

ज्ञानकोश

मासिक चालू घडामोडी (महाराष्ट्र राज्य)

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मुंबईतील हवेची गुणवत्ता सुधारली

गालगुंडाचे दुर्मिळ दुष्परिणाम नोंदवले गेले

GN1 कोरोना

बिहारची पकडवा विवाह प्रथा

RBI ने UPI पेमेंट मर्यादा वाढवली

कुडनकुलम अणुऊर्जा प्रकल्प

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National News

Centre approves fourth phase roll-out of GIAN scheme

Context

The Education Ministry is gearing up to restart the fourth phase of the **Global Initiative of Academic Networks (GIAN)**

About GIAN

- Global Initiative of Academic Networks (GIAN) in **Higher Education was launched in 2015.**
- It is a program of the Ministry of **Human Resource and Development.**
- GIAN taps **scientists and entrepreneurs** for higher education collaboration in India.
 - **Goal:** Enhance academic resources, expedite quality reforms.
 - Focus on strengthening India's **scientific and technological capabilities.**

RS passes Post Office Bill

Context

The Rajya Sabha passed the Post Office Bill, which repeals and replaces the **Post Office Act of 1898.**

Key points

- The bill will ensure the **effective functioning of the postal department** as a messenger service and as a provider of banking facilities.
- **Section 9** of the Bill gives the power to intercept, open or detain any item or deliver item to customs authority by the post office officials.
- The provisions **empowering any officer to intercept, open or detain any postal item** in the interest of the security of the State is also a concern that giving such a free hand to officers will harm the right to privacy.

Centre announces ₹1,500-cr. aid to T.N. and A.P. after cyclone

- The Union government released **₹493.60 crore to Andhra Pradesh and ₹450 crore to Tamil Nadu** in the wake of the damage inflicted by severe cyclonic storm Michaung
- Centre also approved another tranche of ₹561.29 crore for Chennai for flood mitigation efforts for **'Integrated Urban Flood Management activities for Chennai Basin Project'** under the **National Disaster Mitigation Fund (NDMF).**

India Art, Architecture, and Design Biennale

- Prime Minister recently highlighted that **India's re-emergence to a pre-eminent position** in the field of art and architecture would benefit all of humanity
- It was done at the inauguration of the maiden **India Art, Architecture, and Design Biennale at the Red Fort.**

Key points

- India is working to develop a modern system on the lines of similar cultural events in cities like **Venice, London, and Sao Paulo**
- The cultural spaces which are being built in **Delhi, Kolkata, Mumbai, Ahmedabad, and Varanasi** would enrich the cities culturally
- The biennale has exhibitions on seven themes — **Doors of India, Gardens of India, Baolis (stepwells) of India, Temples of India, Architectural Wonders of Independent India, Indigenous Design, and Women in Architecture and Design.**
- The exhibitions have been designed in both physical and digital forms accompanied by interactive installations.

SC upholds repeal of J&K's special status

- A Constitution Bench of the Supreme Court **unanimously upheld the power of the President to abrogate special status of Jammu and Kashmir.**
- This was done under Article 370 of the Constitution, leading to the reorganization of the **full-fledged State to two Union Territories** and the removal of its privileges.

About special status of J&K

- On **5th August 2019**, the **President of India in the exercise of the powers conferred by Article 370(1)** of the Constitution issued the **Constitution (Application to Jammu and Kashmir) Order, 2019.**
- Through this, the Government of India has made modifications to Article 370 itself (not revoked it).
- The **Constitution (Application to Jammu and Kashmir) Order, 2019** has replaced the **Presidential Order of 1954.**
- Subsequently, the **Jammu and Kashmir Reorganisation Bill, 2019**, passed by Parliament divides the state of Jammu and

Kashmir into two new Union Territories (UTs): **Jammu & Kashmir, and Ladakh.**

- This was further challenged in the supreme court.

Important articles: -

- Article 370 under Part XXI **empowers Jammu & Kashmir to have its own constitution.**
- It grants autonomous status to J&K.
- It restricts Parliament's legislative powers in respect of J&K.
- Article 35A, incorporated into the Constitution in 1954, **provides special rights and privileges to the citizens of the state.**
- Article 35A gives the Jammu & Kashmir Legislature full discretionary power to decide who the **'permanent residents' of the state are.**

Logistics costs in India

- A report has been released by the **National Council for Applied Economic Research (NCAER)** commissioned by the **Commerce and Industry Ministry.**
- It highlighted that India's logistics costs had **reduced from a range of 8.6% to 9.8% in 2013-14 to 7.8%-8.9% of GDP in 2021-22**
- The estimate dispels earlier estimates that pegged the country's logistics costs as high as **14% of GDP.**
- The data is relied on National Accounts Statistics for data such as the **output of transport services, storage and warehousing sectors.**

The Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Office, and Terms of Office) Bill, 2023 was passed by the Rajya Sabha.

