

### National and International Weekly Current Affairs 11 to 17 March 2024

### **National News**

# **Centre Implements Citizenship Amendment Act (CAA)**

The Citizenship Amendment Act (CAA), passed in 2019, aims to expedite Indian citizenship for Hindus, Sikhs, Buddhists, Jains, Parsis, and Christians who migrated to India due to religious persecution in Pakistan, Afghanistan, and Bangladesh.

## **Key points:**

- On Monday, the Centre notified the CAA rules just before the Lok Sabha election schedule announcement and the Model Code of Conduct enforcement.
- The Ministry of Home Affairs has launched an online portal for applicants' convenience.
- The Act excludes Muslims from its purview, and applicants must declare their entry year into India without travel documents.
- The delay in implementing the Act was due to protests, including in BJP-ruled states like Assam and Tripura, where Hindu communities opposed it for potentially legitimizing the influx of Bangladeshi migrants.

## Panel recommends simultaneous polls

- The high-level committee headed by former President Ram Nath Kovind has recommended simultaneous elections.
- The recommendation involves a phased approach: Lok Sabha and State Assemblies first, followed by municipal and panchayat polls within 100 days of general elections.

## Key points:

- The committee submitted an extensive report, spanning 18,000 pages, to President Droupadi Murmu, but a concise 321-page version is available to the public.
- The 22nd Law Commission is also examining the issue and likely to recommend the same from the 2029 general election cycle.
- The suggested method involves setting an 'Appointed Date' after each general election,

- initiating a new electoral cycle for synchronizing elections.
- State Assemblies formed post 'Appointed Date' would conclude before subsequent general elections, aligning with the Lok Sabha election cycle.
- Fresh Lok Sabha elections might occur in case of a hung House or no-confidence motion, but the House's tenure would be limited to the unexpired term of the preceding full term.
- Constitutional amendments to Articles 83 and 172 are proposed, requiring no ratification by the States.
- Amendments to Article 324A and Article 325
  are recommended for panchayat and
  municipality elections and the preparation of a
  common electoral roll and voter ID cards,
  necessitating ratification by the States.
- The committee aims to ease the burden on various stakeholders caused by frequent elections and suggests a mechanism for restoring the cycle of simultaneous elections.
- Recommendations aim for minimal amendments to the Constitution and have garnered support from 32 out of 47 political parties contacted, including the BJP and the National People's Party.

# National Speed Breeding Crop Facility

 The Union Minister of Science & Technology recently inaugurated the pioneering "National Speed Breeding Crop Facility" at the prestigious National Agri-Food Biotechnology Institute (NABI) in Mohali.

- The facility is dedicated to developing new varieties of crops like wheat, rice, soybean, pea, and tomato.
- It achieves over four crop generations annually through a meticulously controlled environment.
- The primary aim is to assist agricultural and biotechnology researchers in enhancing crop varieties, aiding plant breeders, and supporting farmers in adopting highyielding and nutritionally rich varieties.





- The facility is particularly significant for North Indian States like Punjab, Himachal Pradesh, Haryana, and the UT of J&K.
- NABI's technology facilitates the development of climate-resistant crops, freeing farmers from seasonal limitations.
- It enables year-round farming, enhancing food security and economic stability.

#### **About NABI:**

- NABI is India's first Agri-Food Biotechnology Institute, established on February 18, 2010.
- It aims to transform the agri-food sector in India.
- NABI focuses on agricultural biotechnology, food, and nutritional biotechnology.
- It aims to provide innovative solutions for quality food and nutrition through research.
- NABI has strong connections with national and international organizations and industries.
- Located in the agri-food cluster of the "Knowledge City" in Mohali, Punjab, along with neighboring institutes.
- NABI has contributed significantly to initiatives such as the 'Atal Jai Anusandhan Biotech (UNaTI) Mission,' 'Poshan Abhiyan,' and the establishment of Biotech Kisan Hubs in regions like Jammu & Kashmir, Ladakh, Himachal Pradesh, Punjab, and Haryana.

#### **Maharashtra State News**

# State to become \$2 trillion economy by 2035: Dy CM

 MH Deputy CM Devendra Fadnavis said that the state government was planning to fast track economic growth to achieve \$2 trillion (around Rs 165 lakh crore) gross domestic product (GDP) by 2035 through various investment and policy measures.

# **Key Strategies:**

### **Boost Manufacturing:**

 Prioritize sectors with high growth potential, like textiles, pharmaceuticals, and information technology. Incentivize domestic manufacturing and attract foreign investment.

### **Infrastructure Development**:

 Invest heavily in infrastructure projects like roads, bridges, and high-speed rail to improve connectivity and facilitate trade.

#### **MSMEs and Startups:**

 Foster a supportive environment for Micro, Small, and Medium Enterprises (MSMEs) and startups. Provide access to credit, simplify regulations, and promote innovation.

## **Human Capital Development:**

 Invest in education and skill development programs to create a skilled workforce that can meet the demands of the evolving economy

#### Sustainable Growth:

 Ensure that economic growth is environmentally sustainable. Promote renewable energy sources and adopt green technologies.

# Maharashtra has got more FDI than Gujarat, Karnataka or UP

- MH deputy CM said that the state is the engine of the country's economy.
- MH has garnered more Foreign Direct Investment (FDI) than Gujarat, Karnataka or Uttar Pradesh.
- He was addressing a 'Viksit Bharat' (developed India) event at Pune's Bhandarkar Oriental Research Institute.

#### About:

- Earlier, **FDI inflow was low** due to policy paralysis.
- However, PM Modi has started taking the country on the path of progress by emphasizing the 'perform, reform and transform' model.
- Now, Maharashtra is the engine of the Indian economy and the nation cannot make any development without Maharashtra.

# 10,000-yr-old' rock art carvings found in Maharashtra's Ratnagiri villages

- **Eight geoglyphs**, which an anthropologist said could be around **10,000 years old**, have been **discovered in Ratnagiri district**.
- While seven of them—of which one is about 17ft long—have been found in Umbarle village in Dapoli taluka, the eighth is in Borkhat village in Mandangad taluka.

#### About:

- Geoglyphs are a form of prehistoric rock art carvings.
- Clusters of them are spread across 900km of the Konkan coast in Maharashtra and Goa.





- Ratnagiri district has more than 1,500 pieces of such art across 70 sites.
- Seven of these sites are on Unesco's tentative world heritage list.

## **Mumbai Coastal Road inauguration**

 The south-bound corridor of the coastal road between Worli and Marine Drive, also known as Mumbai Coastal Road Project Phase 1, in south Mumbai is set to be opened for traffic on Monday, March 11.

