mutate.

7. Prevention and Control

i) High Immunization Coverage: The key to preventing VDPV is maintaining high vaccination coverage to ensure the virus cannot circulate and mutate.

ii) Switch to Inactivated Polio Vaccine (IPV): Some countries have switched from OPV to Inactivated Polio Vaccine (IPV), which uses a killed virus and does not carry a risk of VDPV.

About poliomyelitis/polio



1. Poliomyelitis, often called polio or infantile paralysis is an acute infectious disease caused by polio virus. The virus is a human enterovirus of the *Picornaviridae*

2. There are three types of Polio Virus: 1,2,3-Single stranded RNA virus Natural or Wild Polio Virus (WPVS).

3. It is transmitted from one person to another by oral contact with secretions or faecal material from an infected person. It attacks the central nervous system and damage the cells and paralyse the victim

Comparative Advantages and Challenges

IPV (Inactivated Polio Vaccine)	OPV (Oral Polio Vaccine)
1. Safer as it contains inactivated virus particles. 2. Induces systemic immunity, protecting blood and organ systems. 3. Requires syringes and trained personnel for administration.	1. Easier to administer, needing no syringes or trained personnel. 2. Induces mucosal immunity, offering greater protection at the viral entry site. 3. Rarely, the weakened virus can revert and cause polio.

Read more: [Polio Vaccine](#)

RHUMI-1 Mission

Why in News?

India has successfully launched its first reusable hybrid rocket, RHUMI 1, on August 24, 2024. RHUMI 1 has been designed to carry **three Cube Satellites** and **fifty PICO Satellites** into a suborbital trajectory, marking a significant milestone in India's space exploration efforts.

About RHUMI-1 Mission



Source: BT

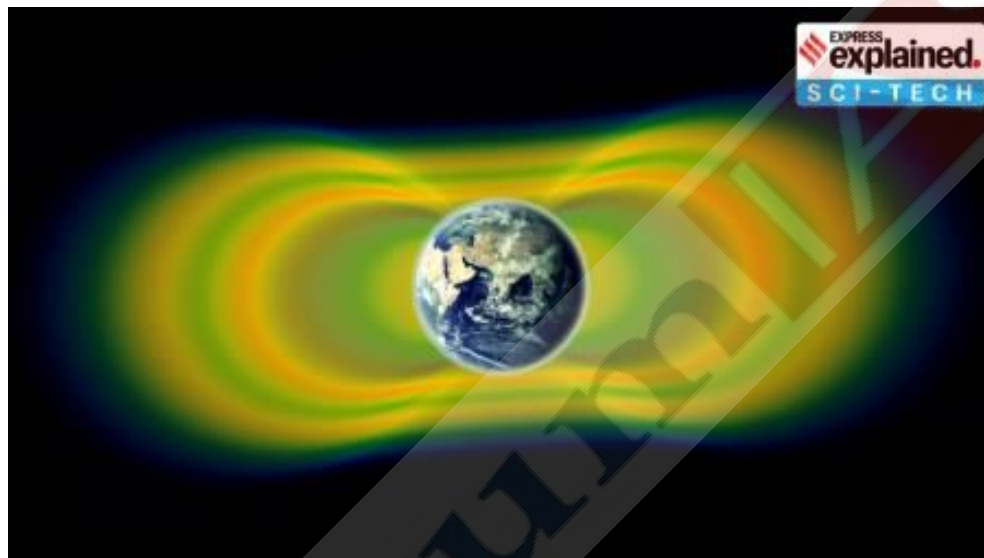
Aspects	Description
About the rocket	<ol style="list-style-type: none">1. It is India's First reusable hybrid rocket.2. The RHUMI-1 rocket was developed by Tamil Nadu-based startup Space Zone India, in collaboration with Martin Group.3. The rocket was launched from a mobile platform in Thiruvidadandai, Chennai.
Features	<ol style="list-style-type: none">1. It has adjustable launch angle, which can be set between 0 and 120 degrees. This allows precise control over the rocket's trajectory, providing greater versatility during launch.3. RHUMI-1 can be launched using a mobile launcher, allowing it to be deployed from various locations.4. RHUMI-1 uses a CO2-triggered parachute system to safely recover its components. This eco-friendly and cost-effective recovery method represents a significant advancement in rocket technology.5. RHUMI-1 utilizes a hybrid propulsion system, combining the advantages of both liquid and solid fuels. This technology promises improved efficiency and reduces operational costs.6. The rocket is powered by a generic-fuel-based hybrid motor, which enhances its efficiency and safety.7. RHUMI-1 is 100% pyrotechnic-free and contains 0% TNT.