- The Chief Election Commissioner and Other Election Commissioners **(Appointment, Conditions of Office, and Terms of Office) Bill, 2023 was passed by the Rajya Sabha.**
- The Bill lays out the process for naming the Chief Election Commissioner (CEC) and two Election Commissioners (ECs).
- The Election Commission of India (ECI), comprising the CEC and two ECs, is established under **Article 324 of the Constitution.**
- The President is authorized under the Constitution to nominate the CEC and ECs, subject to parliamentary approval.

- **In response to a PIL, the Supreme Court declared in March 2023 that there is a legislative vacuum regulating the nomination procedure.**
- The Supreme Court proposed a committee-based selection process that would include the Prime Minister, Chief Justice of India, and Leader of the Opposition.
- **Previously there was no separate committee of selecting the Election Commissioners.**

About

- The proposed law establishes an **organized framework with a search and selection committees, but it excludes the CJI from the process.**
- Individuals holding positions comparable to the rank of **Secretary to the Government of India shall be appointed as CECs and ECs.**
- **The Prime Minister, the Leader of the Opposition, and a Union Cabinet Minister recommended by the Prime Minister make up the selection committee.**
- The mechanism of the Bill differs from worldwide standards, with differences in selection processes in nations such as South Africa, the United Kingdom, and the United States.
- While the **Bill improves the selection process, it is criticized for favouring the existing administration.**
- Retaining the Chief Justice of India (CJI) on the selection committee, as indicated by the Supreme Court, might provide more independence.
- The Bill is expected to become law, and unanimous choices by **the selection committee may boost public trust in the Election Commission of India (ECI).**

LS passes Bills to replace British-era criminal laws

- The Lok Sabha passed three amended Bills that seek to repeal and replace criminal laws which date back to colonial times.
- This criminal law reform brings terrorism offences into a general crime law for the first time, drops the crime of sedition, and makes mob lynching punishable by death.

Key replacements

- The **Bharatiya Nyaya (Second) Sanhita Bill (BNSS) will replace the Indian Penal Code, 1860;**

- the **Bharatiya Sakshya (Second) Bill (BSS)** will replace the **Indian Evidence Act, 1872**; and
- The **Bharatiya Nagarik Suraksha (Second) Sanhita Bill (BNSSS)** replaced the **Code of Criminal Procedure, 1898**.

Key points

- Indian Penal Code (IPC) is the **official criminal code of India** drafted in 1860 in the wake of the **first law commission established in 1834 under the Charter Act of 1833**.
- Code of Criminal Procedure (CrPC) **provides procedures for administering criminal law in India**. It was enacted in 1973 and became effective on 1 April 1974.
- The Indian Evidence Act, originally passed in India by the **Imperial Legislative Council in 1872**, during the British Raj, contains a set of rules and allied issues governing admissibility of evidence in the Indian courts of law.

Telecom Bill 2023

The Lok Sabha passed the **Telecom Bill, 2023**, which will replace existing laws, including the **138-year-old Indian Telegraph Act**.

Key points

- The Bill seeks to **reform and simplify the regulatory and licensing regime** for telecommunications and remove bottlenecks in creating telecom infrastructure.
- It also allows the **government to temporarily take control of telecom services** in the interest of national security and provide a non-auction route for the allocation of satellite spectrum.
- The Telecom Bill, 2023 **provides a mechanism to exercise the right of way for laying telecom infrastructure** in public as well as private property.

Lok Sabha passes Bill on CEC, EC appointment

- The Lok Sabha passed the **Chief Election Commissioner and Other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023**
- The Bill had been passed by the Rajya Sabha already.

About

- The Bill replaces the **Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991**.

- It addresses the **appointment, salary, and removal of the CEC and ECs**
- The legislation aims to bring transparency to the appointment process, responding to a directive from the Supreme Court of India in the **Anoop Baranwal v Union of India case, 2023**.

Bill to replace the PRB Act

- Parliament passed the **Press and Registration of Periodicals Bill** to make the process of allotment of title and registration of periodicals simple through an online system without the requirement of physical interface.
- It replaces the **Press and Registration of Books Act, 1867**.