# **Mumbai Coastal Road Project Phase 1**

- The construction work of the Mumbai Coastal Road had started on October 13, 2018, and its projected cost was ₹12,721 crore.
- Eknath Shinde has said a world-class central park spread over 320 acres will come up along the 'Dharmaveer Sambhaji Maharaj Coastal Road'.
- The 10.5-kilometer-long stretch will be opened for traffic in the first phase. Motorists can enter the coastal road from Worli Seaface, Haji Ali interchange and Amarson's interchange points, and exit at Marine Lines.

# **Key Points:**

## **Speed Limits:**

- Straight road: 80 km/hr
- Tunnel: 60 km/hr
- Entry/exit points & turns: 40 km/hr

#### **Traffic Restrictions:**

- Open weekdays (Mon-Fri) only, 6 AM to 8 PM
- No stopping, getting out of vehicles, or taking pictures on the route.

# National Women and Girls HIV/AIDS Awareness Day

- March 10 is celebrated as National Women and Girls HIV/AIDS Awareness Day (NWGHAAD).
- This day highlights the impact of HIV/AIDS on women and girls, and the importance of prevention, testing, care, and treatment.
- This day was first observed in 2005.

#### Theme:

 The theme for NWGHAAD 2024 is: "Prevention and Testing at Every Age. Care and Treatment at Every Stage".

# Maharashtra Makes Mother's Name Mandatory on All Govt Documents

- The Maharashtra cabinet has decided to make including a mother's name mandatory on all government documents.
- This rule will take effect from May 1, 2024.
- The new requirement applies to a wide range of documents including birth certificates, school records, property papers, Aadhaar cards, and PAN cards.
- This move is seen as a **step towards** promoting gender equality.

# **Dharavi Redevelopment Project Initiates Comprehensive Survey**

- The **Dharavi Redevelopment Project** will initiate a **major survey on March 18th**.
- This initiative aims to gather details on every residence in Dharavi to determine eligibility for the project's rehabilitation program.
- The survey will begin in Kamala Raman Nagar and involve numbering each hut followed by laser mapping of the entire area.
- Information will be digitally collected using a mobile app to ensure efficiency and create a digital archive – the first of its kind for Dharavi.
- The State Government will use the survey data to decide resident eligibility for the project's rehabilitation benefits.

# MH govt approves extension of metro rail to Chandni Chowk and Wagholi in Pune

- The Maharashtra government has approved the extension of the Pune metro rail to Chandni Chowk and Wagholi.
- This expansion aims to improve traffic congestion and offer a more eco-friendly commute for residents.
- Two Branches:
  - Vanaz to Chandni Chowk (1.12 km) with 2 stations
  - Ramwadi to Wagholi (11.63 km) with 11 stations
- Total Length: 12.75 km, fully elevated
- Estimated Cost: Rs 3.756.58 crore
- This project is **expected to significantly** benefit Pune's transportation system.





# MH cabinet gives nod to 300-acre park in Mumbai; guesthouse for pilgrims in Ayodhya

- The Maharashtra cabinet recently approved two proposals aimed at public wellbeing.
- One is the development of a massive 300acre park in Mumbai, modeled after New York's Central Park.
- This could provide much-needed green space for the city's residents.
- The other initiative involves building a guesthouse in Ayodhya, a holy town in Uttar Pradesh, to serve pilgrims from Maharashtra visiting the recently opened Ram temple there.

# Project 'Mukhyamantri Saurya Udyog Utthan Prakalp' announced

- Industries in Maharashtra will receive rooftop solar projects through a public-private partnership, as announced by the Government.
- This initiative comes after the recent launch of a 400 MW solarisation project for Micro, Small & Medium Enterprises (MSMEs) by the state's CM and DY CM
- The project, known as 'Mukhyamatri Saurya Udyog Utthan Prakalp', is being implemented by the Mahatma Phule Renewable Energy and Infrastructure Technology Limited (MAHAPREIT).
- CM has emphasized the importance of solar rooftop projects for industries in the state as a way to cut down on power expenses.
- The initiative is expected to bring significant benefits to industries in Maharashtra by reducing their reliance on traditional gridsupplied power and lowering their overall electricity costs.

# Soumya Swaminathan receives Yashwantrao Chavan National Award

- Dr. Soumya Swaminathan was recently honored with the Yashwantrao Chavan National Award.
- This prestigious award recognizes individuals who significantly contribute to India's national integration, constitutional values, and social and economic development.
- Swaminathan's extensive work in HIV and tuberculosis research, along with her

**leadership during the COVID-19 pandemic**, made her a deserving recipient of this award.

• The award ceremony was held in Mumbai.

# Did you know?

 She is a renowned pediatrician and was a former Chief Scientist of the World Health Organization.

# Maharashtra govt to avail Rs 15,000 crore loan from NABARD

- The Maharashtra government plans to borrow Rs 15,000 crore from NABARD (National Bank for Agriculture and Rural Development) to expedite irrigation projects in the state.
- This loan will be used to complete 75 irrigation projects and construct canals and distributaries for an additional 155 projects.

#### About:

- The project aims to improve irrigation capacity and benefit farmers by bringing more land under irrigation.
- The loan will be availed in phases, with Rs 7,500 crore sanctioned in the first phase for completing 37 irrigation projects.
- This initiative is expected to create additional irrigation potential for around 28.7 lakh hectares of land.

# Ashram schools to have mandatory sickle cell test

- Union minister of state for tribal affairs Dr Bharati Pawar said that soon sickle cell tests will be made compulsory in the ashram schools across the Nasik district.
- It comes in view that Sickle cell anemia is mostly found among tribals and, therefore, the tests are being carried out for free in the district hospital.

#### About:

 Tribal Cooperative Marketing Development Federation of India Ltd (Trifed), under the ministry of tribal affairs.

### Sickle Cell Disease (SCD)

- Inherited blood disorder affecting red blood cells.
- Abnormal hemoglobin causes red blood cells to become stiff and sickle-shaped.
- Sickle cells block blood flow, leading to pain, fatigue, and organ damage.





- Treatments aim to manage symptoms and prevent complications.
- Bone marrow transplant is the only cure for SCD as of now.

## **National Good Samaritan Day**

- National Good Samaritan Day is celebrated on March 13th each year.
- It's a day to recognize people who help others in need, without expecting anything in return.
- The day is named after the parable of the Good Samaritan in the Bible, which tells the story of a traveler who helps a wounded stranger.
- The day was first recognized by the United States White House in 1996 in honour of the life of sports journalist and humanitarian Chad Powellin.

#### **Key points:**

- Promotes kindness and charity: It encourages people to be more helpful and compassionate towards others.
- Honors selfless acts: Recognizes those who go out of their way to assist strangers.
- Importance of community: Highlights the value of helping one another and building a stronger community.