Polaris Dawn Mission

Why in News?

Recently, SpaceX postponed the launch of its **Polaris Dawn mission** for the second time this week due to unfavourable weather conditions off the coast of Florida, where the crew capsule is set to splash down after the mission.

About Polaris Dawn Mission



Source: IE

Aspects	Description
About	<ol style="list-style-type: none">1. Polaris Dawn will be the first non-government effort to perform a spacewalk approximately 700 kilometres (435 miles) above Earth.2. The mission will involve orbiting through the Van Allen Belts.3. The data from this mission will support NASA's future plans, especially the 2025 mission to send astronauts beyond the Van Allen Belts to the Moon's South Pole, and eventually to Mars.
Duration	<ol style="list-style-type: none">1. The mission was scheduled to launch on August 26, 2024.2. The mission is planned to last five days in orbit, followed by a splashdown in the ocean on the sixth day.
Objective	<ol style="list-style-type: none">1. To test new SpaceX-designed spacesuits for their effectiveness in protecting astronauts from Van Allen Belt radiation.2. To test laser communications provided by SpaceX's Starlink satellite network potentially enhancing future communication capabilities for space missions.
Mission Equipment	SpaceX is providing the necessary equipment for the mission, including a Falcon 9 rocket and Dragon capsule .

Research Focus	<ol style="list-style-type: none">1. The Polaris Dawn mission will focus on researching the effects of space radiation on human biology.2. This includes studying its impact on eyesight and brain structure and addressing risks such as Spaceflight Associated Neuro-ocular Syndrome (SANS).3. The mission will also investigate decompression sickness (DCS) which is a condition caused by nitrogen gas bubbles damaging human tissue.
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About Van Allen Belts

1. The Van Allen Belts are two regions of intense radiation surrounding Earth. It was discovered in 1958 by Dr. James Van Allen.
2. It was composed mainly of charged particles like electrons and protons trapped by Earth's magnetic field.
3. These belts are located in the magnetosphere and protect Earth from harmful solar wind and cosmic rays.

4. Structure and Composition:

i) Inner Belt: It is located 1,000 to 5,000 km above Earth and composed primarily of high-energy protons.

ii) Outer Belt: It is located 13,000 to 60,000 km above Earth. It contains mostly high-energy electrons and influenced by solar activity.

5. Significance: The belts affect space weather, impacting satellites and GPS systems. They provide a protective shield against cosmic rays but pose a radiation risk to astronauts and spacecraft and thus require careful planning for missions.

Fixed-Dose Combinations (FDCs)

Why in News?

The government has banned 156 fixed-dose combination (FDC) drugs, including popular medicines like Cheston Cold, used for colds and fever, and Foracet, used for pain relief.

About Fixed-Dose Combinations (FDCs)

1. Definition: Fixed-Dose Combinations (FDCs) are medications that combine two or more active ingredients into one form, such as a pill, capsule, or injection.

2. Purpose: FDCs help patients who need multiple medications, like those with tuberculosis or diabetes, by reducing the number of pills they need to take daily. This can improve their adherence to treatment.

3. Examples of Banned FDCs:

Anti-Allergy Combinations: Such as Levocetirizine with a nasal decongestant and syrups that break down mucus, combined with paracetamol.

Skin Treatments: Combinations like menthol with aloe vera, and aloe vera with vitamin E in medicated soaps; silver sulfadiazine (for burns) with an antiseptic, aloe extract, and vitamin.

Migraine Medication: Combined with another drug to prevent nausea.

Pain Relief for Menstrual Cramps: Mefenamic acid combined with anti-fibrotic medicine tranexamic acid.

Reasons for the Recent Ban on 156 FDCs:

- 1. Lack of Therapeutic Benefits:** The banned FDCs were considered “irrational” because they offered no significant health benefits. The ingredients did not work well together or included unnecessary components.
- 2. Increased Antibiotic Resistance:** Unnecessary combinations, especially involving antibiotics, contribute to resistance, making infections harder to treat and requiring stronger antibiotics.
- 3. Regulatory Changes:** New rules since 2019 classify FDCs as new drugs, requiring approval by the central drug regulator, which has reduced the number of irrational combinations in the market.

