

DAILY NEWS

ANALYSIS



1st April

1.	Arctic	2
2.	IMD Forecast	2
3.	Forest Rights Act 2006	4
4.	Parker Solar Probe	6
5.	New Education Policy 2020	7
	DNA Quiz	10

Playlist Link:

What to Read: <https://bit.ly/3FYdutC>

Daily News Analysis: <https://bit.ly/4ge9BgF>

1. ARCTIC

Relevance: GS1 World's Physical Geography

Backdrop: Geopolitical activities renewed amid re-election of Donald Trump.

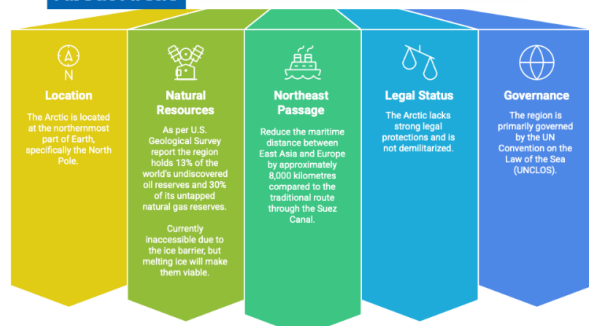
In the news

- U.S. President Donald Trump's renewed interest in acquiring Greenland from Denmark.
- Dispute between Canada and US over status of the Northwest Passage, a potential Arctic shipping route that winds through Canada's Arctic Archipelago.
- Strategic importance of the Greenland-Iceland-U.K. (GIUK) gap, a critical choke point for NATO's naval defences.

About Arctic



About Arctic



- The Arctic holds untapped reserves of natural resources, including fossil fuels, rare earth elements, phosphates, copper, and fishing grounds.
- Primarily governed by the UN Convention on the Law of the Sea (UNCLOS).

- Nations can claim territories and deploy military infrastructure in the Arctic.
- Overlapping maritime claims and military activities are increasing tensions in the region.

Arctic Council

- It is an international body focused on environmental protection, scientific research, and indigenous rights. It was formally established in 1996 through the Ottawa Declaration.
- Member Eight countries: Canada, Denmark (via Greenland), Finland, Iceland, Norway, Russia, Sweden, and the U.S.
- It cannot implement/enforce its guidelines, assessments, or recommendations. It is done by individual Arctic States or international bodies.
- The Arctic Council's mandate excludes military security.
- Member nations have sovereignty over Arctic land and can exploit resources within their Exclusive Economic Zones (EEZs).
- Waters between these territories are under international jurisdiction, allowing freedom of navigation.
- Under UNCLOS, nations can extend seabed claims beyond the 200-nautical-mile EEZ if they prove it is a natural extension of their continental shelf.
- Canada, Denmark, and Russia have overlapping claims.
- Russia is the only Arctic Council member with a significant icebreaker fleet, including a nuclear-powered vessel capable of navigating sea ice.

India and Arctic

- **India's Arctic Policy**, titled 'India and the Arctic by the Ministry of Earth Science for building a partnership for sustainable development.
- India is an **Observer** in the Arctic Council.

Expedition History in Arctic

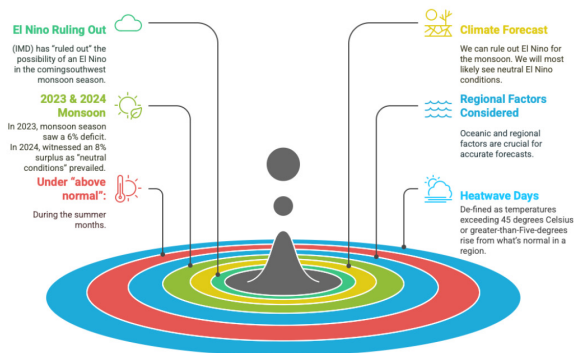
- In 2007, Russia sent the **MIR-1 submarine** to the North Pole to plant a Russian flag on the seabed beneath the Arctic ice cap.
- China declared itself a '**Near-Arctic State**' in 2018 and is planning the construction of its first nuclear-powered icebreaker.