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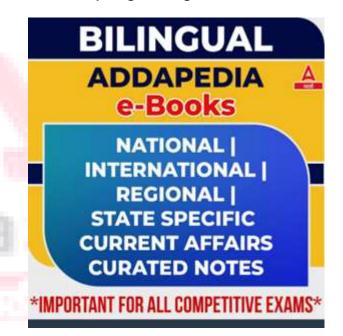
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# All schools told to register for 25% RTE quota admissions

- The Maharashtra School Education and Support Department has mandated that all schools in the state register for the 25% Right To Education (RTE) quota admissions.
- This initiative ensures free education for eligible students from disadvantaged backgrounds in private schools, from entry level up to grade eight.



# 80 villages, towns in MH named after Muslim kings; 32 after Aurangazeb

- Around 80 villages and towns in Maharashtra bear the names of Muslim rulers who governed parts of the state.
- These rulers include Mughals, Adilshahis, and Nizamshahis. Interestingly, Aurangzeb, often seen as a controversial figure, has the most named places (32) after him, followed by Jahangir (21).

#### About:

- These names reflect the long and complex history of MH. where Muslim rule left a lasting imprint.
- The naming styles are often combinations, with some places named directly after rulers





(Aurangabad) and others incorporating the ruler's name with a descriptive term (Shahjahanpur Chakla).

# "Now": The energy chatbot to assist MSEDCL consumers

- MSEDCL has introduced an innovative chatbot service named "Now" to empower its consumers with a user-friendly and interactive platform for managing their electricity accounts.
- This chatbot leverages artificial intelligence to provide real-time support and address consumer queries efficiently.

# **Key functionalities of Now:**

- 24/7 Accessibility
- Multilingual Support
- Simplified Bill Management
- Prompt Outage Reporting
- Informative Q&A Support

## **World Consumer Rights Day**

- World Consumer Rights Day is an annual event held on March 15th.
- It's a day to raise awareness about consumer rights and empower consumers around the world.

#### Theme 2024:

- This year's theme is "Fair and Responsible Al for Consumers".
- It focuses on the impact of Artificial Intelligence (AI) on consumers and the need for ethical and transparent practices.

#### **History:**

Inspired by a 1962 speech by President John
 F. Kennedy on consumer rights, the consumer movement began marking World Consumer Rights Day in 1983.

#### Significance:

 The day promotes informed consumer choices, fights against unfair business practices, and educates consumers about their rights.

#### World Kidney Day 2024

• Observed on the second Thursday of March annually i.e., on March 14th 2024.

#### Objective:

 Aimed at educating individuals about reducing the incidence and impact of kidney diseases. • Healthcare professionals and nephrologists play a pivotal role in spreading awareness.

#### **History:**

- Originated from a collaboration between the International Society of Nephrology and the International Federation of Kidney Foundation.
- First observed in 2006 with the theme 'Are your kidneys okay?'

## Theme of World Kidney Day 2024:

- 'Kidney Health for All Advancing Equitable Access to Care and Optimal Medication Practice.'
- Chosen in a meeting of the World Kidney Day Steering Committee in September 2023.

# Transgender cell made mandatory in colleges, to ensure inclusivity, prevent bias

- The Maharashtra government's 2024 guidelines mandate the creation of transgender cells in all colleges.
- This aims to foster a more inclusive learning environment and prevent discrimination against transgender students.
- University-level cells will provide a comprehensive approach, with dedicated coordinators offering counselling, career guidance, and academic support.
- College-level cells will act as watchdogs, ensuring a prejudice-free atmosphere and addressing issues like mental harassment.

## Country's first LNG buses roll in Mumbai

 The Maharashtra State Road Transport Corporation (MSRTC) is introducing Liquefied Natural Gas (LNG) buses in Mumbai.

This initiative aims to achieve a two-fold benefit:

- 1. Reduced Carbon Emissions:
  - LNG burns cleaner than diesel, leading to a projected 10% decrease in CO2 emissions.
  - This helps combat air pollution and contributes to a greener Mumbai.

## 2. Cost Savings:

- MSRTC expects significant fuel cost savings by switching to LNG.
- They project an annual saving of Rs 235 crore by converting their fleet of 5.000 buses from diesel to LNG.





# Air India building transferred to Maharashtra Govt.

- The Indian government transferred ownership of the iconic Air India building in Mumbai to the Maharashtra state government.
- The deal involved a payment of ₹1,601 crore by Maharashtra and waived dues of ₹298.42 crore owed by Air India Assets Holding Company Ltd (AIAHL).
- This decision marks the culmination of a long process and benefits both parties.
- Maharashtra acquires a prime property near the state secretariat, while the central government clears dues and sheds a non-core asset.

#### About:

- Air India's roots trace back to 1932, when it was founded as Tata Airlines by JRD Tata, making it
- It began with a single-engine aircraft carrying airmail.
- After World War II, it became a public company and was renamed Air India.

# **World Sleep Day**

- World Sleep Day is observed on the Friday before the March equinox ( This year it is 15th March)
- It is a global event raising awareness about the importance of sleep.

# **Key Points:**

- It is organized by the World Sleep Day Committee of the World Sleep Society, formerly World Association of Sleep Medicine (WASM)
- The first World Sleep Day was held on 14 March 2008.

#### Theme:

- The theme for this World Sleep Day is "Sleep Equity for Global Health"
- The day promotes the benefits of adequate sleep and the negative consequences of sleep disorders.
- It aims to educate people about sleep medicine, prevention, and management of sleep problems.

#### About:

 The March equinox or northward equinox is the equinox on the Earth when the subsolar point appears to leave the Southern

- Hemisphere and cross the celestial equator, heading northward as seen from Earth.
- The March equinox is known as the vernal equinox (spring equinox) in the Northern Hemisphere and as the autumnal equinox (autumn equinox) or fall equinox in the Southern Hemisphere.

## **National Vaccination Day**

- On 16 March 1995, the government of India started the pulse polio Immunization Programme as the first attempt of eradicating the disease from the country.
- Since then, March 16 has been celebrated as National Vaccination Day.

#### About:

- National Vaccination Day aims to raise awareness about the importance of vaccines.
- It recognizes the life-saving benefits of vaccination in preventing serious diseases.
- This day encourages people to get vaccinated and stay up-to-date on their immunizations.

# **Key Points:**

 The vaccination campaign, "Do Boond Zindagi Ki," has targeted children between the ages of 0 and 5, and two drops of the vaccine orally are administered at public health centers.

#### Theme:

 The theme for National Vaccination Day 2024 is "Vaccines Work For All"

# Maharashtra cabinet approves renaming of Ahmednagar to Ahilyanagar

- The Maharashtra cabinet has approved the renaming of Ahmednagar city and district to Ahilyanagar.
- This decision honors Ahilyabai Holkar, a revered 18th-century Maratha queen known for her strong leadership and progressive policies.
- This renaming reflects a trend in the state towards reevaluating cultural ties and celebrating historical figures.
- The move aligns with previous initiatives to rename cities and landmarks.