Implementation of School Safety Guidelines by the Centre

Why in News?

The Union Education Ministry has directed all States and Union Territories to implement guidelines to ensure the safety and security of children in schools. The directive comes in response to recent protests over the alleged sexual assault of two four-year-old girls at a school in Badlapur, near Mumbai.

About the Guidelines

Aspects	Description
About the Guidelines	<ol style="list-style-type: none">1. The guidelines were issued by the Union Education Ministry in 2021 under the Protection of Children against Sexual Offences (POCSO) Act.2. These guidelines are designed to hold school management accountable for the safety and security of children in both government and private schools.3. States and Union Territories have been asked to incorporate any necessary additions or modifications to the guidelines based on their specific needs. They are also required to notify the status of the implementation of these guidelines.
Purpose	To maintain “ Zero Tolerance Policy ” against negligence in child safety matters.
Key Provisions of the Guidelines	<ol style="list-style-type: none">1. The guidelines emphasize fixing accountability on school management, principals, and teachers for ensuring child safety.2. They cover preventive education to create awareness about safety measures among students, teachers, and parents.3. It gives clear procedures for reporting any incidents of misconduct or unsafe practices.4. It gives information on legal support, counselling, and creating a safe environment for children.5. It focuses on making schools accessible and inclusive, ensuring positive learning outcomes for all students.

UPSC Syllabus: Governance

J.S. Verma Committee recommendations and the government's decision on it

Context: The article discusses the Justice J.S. Verma Committee's recommendations on sexual assault laws. It also includes its opposition to the death penalty for rape, the government's decision to introduce death penalty in certain rape cases, and the committee's stance on gender rights and marital rape.

What did the Justice J.S. Verma Committee recommend?

1. **Enhanced Sentences for Rape:** The committee recommended increasing the punishment for rape to a minimum of 10 years, which could extend up to 20 years or life imprisonment, but explicitly advised against the death penalty.
2. **Against the Death Penalty:** It argued that the death penalty does not serve as an effective deterrent against crimes, supporting this view with data that showed a consistent decline in murder rates in India over the last 20 years, despite fewer executions since 1980.
3. **Marital Rape:** The committee advised removing the marital exemption for rape, asserting that marriage should not be considered a defense against the charges of rape.

For detailed information on **The Issue of Marital Rape** [read this article here](#)

4. **Gender Rights and Empowerment:** The committee emphasized the need for true empowerment of women, which goes beyond political equality to include social, educational, and economic equality. It noted that changing social mindsets and overcoming gender biases require systemic changes in education and societal behavior, supported by leadership in society.

What was the Union Cabinet's decision?

1. **Death Penalty Introduction:** Contrary to the committee's advice, the Cabinet introduced the death penalty for severe rape cases. For example, under Section 376A of the Indian Penal Code, the death penalty is applied for rape leading to the victim's death or a persistent vegetative state.
2. **Further Amendments in 2018:** The laws were expanded to include the death penalty for gang rape of a girl under 12 years old (Section 376DB) and life-long imprisonment if the victim is under 16 (Section 376DA).
3. **Marital Rape Exemption:** The Cabinet did not criminalize marital rape, maintaining the exemption for husbands if the wife is over 18 years old under the new Bharatiya Nyaya Sanhita.

For detailed information on **Women Safety in India** [read this article here](#)

UPSC Syllabus: Polity and nation

New India Literacy Programme (NILP)

Why in News?

The Education Ministry has recently defined 'literacy' and outlined what it means to achieve 'full literacy' in a letter sent to all States. This clarification comes as part of a renewed push for adult literacy under the New India Literacy Programme (NILP).

New India Literacy Programme (NILP)- It is a five-year initiative (2022-27) aimed at enhancing adult literacy across India by enrolling one crore learners aged 15 and above each year from all States and Union Territories.

Definition of Literacy and Full Literacy

- Literacy:** Literacy encompasses the ability to read, write, and compute with comprehension. It also includes understanding, interpreting, creating, and critical life skills such as digital and financial literacy.
- Full Literacy:** Achieving 'full literacy' is defined as reaching a 95% literacy rate in a State or Union Territory.
- Criteria for Literacy Certification:** Under NILP, a non-literate person is considered literate if they pass the Foundational Literacy and Numeracy Assessment Test (FLNAT).