2. IMD FORECAST

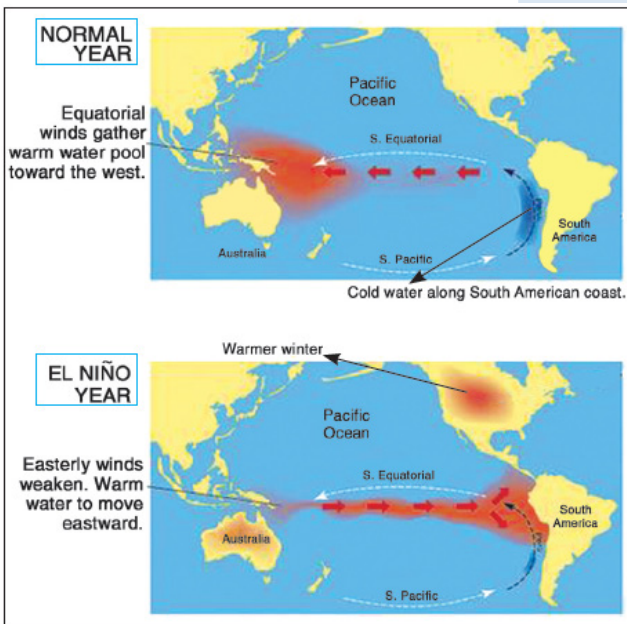
Relevance :GS 1 Geography

Backdrop: Summer set to be warmer, but El Nino unlikely during next monsoon: IMD

About the News:



About EL Nino



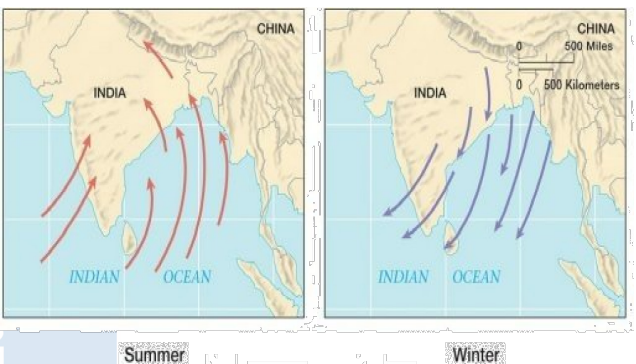
Indian Monsoon and EL Nino

- In general, during the El Niño event, the Indian summer monsoon is weaker than normal, and the intensity of the event also decides the amount of impact on the monsoon.
- Since 1950, there have been 16 El Niño years, out of which 7 years had impacted Indian monsoon rainfall when rainfall was below normal.

- However, there is a **stronger inverse relationship** between El Niño and rainfall during the later half of the monsoon season

Indian Monsoon: Overview

- The **Southwest Monsoon** accounts for **75-80% of India's annual rainfall**.
- It is **driven by differential heating of land and sea**, which creates low-pressure zones over India, pulling in moisture-laden winds from the Indian Ocean.
- The **monsoon is vital for agriculture**, affecting **nearly 50% of India's farmland**, which depends on rain-fed irrigation.

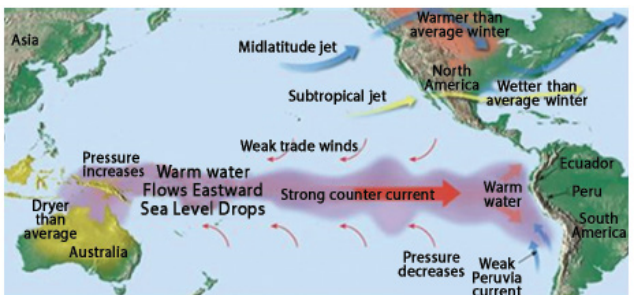


How El Niño Affects the Indian Monsoon?