# Maharashtra Cabinet Approves Renaming Of 8 Mumbai Railway Stations

- The Maharashtra cabinet decided to rename eight railway stations in Mumbai that have names from the British colonial era.
- This aims to reflect Indian history and culture.
- These Railway stations include:
  - 1. Currey Road becomes Lalbaug
  - 2. Sandhurst Road becomes Dongri
  - 3. Marine Lines becomes Mumbadevi
  - 4. Charni Road becomes Girgaon
  - 5. Cotton Green becomes Kalachowki
  - 6. Dockyard Road becomes Mazgaon
  - 7. King Circle becomes Tirthakar Parshivnath
  - 8. Mumbai Central Station to Nana Jagannath Shankarsheth Station,

#### Note:

Changing name of Mumbai Central Station to Nana Jagannath Shankarsheth Station, requires approval from the Railways Ministry.

### Maharashtra to borrow over Rs 17,000 crore

- The Maharashtra state cabinet has approved borrowing Rs 17,000 crore to strengthen the network of agricultural solar pumps across the state.
- This initiative aims to improve irrigation and reduce dependence on grid-supplied electricity for farmers
- Funds will come from two institutions:
- Asian Development Bank (ADB) Rs 8,109 crore
- Asian Infrastructure Investment Bank (AIIB)
   Rs 9,020 crore
- The project aims to:
  - Distribute solar powered agricultural pumps
  - Solarize agricultural power lines

# Airports Council International Names Mumbai Airport Best in Asia Pacific Region

- Chhatrapati Shivaji Maharaj International Airport (CSMIA) in Mumbai has been recognized as the best airport in the Asia-Pacific region for handling over 40 million passengers annually.
- This prestigious title, awarded by the Airports Council International (ACI), marks

- CSMIA's seventh consecutive year receiving this recognition.
- Passenger feedback through the ACI's Airport Service Quality (ASQ) program determines the winner.
- This award highlights CSMIA's commitment to providing exceptional customer experiences and its dedication to continuous improvement.

#### **International News**

## **Yaounde Declaration**

 Health ministers from 11 African countries met in Yaoundé, Cameroon, and pledged to end malaria deaths.

## **Key points:**

- In 2022, malaria cases globally rose significantly from 233 million in 2019 to 249 million.
- In Africa, cases increased from 218 million to
   233 million during the same period.
- Africa accounts for 94% of global malaria cases and 95% of malaria-related deaths.
- In 2022, an estimated 580,000 deaths occurred in Africa due to malaria.
- According to the 2023 Africa Malaria Progress Report, malaria incidence has declined by 7.6% and mortality by 11.3%, falling short of African Union's interim goals.
- The African Union aims to control and eliminate malaria by 2030.

#### **Economy News**

# India signs free trade pact with 4 European countries

- India recently signed a landmark free trade agreement (FTA) with four European countries - Iceland, Liechtenstein, Norway, and Switzerland.
- The agreement aims to boost investments in India to \$100 billion and create one million jobs within 15 years.
- This Trade and Economic Partnership Agreement (TEPA) is the second full-fledged FTA signed by India, following the one with the United Arab Emirates.



- The FTA with the EFTA (European Free Trade Association) countries, separate from the EU, includes significant tariff reductions, increased market access, and simplified customs procedures.
- It also includes a unique chapter on commitments to human rights and sustainable development, a first in such agreements.
- The agreement will come into force after ratification by the EFTA states, expected possibly by the end of the year.
- Commerce Minister Piyush Goyal highlighted the investment clauses as a unique achievement, with a goal to invest \$100 billion in India from EFTA countries.
- The agreement sets objectives to increase foreign direct investment from EFTA states into India by \$50 billion within 10 years and another \$50 billion in the next five years, aiming to generate 1 million jobs within 15 years in India.
- If the goals are not met within 15 years, India can temporarily withdraw some trade concessions.

# **Avaana Sustainability Fund**

- SIDBI has secured \$24.5 million from the Green Climate Fund (GCF) for its Avaana Sustainability Fund (ASF), aimed at promoting sustainability and climate-focused startups and MSMEs.
- The funding was approved during the 38th meeting of the GCF Board in Kigali, Rwanda.

### **Project Overview:**

- The project is valued at \$120 million and will support early-stage startups and MSMEs using technology-led innovations for sustainability and climate solutions in India.
- The ASF initiative aims to fund enterprises using technological innovations to address climate change challenges.
- It will aid in climate change mitigation, adaptation, and improving resilience in sectors vulnerable to climate impacts.

#### Implementation:

 SIDBI will work with stakeholders and ministries, including the Department of

# Financial Services of the Ministry of Finance.

 The bank can anchor proposals from other entities and submit its own, supporting the development of MSMEs.

#### Significance:

- This is a pioneering move by SIDBI, representing the first such project anchored by the bank and aligning with India's commitments under the Paris Agreement.
- SIDBI, as an accredited and direct access entity with the GCF, will fund projects promoting low-carbon and climate-resilient development across India.

#### **Green Climate Fund:**

 The GCF is the largest climate fund globally, supporting developing countries in meeting their nationally determined contributions (NDCs) for global climate action.

# Indo-Pacific Economic Framework for Prosperity

 Union Minister Piyush Goyal Joins Indo-Pacific Economic Framework for Prosperity (IPEF) Virtual Ministerial Meeting.

#### Key points:

### The four pillars of IPEF are

- (1) Trade;
- (2) Supply Chains;
- (3)Clean Energy, Decarbonization, and Infrastructure; and
- (4) Tax and Anti-Corruption.
  - The IPEF is not an FTA.
  - India actively participates in the IPEF but not across all pillars.
  - India has opted out of the trade pillar due to misalignment with its **trade policies**.

#### **About IPEF:**

- IPEF was launched in May 2022, bringing together 14 regional partners Australia, Brunei, Fiji, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, the United States, and Vietnam in a new model of economic cooperation.
- IPEF negotiations began in late 2022.



- In May 2023, the IPEF partners announced the substantial conclusion of the negotiations for a first-of-its-kind IPEF Supply Chain Agreement.
- In November 2023, the IPEF partners announced the substantial conclusion of the negotiations on the proposed IPEF Clean Economy and Fair Economy Agreements, as well as on a proposed overarching Agreement on IPEF to help ensure the durability of the framework and held a signing ceremony for the IPEF Supply Chain Agreement.