Literacy Challenges in India

- Non-Literate Population:** As per the 2011 Census, India had 25.76 crore non-literate individuals aged 15 and above, including 9.08 crore males and 16.68 crore females.
- Progress and Remaining Challenges:** Despite the Saakshar Bharat programme certifying 7.64 crore individuals as literate from 2009 to 2018, about 18.12 crore adults in India are still non-literate.
- Impact of Illiteracy:** Non-literate individuals face significant challenges, including difficulties with financial transactions, job applications, understanding rights, and participating effectively in higher productivity sectors.

Foundational Literacy and Numeracy Assessment Test (FLNAT) Results

- In 2023, 39,94,563 adult learners took the FLNAT, with 36,17,303 (approximately 90%) being certified as literate.
- On March 17, 2024, 34,62,289 learners appeared for the test, but only 29,52,385 (85.27%) were certified as literate, indicating a decline in the pass percentage compared to 2023.

UPSC Syllabus: Tribes in news

Dhangars Community

Why in News?

A large group of Dhangars marched to the subdivisional officer's office in Khamgaon, Buldhana district, Maharashtra. They demanded the establishment of a "grazing corridor" for their sheep and goats.

About Dhangars Community



Figure 4. Source: IE

1. About: The Dhangars are a community known for herding sheep and goats. They follow a nomadic lifestyle, moving along specific routes to graze their animals. They are part of Maharashtra's Vimukta Jati and Nomadic Tribes (VJNT) list.

2. Where They Live: They are primarily found in Maharashtra. Dhangars also live in Gujarat, Karnataka, and Andhra Pradesh where they are known by different names like Golla and Kuruba.

3. Population and Economic Dependency: The Dhangars are estimated to be around 1 crore which makes up about 9% of Maharashtra's population. About 40% of the community relies solely on herding for their livelihood underscoring the importance of their traditional grazing routes.

What Are the Dhangars Demanding?

1. Grazing Corridors: They are asking for "grazing corridors" to be allowed to graze their animals on traditional routes without being seen as illegal encroachers. They argue that their grazing practices benefit the land and do not harm the forests. Their traditional grazing routes are vital for their livelihood and are deeply rooted in their cultural heritage.

2. Scheduled Tribe (ST) Status: The Dhangars want to be classified as a Scheduled Tribe (ST) to receive reserved benefits in education and jobs which they currently do not get under their existing VJNT (Vimukta Jati and Nomadic Tribes) category.

3. Forest Rights: They seek rights under the Forest Rights Act, 2006 to access traditional grazing lands which currently mainly benefits those with ST status.

UPSC Syllabus: Art and culture

Guru Padmasambhava

Why in News?

The International Buddhist Confederation, in partnership with Nava Nalanda Mahavihara, will host a two-day International Conference in Nalanda, Bihar.

About International Conference on the Life and Living Legacy of Guru Padmasambhava



Source: ARTIWELL

Aspects	Description
About	A two-day International Conference on the Life and Living Legacy of Guru Padmasambhava will be organised on 28th and 29th august, 2024 in Nalanda, Bihar.
Organised by	International Buddhist Confederation (IBC) in collaboration with Nava Nalanda Mahavihara.

Factly Compilation August (Fourth Week) 2024

Conference Themes	<ol style="list-style-type: none">1. Biographical Insights and Mythology of Guru Padmasambhava.2. Teachings of Vajrayana Buddha Dhamma and the Tantra3. Cultural and Artistic Contributions of Guru Padmasambhava4. Travels and Regional Impact of Guru Padmasambhava5. Legacy and his Contemporary Relevance in today's world.
Objectives of the Conference	<ol style="list-style-type: none">1. To celebrate the diverse Dhamma legacy of Guru Padmasambhava through manuscripts, relics, paintings, and monuments.2. To gain insights into his approach of integrating local customs and rituals to effectively transmit the teachings of Buddha.3. To understand how Guru Padmasambhava adapted Buddha Dhamma to local cultures, making the faith more accessible and relatable.