El Niño Phase	Impact on Indian Monsoon
Normal Year (No El Niño)	Regular monsoon rainfall (~880 mm avg.)
El Niño Year	Weak monsoon, delayed onset, drought risk
Strong El Niño Year	Major monsoon failure, severe droughts, crop losses

Mechanism Behind El Niño's Impact on Monsoon

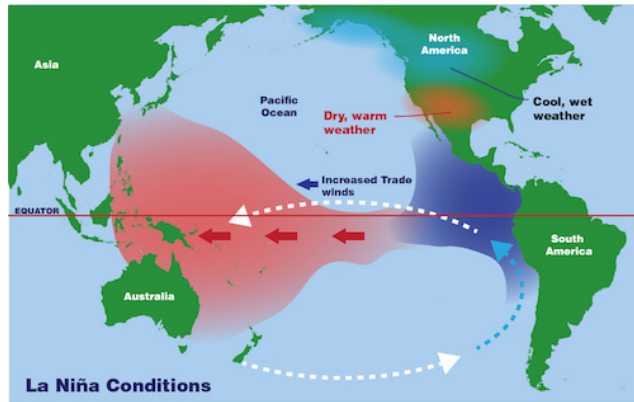
- Weakening of Trade Winds → Moist air is not pushed towards India.
- Shifting of Walker Circulation → Causes descending dry air over India.
- High-Pressure System Formation → Reduces cloud formation, leading to less rainfall.



About La Nina

- La Niña**, a climate phenomenon characterized by **notably cooler sea surface temperatures (SST) in the central and eastern Pacific Ocean (opposite to El Niño)**, can significantly impact the Indian monsoon.

- In general, during a La Niña event, normal to above-normal rainfall is received over India during the southwest monsoon season
- Also, below-normal temperatures are generally observed during the winter season during the La Niña years



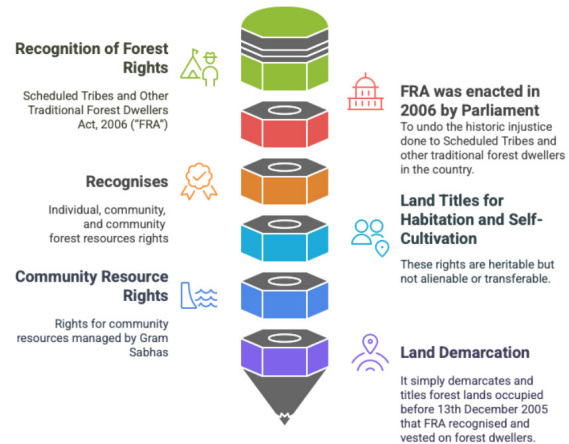
Criteria	La Niña	El Nino
Trade Winds	Stronger, pushing warm waters towards the western Pacific	Weaker or reversed, causing warm waters to stay in the central/ eastern Pacific
Sea Surface Temperature (SST)	Lower than usual in the central & eastern Pacific Ocean	Higher than usual in the central & eastern Pacific Ocean
Rainfall in India	Enhanced monsoon, leading to above-normal rainfall	Weakened monsoon, often causing dry spells and droughts
Cyclone Patterns (Indian Ocean)	More cyclones in the Bay of Bengal	More cyclones in the Arabian Sea
Impact on Global Climate	Tends to cool global temperatures	Contributes to warmer global temperatures, often linked to heatwaves

3. FOREST RIGHTS ACT 2006

Relevance : Polity, Environment

Backdrop: FRA, was challenged in the Supreme Court in 2008 by Wildlife First, an NGO which called for the eviction of people whose FRA claims had been rejected. This petition is scheduled on 2nd April 2025 in the Supreme Court .

About the Forest Right Act:-



Key Provisions under the Act:

Recognition of Rights:

- Grants individual and community rights to forest dwellers, including ownership, usage, and management of forest resources.
- Recognizes the rights of Scheduled Tribes (STs) and Other Traditional Forest Dwellers (OTFDs).
- It deals with three major rights:



Rights to Minor Forest Produce (MFP) – Legalizes the collection and sale of items like tendu leaves, honey, bamboo, etc.