#### **Schemes and Committees News**

## **Electric Mobility Promotion Scheme 2024**

- Announcement: Ministry of Heavy Industries announces Electric Mobility Promotion Scheme 2024.
- Duration: Scheme to be implemented from 1st April to 31st July 2024.
- Total Outlay: Rs. 500 crore.
- Objective: To promote electric two-wheeler (e-2W) and three-wheeler (e-3W) adoption, and boost electric vehicle manufacturing in India.
- Eligible Categories:
  - Two Wheelers (electric) (e-2W)
  - Three-wheeler (electric) including registered e-rickshaws & e-carts and L5 (e-3W)
- Applicability: Mainly for and e-3Ws; privately or registered e-2W also eligible.

### **Target Numbers:**

Aim to support 3,72,215 EVs including e-2W (3,33,387) and e-3W (38,828 including 13,590 rickshaws & e-carts and 25,238 e-3W in L5 category).

#### **Aatma Nirbhar Bharat Impact:**

- Promotes efficient, competitive, and resilient EV manufacturing, aligning with the vision of Aatma-Nirbhar Bharat.
- Phased Manufacturing Programme (PMP)
   adopted to encourage domestic manufacturing
   and strengthen EV supply chain, creating
   significant employment opportunities.

# PM Gati Shakti- National Master Plan in Coal Sector

- Union Minister of Coal, Mines and Parliamentary affairs Shri Pralhad Joshi released "PM Gati Shati-National Master Plan in coal sector".
- Aim:To offer in-depth insights into the coal sector through the geospatial layers available on the Ministry of Coal page of the PMGS-NMP portal.

## **Key points:**

- Shri Anandji Prasad, Advisor (Projects), Ministry of Coal, echoed that the release of the PM-Gati Shakti National Master Plan aims to develop a smart, integrated, and sustainable coal logistics ecosystem.
- This will ensure the availability of adequate infrastructure, optimize logistics costs, and promote modernization through the adoption of information and communication technology.
- The initiative aligns with the vision of 'Atmanirbhar Bharat' by promoting cost efficiencies, minimizing disruptions, and fostering inclusive growth.

# Revamped Pharmaceuticals Technology Upgradation Assistance Scheme

The Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers has introduced the Revamped Pharmaceuticals Technology Upgradation Assistance (RPTUAS) Scheme.

## **Key points:**

 Objective: Provide subsidies based on quality reimbursement to aid pharmaceutical companies in achieving Revised Schedule M and WHO-GMP certifications, enhancing product quality and safety.

#### **Key features of the scheme:**

- Expanded Eligibility Criteria: Extends eligibility beyond Micro, Small, and Medium Enterprises (MSMEs) to encompass any pharmaceutical manufacturing unit with a turnover of less than 500 crores, facilitating technology and quality upgradation.
- Flexible Financing Options: Introduces more flexible financing, emphasizing subsidies on a



- reimbursement basis rather than traditional credit-linked approaches.
- Comprehensive Support for Compliance: Aligned with revised Schedule-M and WHO-GMP standards, the scheme supports a broader spectrum of technological upgrades.
- Integration with State Government Schemes: Revised scheme allows integration with state government initiatives, enabling units to benefit from additional top-up assistance.
- New Benefit Limits Based on Turnover: Incentives are determined based on the company's turnover.

#### **PM-SURAJ Portal**

- PM unveiled 'Pradhan Mantri Samajik Utthan and Rozgar Adharit Jankalyan' (PM-SURAJ) national portal online.
- The Ministry of Social Justice and Empowerment launched a nationwide initiative aimed at offering credit support to the marginalized segments of society.

### **Key points:**

- It is a national portal launched by Prime Minister Narendra Modi to provide credit support to small entrepreneurs from marginalised communities.
- Small entrepreneurs from marginalised communities, including Scheduled Castes, Backward Classes, and sanitation workers, can benefit from the PM-SURAJ Portal.
- The objective of PM-SURAJ Portal is to provide financial assistance directly to beneficiaries, eliminate middlemen and commissions, and empower marginalised communities economically and socially.
- PM-SURAJ Portal aims to uplift marginalised communities and integrate them into the mainstream economy, which is essential for achieving the goal of Viksit Bharat by 2047.

#### Awards News

#### **National Creators Award**

- Prime Minister Narendra Modi presented the inaugural National Creators Award at Bharat Mandapam, New Delhi.
- The award is being provided across twenty categories including the Best Storyteller Award; The Disruptor of the Year; Celebrity

Creator of the Year; Green Champion Award; Best Creator For Social Change; Most Impactful Agri Creator; Cultural Ambassador of The Year; International Creator award; Best Travel Creator Award; Swachhta Ambassador Award; The New India Champion Award; Tech Creator Award; Heritage Fashion Icon Award; Most Creative Creator (Male & Female); Best Creator in Food Category; Best Creator in Education Category; Best Creator in Gaming Category; Best Micro Creator; Best Nano Creator; Best Health and Fitness Creator.

## **Key points:**

- **Disruptor of the Year award:** Ranveer Allahbadia (BeerBiceps)
- Best Creator in Education Category(Male & Female): Naman Deshmukh
- Best Creator in Tech Category: Gaurav Chaudhary(Technical Guruji)
- Favourite Travel Creator: Kamiya Jani
- Best Health and Fitness Creator: Ankit Baiyanpuria
- Best Creator in Food Category: Kabita Singh (Kabita's Kitchen)
- Celebrity Creator of the Year: Aman Gupta
- Green Champion' Category: Pankhti Pandey
- Best Storyteller: Keerthika Govindasamy
- Cultural Ambassador of the Year: Maithili
  Thakur
- Most Creative Creator Female: Shraddha
   Jain
- Most Creative Creator Male: RJ Raunac
- Heritage Fashion Icon Award: Jahnvi Singh
- Best Creator for Social Change Award: Jaya Kishori
- Best Micro Creator Award: Aridaman
- Best Creator in Gaming Category Award: Nishchay
- Swachhta Ambassador Award: Malhar Kalambe
- Best International Creator Award: Drew Hicks, Kili Paul, Cassandra Mae Spittmann
- Best Nano Creator Award: Piyush Purohit
- Most Impactful Agri Creator: Lakshay Dabas
- The New India Champion Award: Abhi and Niyu

#### 96th Academy Awards

The 96th Academy Awards ceremony, organized by the Academy of Motion Picture Arts and Sciences





(AMPAS), was held on March 10, 2024, at the Dolby Theatre in Hollywood, Los Angeles.

#### 2024 Winners:

- **Best Actor:** Cillian Murphy won for his role in "Oppenheimer."
- **Best Actress:** Emma Stone won for her performance in "Poor Things."
- Best Supporting Actor: Robert Downey Jr. won for "Oppenheimer."
- Best Supporting Actress: Da'Vine Joy Randolph won for "The Holdovers."
- Best Director: Christopher Nolan won for "Oppenheimer."
- **Best Original Screenplay:** Justine Triet and Arthur Harari won for "Anatomy of a Fall."
- Best Movie: "Oppenheimer"

#### **Defense News**

## **Mission Divyastra**

- DRDO, on 11th March 2024, conducted the first successful flight test of the Agni-5 missile with MIRV(Multiple Independently Targetable Re-Entry Vehicle) technology.
- The indigenously developed missile was launched from Dr APJ Abdul Kalam Island in Odisha.
- Prime Minister Modi lauds the first successful test of Agni-5 with multiple warhead technology.