About Guru Padmasambhava

1. Padmasambhava is a **highly revered figure in Tibetan Buddhism** and is often regarded as the “**Second Buddha**” due to his significant role in spreading Buddhism throughout Tibet and the Himalayan regions.
2. The name Padmasambhava, meaning “Lotus-Born,” reflects his miraculous birth from a lotus flower in a lake within the kingdom of Oddiyana, believed to be in the Swat Valley of present-day Pakistan or a mythical region in northwestern India.
3. Padmasambhava introduced Vajrayana Buddhism, which focuses on esoteric practices such as mantras, mudras, and visualizations, as pathways to enlightenment.
4. He taught numerous forms of meditation and passed down secret tantric teachings that became foundational to Tibetan Buddhism, particularly within the Nyingma school, which considers him its founding master.
5. Padmasambhava is also known for concealing numerous spiritual treasures, or *termas*, across Tibet and surrounding areas. These teachings were intended for future generations and were to be discovered by enlightened beings known as *tertöns*.
6. His life and accomplishments are celebrated in numerous texts, and he is frequently depicted in thangka paintings, sculptures, and religious artwork throughout the Himalayan region.
7. Guru Rinpoche's Day, observed on the 10th day of the lunar month, serves as a tribute to his enduring influence. Devotees across the Himalayan region participate in prayers, meditation, and rituals to honor his teachings and seek his blessings for spiritual growth.

UPSC Syllabus: Schemes and program

Unified Pension Scheme (UPS)

Why in News?

The Union Cabinet introduced the **Unified Pension Scheme (UPS)** which will be effective from April 1, 2025. This new scheme combines the best elements of the Old Pension Scheme (OPS) and the National Pension Scheme (NPS).

About Unified Pension Scheme (UPS)

1. The Unified Pension Scheme (UPS) has been launched to provide government employees with a steady pension based on their length of service and the most recent basic salary drawn.
2. **Aim:** It aims to provide a balanced approach to pension management for government employees, combining the stability of the OPS (Old Pension Scheme) with the fiscal responsibility of the NPS (New Pension Scheme).
3. **Who can opt for UPS:** The UPS is available to all government employees who have retired under the NPS since 2004. They can choose to switch to the UPS and receive arrears adjusted for any amounts already withdrawn under the NPS.
4. Employees have the option to remain with the NPS, but this decision is final once made.
5. **Implementation:** It is scheduled for implementation from April 1, 2025.

Features of the Unified Pension Scheme

Features	Description
Assured Pension	Minimum Qualifying Service: Employees with a minimum of 25 years of service are eligible for a pension amounting to 50% of the average basic salary drawn during the last 12 months before retirement. Shorter Service Periods: For those with less than 25 years but at least 10 years of service, the pension amount will be adjusted according to the length of service.
Assured Minimum Pension	A minimum pension of Rs 10,000 per month will be provided to employees with at least 10 years of service upon retirement.
Family Pension	The family of a deceased government employee will receive 60% of the employee's pension at the time of their demise.
Inflation Indexation	The pension, family pension, and minimum pension amounts will be adjusted for inflation based on the All India Consumer Price Index for Industrial Workers (AICPI-IW).
Lump Sum Payment at Superannuation	Upon retirement, employees will receive a lump sum payment equal to 10% of their salary and Dearness Allowance (DA) for every six months of completed service. This payment is in addition to gratuity and does not reduce the amount of the secured pension.

UPSC Syllabus: Indian Economy

Unified Lending Interface (ULI)

Why in News?

RBI Governor Shaktikanta Das recently announced ULI to build on the success of the Unified Payments Interface (UPI) by streamlining the credit process.

About Unified Lending Interface (ULI)



Figure 5. Source- RBI

1. Unified Lending Interface (ULI) is a platform developed by the Reserve Bank Innovation Hub (RBIH).

2. The platform uses standardized **Application Programming Interfaces (APIs)** to simplify technical integrations, allowing a 'plug and play' approach for digital access to diverse information sources.

3. The combination of JAM (Jan Dhan-Aadhaar-Mobile), UPI, and

ULI is described as a "new trinity" that will drive India's digital infrastructure forward.

Benefits of ULI

1. ULI aims to bring efficiency, reduce costs, and facilitate quicker credit disbursement across the country, especially for smaller and rural borrowers.
2. ULI aims to address the significant unmet demand for credit in sectors like agriculture and micro, small, and medium enterprises (MSMEs).
3. It facilitates the seamless and consent-based flow of digital information, including land records from various states to lenders from multiple data service providers.