- As per the Forest Rights Act, 2006: Act, Rules and Guidelines (“Rules”)

- Under the FRA, **FRCs are constituted by Gram Sabhas** to receive and verify the claims, prepare the maps and record the findings.
- Only Forest Rights Committees (“FRCs”) and Gram Sabha can receive, reject or modify any claim at Block, Panchayat, forest or range level.
- Procedure for addressing the claims and their rejections involves a three-tier system, including
 - Gram Sabha,**
 - Sub-Divisional Level Committee (“SLDC”)** a sub-division level committee of representatives of the Revenue, Tribal Welfare and Forest departments along with three Panchayat representatives,
 - District Level Committee (“DLC”)**
- The claimant, the Gram Sabha and any government agency can appeal against the decisions of these statutory bodies.
- FRA does not allow satellite imagery as evidence to reject claims, but only as supplementary evidence to accept them
- FRA doesn’t permit land use change. FRA violation by its officials or members of the statutory bodies is a punishable offence.
- The Act envisages the **recognition and vesting of forest rights** in forest dwelling Scheduled Tribes and other traditional forest dwellers over all forest lands, including **National Parks and Sanctuaries.**
- It provides rights to **allocation of forest land for developmental purposes to fulfil basic infrastructural needs** of the community. FRA provides for 13 public facilities, such as schools, ration shops, anganwadis, drinking water etc up to 1 ha and felling of 75 trees per facility with Gram Sabha approval.
- In conjunction with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Settlement Act, 2013(LARR ACT) FRA protects the tribal population from eviction without rehabilitation and settlement.
- The forest land title holder is considered as ‘land owner’ on par with a title holder on Ryotwari revenue lands.

Issues with the Act:

January 2025



Only 20.6 lakh ha, or 2.9% of the 715 lakh ha forest lands, were titled for pre-2005 habitation and cultivation.



FRA gives the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) the lead role in preparing the guidelines for establishing CWHs.



NCST’s Working Group found that even under the old rules, FRA compliance was in trouble.



The data showed that a total of 44.46 lakh claims have been made for title rights over forest land (both individual and community), against which title rights have been issued for just 22.35 lakh.

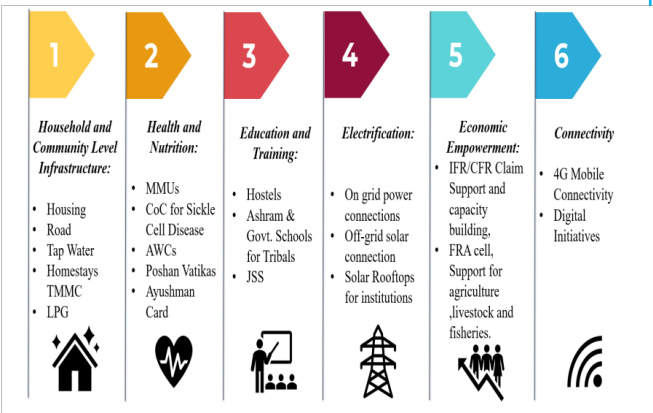


Of the total 42.76 lakh individual claims over forest land under the FRA, title rights had been issued to just 21.33 lakh claimants.

Other Schemes for Tribal Areas

Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PM-JUGA)

- In the **Budget 2024-25**, the Government of India announced the **Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PM JUGA)**. Its name was later changed into “Dharti Aaba Janjatiya Gram UtkarshAbhiyan”.
- It aims at improving the socio-economic conditions of tribal communities by saturating tribal households and tribal majority villages including villages in aspirational blocks having significant tribal population with basic facilities,
- Covering around 63,843 villages and benefiting more than 5 crore tribal people in a set time frame.
- The Ministry of Tribal Affairs will serve as the nodal agency.
- Period:** Five years (2024-25 to 2028-29),



Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN)

- Hon’ble Prime Minister **launched** the PM JANMAN Mission on Janjatiya Gaurav Divas on 15th November, 2023

- The basic objective of the PM-JANMAN is to **improve socio-economic conditions** of the **Particularly Vulnerable Tribal Groups (PVTGs)**, by saturating PVTG families and habitations with basic facilities and services.
- **The Ministry of Tribal Affairs will serve as the nodal agency.**

4. PARKER SOLAR PROBE

Relevance: General Science, Awareness in the field of Space.