### **Key points:**

- Agni, a long-range missile developed by DRDO, has been in the Indian armed forces' arsenal since the early 1990s.
- The recent test of Agni-5 demonstrates India's upgraded missile system, enhancing its strike capability, including the nuclear option.
- MIRV technology, allowing a missile to carry multiple warheads, is possessed by a few countries like the US, Russia, China, UK, and France.
- Pakistan claimed to have tested a MIRVequipped missile, Ababeel, last year.
- Agni-5 can carry nuclear warheads and hit targets over 5,000 km away, mainly aimed at countering China.
- Dr. V K Saraswat highlighted that MIRV technology significantly increases Agni-5's potency as a force multiplier.

- The MIRV-equipped Agni-5 missiles can carry three to four warheads and autonomously guide them to predetermined targets.
- Agni-1 to 4 missiles have ranges from 700 km to 3,500 km and are already deployed, including medium to intercontinental versions.
- The next upgrade, Agni-6, is expected to be an intercontinental ballistic missile with a range exceeding 7,000 km.
- The DRDO development team of MIRVequipped Agni-5 was led by a woman, Sheena Rani, and included many other women scientists.

## **Cutlass Express 24**

- The Indian Navy led the maritime exercise "Cutlass Express" – 24 with INS Tir at Port Victoria, Seychelles.
- The exercise involved active engagement with participants from 16 friendly foreign countries.

#### **Training Activities:**

- The training encompassed theoretical and practical aspects of Maritime Interdiction Operations, Visit Board Search and Seizure (VBSS) procedures, and Diving operations.
- During the sea phase, the VBSS team of INS
   Tir boarded the Seychelles Coast Guard ship
   LE Vigilant, showcasing boarding operation
   procedures.
- Joint diving operations were conducted by Indian, US, and Seychelles divers after intensive training.

#### INS Tir:

- INS Tir (A86) is the first dedicated cadet's training ship to be built by Mazagon Dock Limited and commissioned as such by the Indian Navy.
- She is the senior ship of the 1st Training Squadron of the Southern Naval Command.
- INS Tir was commissioned on 21 February 1986.

#### **INS Tushil**

INS Tushil, India's latest naval asset, began its sea trials from Russia's Baltiysk naval base on March 5.

#### **Key points:**

• INS Tushil belongs to the **Talwar-class frigates**, known for their stealth-guided missile capabilities.





- These frigates are upgraded versions of the Russian Krivak III-class frigates, originally used by the Coast Guard.
- The Indian Navy currently operates six of these ships, with four more under construction, including two at India's Goa shipyard.
- These ships incorporate "stealth technology" to minimize radar and underwater noise detection.
- They are equipped with Indian and Russian weaponry, including surface-to-surface missiles, sonar systems, surveillance radar, communication suites, antisubmarine warfare systems, surface-to-air missiles, and gun mounts.
- Designed for combat in brown and blue waters, they can engage submarines, warships, and repel air attacks independently or in formations.
- The frigates have a displacement of 3620 tons, a length of 124.8 meters, a top speed of 30 knots, and a cruising range of 4850 miles.

## Project 11356M:

- In October 2016, India and Russia signed an Inter-Governmental Agreement (IGA) for four Admiral Grigorovich-class frigates (Project 11356M).
- Russia agreed to deliver two frigates, including INS Tushil and INS Tamala, while India would build the other two domestically.
- The construction of these ships is tailored to meet the Indian Navy's requirements for comprehensive naval warfare capabilities in air, surface, and sub-surface domains.

## India's indigenous fifth gen fighter jet AMCA

 The Cabinet Committee on Security (CCS) cleared a Rs 15,000 crore project to design and develop the Advanced Medium Combat Aircraft (AMCA), India's fifth-generation fighter multirole fighter jet.

#### **Agencies Involved**

- The Aeronautical Development Agency (ADA) under the Defence Research and Development Organisation (DRDO) will be the nodal agency for executing the programme and designing the aircraft.
- It will be manufactured by state-owned Hindustan Aeronautics Limited (HAL).

#### **Features**

- Stealth features
- Low-probability-of-intercept radar
- Agile airframes with super cruise performance
- Advanced avionics features
- Highly integrated computer systems capable of networking with other elements within the battlespace
- Higher utilization time and smaller serviceability or maintenance periods

## Other fifth-generation fighters

- Only a few countries have built a fifthgeneration stealth fighter aircraft.
- The list of the aircraft currently in service includes the F-22 Raptor and F-35A Lightning II of the US, the Chinese J-20 Mighty Dragon, and the Russian Sukhoi Su-57.

#### **Exercise Bharat Shakti**

 Prime Minister Narendra Modi and a delegation of over 30 members observed the 'Bharat Shakti' tri-service exercise in Pokhran, Rajasthan.

## **Key points:**

- This exercise integrates the firepower and manoeuvre capabilities of all three services.
- It serves to exhibit the effectiveness of domestically manufactured defence equipment.
- Through realistic scenarios, it showcases the Indian Armed Forces' ability to operate cohesively across various domains.
- The exercise is in line with the Aatmanirbharata initiative, underscoring India's self-reliance in defence.

Key Equipment and Weapons Systems Participated:

#### **Indian Army:**

 Includes T-90 (IM) Tanks, Dhanush and Sarang Gun Systems, Akash Weapons System, Logistics Drones, Robotic Mules, Advanced Light Helicopter (ALH), and various unmanned aerial vehicles.

### **Indian Navy:**

 Deployed Naval Anti-Ship Missiles, Autonomous Cargo Carrying Aerial Vehicles, and Expendable Aerial Targets.

## **Indian Air Force:**





 Showcased the Light Combat Aircraft Tejas, Light Utility Helicopters, and Advanced Light Helicopters.

# Rajnath Singh Inaugurates Indian Navy's New Headquarters in Delhi

- Defence Minister Rajnath Singh inaugurated the Indian Navy's new headquarters, Nausena Bhawan, in Delhi Cantonment.
- This marks a significant milestone as the Indian Navy establishes its first independent headquarters in Delhi, consolidating its operations previously spread across 13 different locations.

### **Key points:**

- It is equipped with a state-of-the-art integrated building management system for efficient coordination and monitoring of security services and utility systems.
- Nausena Bhawan has achieved Green Rating
   IV under the integrated habitability
   assessment.