Current Challenges with Digital Lending and the benefit offered by ULI

1. Data needed for credit appraisal is currently spread across various entities like governments, banks, account aggregators, and credit information companies. This makes seamless credit delivery difficult.
2. ULI's architecture provides standardized APIs that offer a 'plug and play' solution, making it easier to access information digitally from different sources and reducing the complexity of multiple technical integrations.

How ULI is different from UPI

1. **Focus:** ULI focuses on lending and credit information sharing, while UPI focuses on digital payments.
2. **Users:** ULI is primarily for financial institutions and credit entities; UPI is for the general public and businesses for money transfers and payments.
3. **Integration:** ULI integrates multiple data sources for credit assessment; UPI integrates multiple bank accounts for seamless payments.

UPSC Syllabus: Environment

Three New Ramsar Sites added

Why in News?

India has recently designated three new Ramsar sites. This increases the total number of Ramsar sites in the country to 85. The combined area covered by these sites has now reached an impressive 1,358,068 hectares.

About Nanjarayan Bird Sanctuary, Tamil Nadu

Aspects	Description
About	<ol style="list-style-type: none"> 1. It is a vast, shallow wetland located in Tamil Nadu. 2. This lake covers an area of 125.865 hectares. 3. The sanctuary is named after King Nanjarayan, who historically restored the lake.
River flowing through it	It is located on the banks of the Noyyal River .
Significance	It plays a crucial role as a feeding and nesting ground for both resident and migratory birds and serves as an essential water source for local agricultural activities .
Biodiversity	This sanctuary is home to a diverse range of species , including 191 bird species, 87 butterfly species, 7 amphibians, 21 reptiles, 11 small mammals, and 77 plant species.
Fauna	Pelicans, painted storks, coots, Eurasian coot, spot-billed duck, and numerous herons are commonly found here.

About Kazhuveli Sanctuary, Tamil Nadu

Aspects	Description
About	<ol style="list-style-type: none"> 1. It is located on the Coromandel Coast, Tamil Nadu. 2. This shallow brackish lake connects to the Bay of Bengal via the Uppukalli Creek and Edayanthittu Estuary. 3. It covers 5,151.6 hectares and was declared Tamil Nadu's 16th bird sanctuary in 2021.
Ecosystem	It consists of salt marshes, mudflats, and shallow waters .
Significance	<ol style="list-style-type: none"> 1. It helps in flood control and groundwater recharge. 2. The lake serves as a feeding ground for long-distance migratory birds from the cold subarctic regions of Central Asia and Siberia, such as Black-tailed Godwits, Eurasian Curlews, White Storks, Ruffs, and Dunlins. 3. It supports numerous globally endangered species, including the black-headed ibis and greater flamingo.

Factly Compilation August (Fourth Week) 2024

Flora	It includes degraded mangrove patches featuring Avicennia species in the brackish water zones, and extensive reed beds spread over hundreds of acres.
Fauna	Spot-billed pelicans, darters, cormorants, herons, egrets, storks, black ibis, spoonbill, flamingo, spot-billed duck, garganey, common pochard, sandpiper, coots, shanks, and terns are found there.

About Tawa Reservoir, Madhya Pradesh

Aspects	Description
About	1. Tawa Reservoir is located in Madhya Pradesh . 2. It is located within the Satpura Tiger Reserve , marking the western boundary of Satpura National Park and Bori Wildlife Sanctuary .
River flowing through it	It is located at the confluence of the Tawa and Denwa rivers .
Significance	1. It provides irrigation water for surrounding farmlands and supplies drinking water to local communities. 2. It also serves as a major wintering ground for migratory birds .

About Ramsar Convention

- 1. About:** The Ramsar Convention is an **international treaty** established in **1971** in Ramsar, Iran.
- 2. Aim:** Promoting the conservation and sustainable use of wetlands globally.
- 3. Goal:** To **ensure the wise use of wetlands** through local, regional, and national efforts, and international cooperation.
- 4. Mandate:** Member countries commit to designating at least one wetland of international importance (Ramsar site) and to sustainably manage all wetlands within their territory.
5. The Convention also **encourages international collaboration, policymaking**, and capacity building for effective wetland management.

Read more: [Other Newly Added Ramsar sites](#)