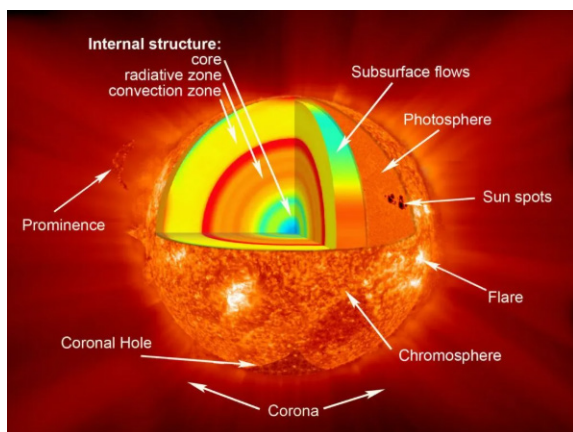
Background: On March 22, the probe made another attempt to get within 6 million km of the sun, considered a very small distance to be from the star.

In the News:

- NASA's Parker Solar Probe arrived within 6.1 million km of the star's surface; no spacecraft has ever made such a close approach.

Facts about Sun

- The **sun's core produces energy using nuclear fusion.**
- **Numerous electrons, protons, and heavy nuclei are spit out of the solar corona.**
 - ♦ **The solar corona is the uppermost layer of the sun's atmosphere.**
- **Solar flare is an intense burst of radiation coming from the release of magnetic energy associated with sunspots.**
- Coronal mass ejection (CME) is an ejection of plasma mass from the corona into the heliosphere. They are often associated with solar flares and other forms of solar activity.
- **To understand the dynamics of the corona over time and their effects on the solar system at large, scientists need to observe the sun closely.**
- Layers of Sun



Parker Solar Probe

- A scientist named **Eugene Parker predicted the existence of the solar wind: a stream of charged particles flowing out from the sun in all directions.** NASA named the Parker Solar Probe in his honour.
- **It was launched on board a Delta IV rocket from Cape Canaveral in Florida in August 2018.**
- In space **Probe's maximum speed will be up to 692,000 km/hr.**
- To protect from intense **heat thick carbon-carbon composite material shield that can withstand up to 1,370 °C**
- **Probe has four scientific instruments: FIELDS, Integrated Science Investigation of the Sun (ISoIS), Wide-Field Imager (WISPR), and Solar Wind Electrons Alphas and Protons (SWEAP).**
 - ♦ **FIELDS measures the electric and magnetic fields of the sun's atmosphere.**
 - ♦ **ISoIS observes the energetic particles that cause solar storms.**
 - ♦ **SWEAP records their properties.**
 - ♦ **WISPR takes pictures as it passes through the corona.**
- An important open question in solar astrophysics is **why the sun's surface is only 6,000o C or so whereas the solar corona is 200-times hotter.**
- ♦ **Scientists believe the answer to the mystery lies in Alfvén waves: an oscillation of ions in the plasma released by the sun, set in motion by forces in the surrounding magnetic field.**

Aditya L1

- It is **India's first space-based solar mission to study the Sun.**
- **It aims to establish its own solar observatory in space.**
- **Launched on September 2, 2023, by ISRO**
- **into a halo orbit around the Sun-Earth Lagrange point 1 (L1).**
- **Launched from the Satish Dhawan Space Centre in Sriharikota using the PSLV XL launch vehicle.**
- It would **provide an uninterrupted view of the Sun for prolonged periods.**

• Payloads

Type	Sl. No.	Payload	Capability
Remote Sensing Payloads	1	Visible Emission Line Corona/Imaging & Spectroscopy Coronagraph(VELC)	
	2	Solar Ultraviolet Imaging Telescope (SUIT)	Photosphere and Chromosphere Imaging- Narrow & Broadband
	3	Solar Low Energy X-ray Spectrometer (SoLEXS)	Soft X-ray spectrometer: Sun-as-a-star observation
	4	High Energy L1 Orbiting X-ray Spectrometer(HEL1OS)	Hard X-ray spectrometer: Sun-as-a-star observation
In-situ Payloads	5	Aditya Solar wind Particle Experiment(ASPEX)	Solar wind/Particle Analyzer Protons & Heavier Ions with directions
	6	Plasma Analyser Package For Aditya (PAPA)	Solar wind/Particle Analyzer Electrons & Heavier Ions with directions
	7	Advanced Tri-axial High Resolution Digital Magnetometers	In-situ magnetic field (Bx, By and Bz).