#### **Ranks & Reports News**

# Golden Langurs

- The latest survey estimates India's golden langur population at 7,396.
- Conducted by the Primate Research Centre NE India (PRCNE), Assam Forest Department, Bodoland Territorial Council, Salim Ali Centre for Ornithology and Natural History (SACON), and Conservation Himalayas.
- The golden langur's distribution covers the Manas Biosphere Reserve and fragmented forests in western Assam.
- Ripu Reserve Forest and Chakrashila Wildlife Sanctuary identified as significant habitats for golden langurs.

### Geographic Range:

- Limited to Assam, India, and neighboring Bhutan.
- Inhabits an area surrounded by four geographical landmarks: the foothills of Bhutan (north), Manas river (east), Sankosh river (west), and Brahmaputra river (south).

#### Habitat:

 Occupies moist evergreen and tropical deciduous forests, as well as some riverine areas and savannas.

- Primarily tree-dependent, living in the upper canopy of sub-tropical forests in the south and temperate forests in the north.
- Found at elevations close to sea level in the south and up to 3000 m at the foothills of Bhutan in the north.

#### **Conservation Status:**

- IUCN: Endangered
- CITES: Appendix I
- Wildlife Protection Act, 1972: Schedule I

## **Liberal Democracy Decline in India**

India's democratic status has deteriorated significantly, according to the "Democracy Report 2024" by the V-Dem Institute.

- In 2018, India was labeled an "electoral autocracy," but it has since worsened, becoming one of the most autocratic nations.
- The report classifies countries into four regime types based on the Liberal Democratic Index (LDI): Liberal Democracy, Electoral Democracy, Electoral Autocracy, and Closed Autocracy.
- India, despite having 18% of the world's population, now hosts about half of the population residing in countries experiencing autocratisation.
- The state of liberal democracy in South and Central Asia, particularly India, has regressed significantly, reaching levels comparable to those seen in 1975 during Indira Gandhi's emergency declaration.
- The Modi-led government is criticized for suppressing freedom of religion, intimidating political opponents and protesters, and stifling dissent in academia.
- The report warns that a third consecutive term for the BJP and Prime Minister Modi could exacerbate autocratisation, considering the substantial decline in democracy under his leadership and ongoing crackdowns on minority rights and civil society.
- The V-Dem's Democracy Report involves 4,200 scholars from 180 countries and draws on 31 million datasets covering 202 countries from 1789 to 2023.





# India was the top arms importer in 2019-2023

- India ranked as the world's top arms importer from 2019 to 2023.
- Imports increased by 4.7% compared to 2014–2018, according to SIPRI.

#### **Key points:**

- European countries saw a 94% increase in arms imports from 2014–18 to 2019–23, likely influenced by the Ukraine war.
- Russia, India's main arms supplier, had its share drop below half for the first time since 1960–64.
- Nine out of the top 10 arms importers were from Asia, Oceania, or the Middle East.
- Ukraine became the fourth largest arms importer due to major arms transfers from over 30 states in 2022–23.
- In India's FY 2024–25 interim budget, the Defence Ministry received ₹6.2 lakh crore.
- This included ₹1.72 lakh crore for new procurements, a 5.78% increase from the previous year.

### **Global Arms Trade Trends**

- Pakistan, the fifth largest arms importer, saw a 43% increase in imports, with China supplying 82% of its arms.
- U.S. arms exports grew by 17%, while Russian exports fell by more than half (-53%).
- France emerged as the world's second largest arms supplier with a 47% increase in exports.

#### **SIPRI Overview**

- SIPRI, or the **Stockholm International Peace Research Institute,** is an independent international institute established in 1966.
- It focuses on research into conflict, armaments, arms control, and disarmament.
- SIPRI provides data, analysis, and recommendations to policymakers, researchers, media, and the public on international security matters.

### **Science and Technology News**

#### **IRIS AI Robot**

A pioneering advancement in education has emerged in Kerala's Thiruvananthapuram, where a school has introduced India's first Al teacher robot, Iris. Key points:

 Powered by Robotics and Generative Al technologies, Iris boasts a dedicated Intel

- processor and coprocessor for seamless performance.
- Its Android App interface allows users to control and interact with the robot, ensuring a personalized learning experience.
- Not just a passive presence in the classroom, Iris is a dynamic voice assistant and interactive learning tool.
- Acts as an Al voice-controlled assistant, responding to user queries, providing explanations, and delivering educational content.
- Engages users in interactive learning experiences through personalized content generation, quizzes, and interactive activities.
- Equipped with a 4-wheel chassis, Iris can move freely within its environment, facilitating interaction with users and navigating through learning spaces.
- Its hands, featuring 5 DoF each, enable Iris
  to manipulate objects, perform
  demonstrations, and engage in hands-on
  learning activities.
- The robot can teach subjects from nursery to Class 12.
- Currently, Iris speaks three languages -English, Hindi, and Malayalam.
- Created by Maker Labs.

#### PI AI

 Inflection Al recently unveiled Inflection 2.5, an upgraded version of its language model, designed to enhance the functionality of its user-friendly chatbot, Pi, serving as a personal assistant.

## **Key points:**

- Pi is an Al chatbot specifically designed for engaging in deep and meaningful conversations.
- Pi is promoted as having a personality, making it more relatable and companion-like.
- Pi offers **six distinct voices**, providing depth and variety to user interactions.
- Pi is trained on billions of lines of text from the open web, enhancing its conversational abilities.

#### **About Inflection 2.5:**

• **Model Upgrade:** Inflection 2.5 features an upgraded in-house model, now comparable to global leading LLMs.





- **Signature Features:** Inflection 2.5 maintains its unique personality with added empathetic fine-tuning.
- Real-Time Web Search: Inflection 2.5 is equipped with world-class real-time web search capabilities, providing access to timely, high-quality information.
- Versatile Conversations: With the upgrade, users can engage Pi in discussions on a broad array of topics, including current events, local dining options, academic assistance (e.g., biology exam prep), business plan creation, programming, coding, leisure activities, and hobbies.

# Oldest 'Dead Galaxy' Discovered by James Webb Telescope

- Astronomers using the James Webb Space Telescope (JWST) have found the oldest known "dead" galaxy.
- Named JADES-GS-z7-01-QU, it ceased star formation when the universe was just 5% of its current age.

### Significance:

- This discovery surpasses prior findings by approximately 500 million years.
- It marks the earliest instance of a "dead" galaxy.
- Astrophysicist Tobias Looser likens its star formation pattern to James Dean's sudden halt, post a rapid burst of activity.
- Despite ample gas availability in the early universe, star formation abruptly stopped.

#### **Characteristics:**

- Estimated to contain 100 million to one billion stars.
- Comparable in size to the Small Magellanic Cloud but devoid of ongoing star formation.
- Existing stars will expire without replacement, leading to a color shift from blue to yellow to red.