5. NEW EDUCATION POLICY 2020

Relevance: Social Sector Initiatives(Prelims) & Development and Management of Education (mains GS2)

Backdrop: NEP 2020 in the classroom, from policy to practice.

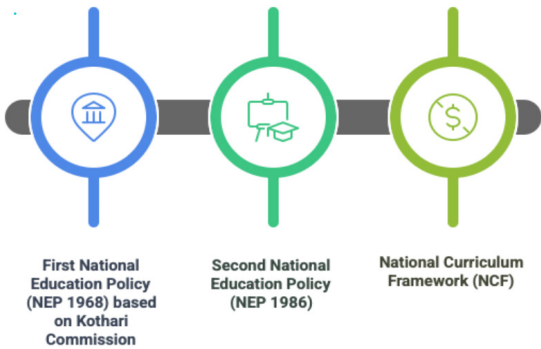
In the News

- **NEP 2020 frames the universal acquisition of Foundational Literacy and Numeracy (FLN) as an urgent national mission.**
- Findings from the nationwide Annual Status of Education Report (ASER) 2024 survey.
 - ♦ More than 80% of the rural schools surveyed reported having received a directive from the government to implement FLN activities for Classes one to three.
 - ♦ **In over 75% of these schools, at least one teacher had received in-person training on FLN.**
- **One conclusion is that the rationale for why FLN is important appears to have been communicated clearly and on scale.**
- **Several teachers said that they have limited opportunities to identify and discuss these challenges during training workshops.**
- **Post-training support systems to teachers are of vital importance.**
- **Regular “monitoring” visits from officials ensured that the focus on FLN was not lost.**
- **Teachers are often unable to make full use of the guidelines and materials provided to them.**
- **Most crucially, decisions on what and how to teach are still based primarily on syllabus completion.**
- Resolving the inherent contradiction between ensuring universal FLN and syllabus completion

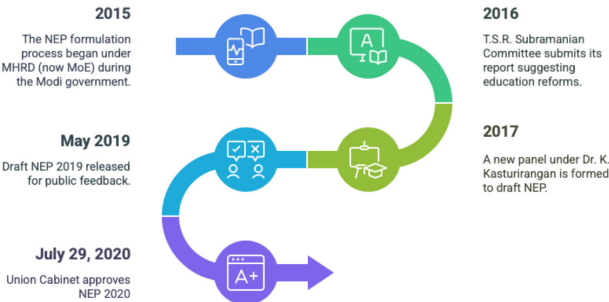
is a question that the system has yet to reckon with in a systematic way.

Evolution of NEP 2020-Timeline

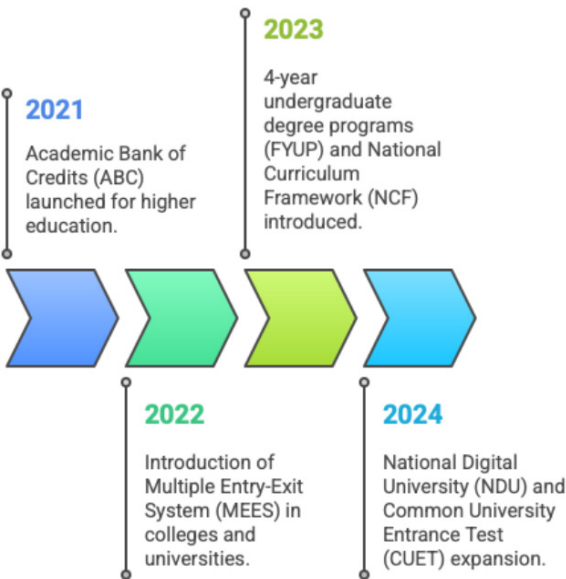
Pre-NEP 2020: Earlier Education Policies



Formation of NEP 2020



Implementation Timeline



About the NEP 2020

- The National Education Policy (NEP) 2020 aims to transform India's education system by introducing a holistic, flexible, and multidisciplinary approach.

- It replaces the NEP 1986 and focuses on early childhood education, skill development, digital learning, and higher education reforms.
- The policy emphasizes universal access to education, reducing the dropout rate, integrating vocational training, and using technology to improve learning outcomes.
- It also promotes multilingualism, teacher training reforms, and the establishment of a new regulatory framework for education.

Key Features of NEP 2020

School Education Reforms

- New 5+3+3+4 Structure replaces the 10+2 model
- Early Childhood Care & Education (ECCE) at Anganwadis and pre-schools.
- Focus on experiential learning and skill-based education.
- Multilingual education in early grades; emphasis on mother tongue/local language as a medium of instruction.
- Introduction of Coding, Computational Thinking, AI, and Vocational Training from an early age.
- Board Exams to be made easier, with flexibility to choose subjects.
- No rigid separation between Science, Arts, and Commerce streams.

Higher Education Reforms

- Introduction of Multidisciplinary Education with flexible course choices.
- Multiple Entry & Exit System (MEES) in colleges & universities:
- 1-year certification, 2-year diploma, 3-4-year degree options.
- Implementation of Academic Bank of Credits (ABC) for credit transfer.
- Focus on research, innovation, and skill development.
- Establishment of Multidisciplinary Education and Research Universities (MERUs).
- Phasing out of M.Phil. programs.

Teacher Training & Development

- New National Professional Standards for Teachers (NPST).
- 4-year integrated B.Ed. degree to be the minimum qualification for teachers by 2030.
- Continuous teacher training through digital platforms.

Technology & Digital Education

- Establishment of a National Educational Technology Forum (NETF).
- Promotion of E-learning, AI-driven education, and digital classrooms.
- Focus on Digital Infrastructure for School Education (DIKSHA) and online learning.

Vocational & Skill Education

- Introduction of internships and skill training from Grade 6 onwards.
- Integration of coding, AI, and robotics in school curricula.

Governance & Regulatory Changes

- Higher Education Commission of India (HECI) to replace UGC & AICTE.
- Autonomy for colleges and universities to design courses.
- National Assessment Centre - PARAKH to standardize assessments.

Key Goals by 2030-2040

- 100% Gross Enrollment Ratio (GER) in School Education by 2030.
- 50% Gross Enrollment Ratio (GER) in Higher Education by 2035.
- Universal early childhood education (ECCE) by 2030.
- All teachers to have a minimum B.Ed. degree by 2030.
- Digital learning and AI-powered classrooms in all schools.

Need/ Importance

- **Student-Centered Learning** – Education tailored to individual student needs, interests, and learning styles.
- **Future-Ready Skills** – Equips students with adaptable skills to thrive in a rapidly evolving world.
- **Enhanced Education Quality** – Strengthens curriculum design, teacher training, and assessment methods.
- **Equal Learning Opportunities** – Ensures inclusive education by bridging accessibility gaps.
- **Comprehensive Growth** – Integrates academics with sports, arts, and vocational training for holistic development.
- **Practical Learning Approach** – Encourages hands-on experiences and real-world applications of knowledge.

- **Technology-Driven Education** – Leverages digital tools to enhance teaching, learning, and accessibility.
- **Flexible Learning Paths** – Allows students to select subjects and career-oriented courses based on their interests.
- **Teacher Development & Support** – Focuses on teacher training, professional growth, and innovative teaching methods.