### **Potential Causes:**

- Researchers speculate on reasons for cessation, including the influence of a supermassive black hole or gas depletion.
- The JWST's advanced capabilities enabled a snapshot observation, leaving open the possibility of resumed star formation.

### **About James Webb Space Telescope:**

• Launched in **December 2021**, it's the most potent space telescope constructed to date.

- Tailored for infrared astronomy, it explores objects beyond the reach of the Hubble Space Telescope.
- Primarily aims to study the earliest stars and galaxies, providing insights into the universe's infancy.
- Its inaugural image was captured in July 2022, leading to numerous discoveries, including ancient galaxies.

#### **Miscellaneous News**

## ISRO's second rocket launchport

 Recently, Prime Minister Narendra Modi initiated the construction of ISRO's second rocket launchport.

### Why India Needs a New Launchport?

- Increasing Commercial Launches: India expects a surge in commercial launches with the recent policy allowing private players in the space sector.
- Relieving Pressure on Existing Facility: To avoid overloading ISRO's Satish Dhawan Space Centre (SDSC) SHAR in Sriharikota, a new launchport is essential.
- Diverse Launch Capabilities: The Kulasekarapattinam launchport will handle smaller payloads, allowing SHAR to focus on larger missions like lunar, Venus, and humanflight missions.
- Facilitating Private Players: Private companies can develop space systems, build satellites, and launch vehicles, promoting private sector involvement in space.
- Dedicated Infrastructure: It will provide dedicated launch infrastructure for on-demand commercial launches, ensuring smooth operations.

### Why is the New ISRO Launchport in Tamil Nadu?

- Geographical Advantage: Kulasekarapattinam's coastal location in Tamil Nadu offers a natural advantage.
- Optimized Trajectory for SSLV: The launchport allows a direct southward trajectory, beneficial for the Small Satellite Launch Vehicle (SSLV) missions.
- Reduced Fuel Consumption: Kulasekarapattinam's westward location saves





- fuel for SSLV missions compared to the eastward trajectory required from SHAR.
- Equatorial Proximity: Located near the equator, both launchports significantly boost payload capacity due to the Earth's rotational velocity.
- Enhanced Payload Capacity: Proximity to the equator increases velocity due to Earth's rotation, benefiting geostationary satellites.

# 71st Miss World pageant 2024

Krystyna Pyszkova from the Czech Republic was crowned as the new Miss World 2024 at a grand event in Mumbai, India. The previous Miss World 2022, Karolina Bielawska from Poland, crowned her successor in a magnificent ceremony.

## **Runners-Up and Continental Winners**

- First Runner-Up: Yasmina Zaytoun of Lebanon
- Miss World Asia and Oceania: Yasmin Azaytoun of Lebanon
- Miss World Europe: Krystyna Pyszková of Czech Republic
- Miss World America and Caribbean: Aché Abrahams of Trinidad and Tobago
- Miss World Africa: Lesego Chombo of Botswana

#### **Humanitarian Award**

The Miss World Humanitarian Award was given to Nita Ambani for her work at the Reliance Foundation, a non-profit organization. Julia Morley CBE, the Chairwoman of the Miss World Organization, presented her with the award.

# **Gold Nanoparticles**

- Often referred to as 'gold bhasma,' gold nanoparticles are recognized for their therapeutic and beautifying properties in skincare.
- They protect the skin from external infestations, combat aging, improve metabolism, and rejuvenate the body.

#### **Key points:**

 Gold nanoparticles (AuNPs) are tiny particles made of gold atoms, typically ranging from 1 to 100 nanometers in size.  They possess unique optical, electronic, and catalytic properties due to their small size and shape.

#### **Benefits**

- Easily absorbed by the skin, they act as a rejuvenator, potentially benefiting various systems of the human body.
- Integral to various Ayurvedic preparations, they are known for their rejuvenating, immunomodulating, beautifying, and healing properties.
- They slow down collagen depletion, stimulate cell regeneration, improve metabolism, and tone up muscles.
- They strengthen underlying tissue, bones, and nerves, contributing to a youthful appearance.
- Innovative formulations like sparkling gold face washes enriched with gold nanoparticles and natural ingredients offer potent skincare solutions.

## **Applications**

- Biomedical: Used in imaging, therapy, and diagnostics, serving as contrast agents in Xray, computed tomography (CT), and photoacoustic imaging, and facilitating photothermal therapy and drug delivery.
- Catalysis: Exhibit remarkable catalytic activity in various chemical transformations.
- **Electronics:** Used in nanoelectronic devices, conductive inks, and sensors.
- Environmental Remediation: Employed in detecting and removing pollutants from water and soil.

### Nyepi day

- Nyepi Day is also known as Bali's Day of Silence.
- It marks the **Hindu New Year according to** the **Balinese calendar**.
- The majority of Bali's population follows Hinduism.

#### **Significance**

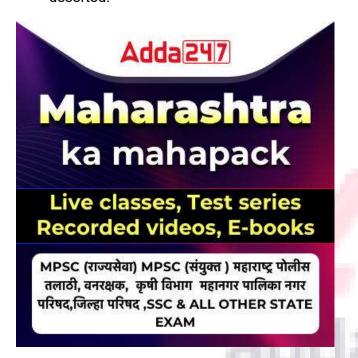
- Nyepi Day is a holy day aimed at purifying the island from the previous year's negativity.
- It sets the tone for a positive and prosperous new year.





#### Observance

- Nyepi is observed with silence, fasting, and meditation.
- All lights and sounds are turned off, and all activities cease.
- The day is spent in silence, self-reflection, and meditation.
- Traffic comes to a halt, and the island appears deserted.



#### Kochrab Ashram

- Prime Minister Narendra Modi inaugurated the redeveloped Kochrab Ashram in Ahmedabad, Gujarat, marking the 94th anniversary of the Dandi March.
- Kochrab Ashram was Gandhi's first home in India after returning from South Africa in 1915.
- Modi also revealed the master plan for the Rs 1,200 crore Gandhi Ashram Memorial and Precinct Development Project.

#### **Future Plans for Gandhi Ashram Memorial**

- The master plan aims to expand the ashram to 55 acres, restoring and conserving 36 buildings, including Gandhi's residence, Hriday Kunj.
- It includes new structures for administration facilities, visitor amenities, interactive workshops, and public utilities.

 An orientation center, a library, and archive buildings will be built to safeguard and disseminate Gandhi's ideas.

## **International Day of Mathematics**

#### Context:

Pi Day, celebrated annually on March 14, honors the mathematical constant pi  $(\pi)$ , chosen due to the significance of the date's digits (3/14 mirroring the first three digits of pi).

- In 2009, the U.S. House of Representatives officially recognized Pi Day.
- UNESCO declared Pi Day as the International Day of Mathematics in November 2019.
- **Origins:** Founded by Larry Shaw in 1988 at the Exploratorium in San Francisco.