Challenges

- **Insufficient Infrastructure & Resources** – Inadequate schools, digital facilities, and educational resources, particularly in rural areas.
- **Teacher Training & Development** – Extensive training is required to help educators adapt to new teaching methods and pedagogies.
- **Implementation Hurdles** – Effective execution demands seamless coordination between central and state governments, which may lead to delays.
- **Technology Access Disparity** – Unequal distribution of internet and digital tools results in learning gaps, especially between urban and rural students.
- **Funding Limitations** – A substantial financial investment is needed for teacher training, technology adoption, and infrastructure improvements.
- **Assessment & Evaluation Shift** – Moving from rote memorization to skill-based assessments requires significant structural adjustments.
- **Vocational Education Integration** – Aligning vocational training with mainstream education for smoother career transitions remains a challenge.
- **Medium of Instruction Concerns** – Implementing regional languages in education may impact higher education opportunities and global competitiveness.
- **Resistance to Educational Reforms** – Conventional beliefs and rigid academic structures may hinder the adoption of innovative learning models.
- **Ensuring Accountability & Progress Tracking** – Maintaining transparency, monitoring policy execution, and assessing institutional performance effectively.

Way Forward

- **Enhancing Educational Infrastructure** – Develop well-equipped schools, improve digital

access, and ensure availability of quality learning resources, especially in rural areas.

- **Advanced Teacher Training** – Conduct large-scale professional development programs to equip teachers with modern pedagogical techniques and digital competencies.
- **Effective Policy Execution** – Strengthen collaboration between central and state governments through structured guidelines, phased implementation, and continuous monitoring.
- **Reducing the Digital Gap** – Improve internet connectivity, provide digital learning devices, and establish smart classrooms in underprivileged regions.
- **Ensuring Financial Sustainability** – Increase education sector funding, foster public-private partnerships, and attract corporate investments through CSR initiatives.
- **Revamping Assessment Systems** – Transition to skill-based evaluations that emphasize critical thinking, problem-solving, and practical knowledge application.
- **Seamless Integration of Vocational Education** – Enhance industry-academia partnerships, introduce specialized skill certifications, and promote hands-on vocational training.
- **Overcoming Language Barriers** – Develop multilingual educational resources, train teachers in regional languages, and facilitate smooth progression to higher education.
- **Shifting Traditional Mindsets** – Organize awareness programs for educators, students, and parents to embrace innovative learning methods and flexible education models.
- **Strengthening Oversight & Accountability** – Implement robust evaluation mechanisms, leverage technology for progress tracking, and ensure compliance across institutions.

== PRACTICE QUESTION ==

- Q “Education transcends being a mere obligation; it is a powerful tool that drives personal development and societal transformation.” In the context of this statement, critically examine the National Education Policy (NEP) 2020. Discuss its potential to foster holistic development and bring about social change in India. (15 Marks 250 words).

DNA QUIZ

Q.1 Consider the following countries: (2014)

1. Denmark
2. Japan
3. Russian Federation
4. United Kingdom
5. United States of America

Which of the above are the members of the 'Arctic Council'?

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 4 and 5
- (d) 1, 3 and 5

Q.2 La Nina is suspected to have caused recent floods in Australia.

How is La Nina different from El Nino?

1. La Nina is characterized by unusually cold ocean temperature in the equatorial Indian Ocean whereas El Nino is characterized by unusually warm ocean temperature in the equatorial Pacific Ocean.
2. El Nino has an adverse effect on the south-west monsoon of India, but La Nina has no effect on the monsoon climate.

Which of the statements given above is/are correct? (PYQ2011)

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.3 Consider the following statements:

1. As per recent amendment to the Indian Forest Act, 1927, forest dwellers have the right to fell the bamboos grown on forest areas.
2. As per the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, bamboo is a minor forest produce.
3. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 allows ownership of minor forest produce to forest dwellers.

Which of the statements given above is/are correct? (PYQ 2019)

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1,2 and 3

Q4. Consider the following statements about the Parker Solar Probe.

1. It was launched on board a Delta IV rocket.
2. Its payloads are FIELDs, Integrated Science Investigation of the Sun (ISIS), Wide-Field Imager (WISPR), and Solar Ultraviolet Imaging Telescope (SUIT).
3. It is a joint initiative of NASA and ESA.

How many of the above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answers

Q.1 (d)	Q.2 (d)	Q.3 (b)	Q.4 (a)
---------	---------	---------	---------