Muslim League Jammu Kashmir (Masarat Alam faction) under Unlawful Activities (Prevention) Act (UAPA)

- The Union Home Ministry declared the **Muslim League Jammu Kashmir (Masarat Alam faction)** an “unlawful association” under the **anti-terror Unlawful Activities (Prevention) Act (UAPA)** for five years.
- MLJK-MA was known for its **anti-India and pro-Pakistan propaganda** and its objectives were to get freedom of Jammu and Kashmir from India so as to realise the merger of Jammu and Kashmir with Pakistan and establish Islamic rule.

About

- UAPA was **passed in 1967**.
- It aims at effective prevention of unlawful activities associations in India.
- Unlawful activity refers to any action taken by an individual or association intended to disrupt the territorial integrity and sovereignty of India.
- The Act assigns **absolute power to the central government**, by way of which if the Centre deems an activity as unlawful then it may, by way of an Official Gazette, declare it so.
- It has the **death penalty and life imprisonment** as the highest punishments.
- Under UAPA, **both Indian and foreign nationals can be charged**.

Disabled staff to get quota in promotion with effect from 2016

- The **Indian government has implemented a policy granting disabled staff reservation in**

promotions within government departments, retroactive to June 30, 2016.

- This decision signifies a **significant step towards ensuring equal opportunities for disabled individuals in career progression.**

Key Points:

- The policy provides a **4% reservation in vacancies within Groups C, B, and A for promotion of Persons with Disabilities (PwDs).**
- Employees with **benchmark disabilities exceeding 40%** in specified categories, as defined by the Rights of Persons with Disabilities Act, 2016, are eligible for the quota.
- It aims to **address the underrepresentation of PwDs in higher positions** within government departments, offering them a fair chance to climb the career ladder.
- The **Department of Personnel and Training (DoPT) has issued guidelines for various aspects of the policy**, including identification of vacancies, application procedures, and selection criteria.

State News

SC directs Bihar govt. to remove encroachments near the Ganga

Context

- The Supreme Court has ordered the Bihar government to clear **unauthorized constructions** from the floodplains of the Ganga, especially in and around Patna.
- The State shall also ensure **no further construction** takes place

Key impacts

- Illegal constructions on Ganga's floodplain produce waste, noise, and sewage.
- Unauthorized structures harm biodiversity and **threaten dolphins, a Schedule I species.**
- Permanent encroachments pose an environmental threat to the **Ganga's habitat.**
- Deleterious impacts on biodiversity and dolphin survival are observed.
- **The Wildlife (Protection) Act, 1972**, designates dolphins as Schedule I species.
- Urgent action is needed to address the destructive consequences of these unauthorized activities.

200 million tons of dust in the world every year

Context:

- **Every year, 200 crore tonnes of dust and sand are entering the atmosphere worldwide.**
- About **25 percent of the total incidence of dust and sand is due to excessive human intervention in the environment.**
- The Food and Agriculture Organization of the United Nations (**FAO**) has said that the **risk of large-scale infertility of agricultural land has increased**
- As per a 2021 **United Nations Economic and Social Commission report**, more than **500 million people in India** and about **80 percent** of the population in Turkmenistan, Pakistan, Uzbekistan, Tajikistan and Iran face dust and sandstorms and degraded air quality

Revanth sworn in as Telangana CM

Context

- **Anumula Revanth Reddy** was sworn in as the **first Congress Chief Minister of Telangana**
- After the win he vowed to revive a tradition of inviting the public into the halls of power to present their grievances directly to him.
- He immediately signed his first file, to implement the **six welfares 'guarantees'** that headlined the Congress' poll manifesto.

114 seats, migrant quota cleared for J&K Assembly

Context

The Lok Sabha passed the **Jammu and Kashmir Reorganisation (Amendment) Bill, 2023**, and the **Jammu and Kashmir Reservation (Amendment) Bill, 2023**, the former seeking to reserve seats for **"Kashmiri migrants, people displaced from Pakistan-occupied Kashmir [PoK] and Scheduled Tribes"** in the yet-to-be constituted **114-seat J&K Assembly.**

Key points

- The **reservation of seats for Kashmiri migrants**, who were displaced from their own homes in the 1990s, will ensure that the voice of the community is heard "loud and clear in the J&K Assembly".
- The **Reorganisation Bill increases the total number of seats in the J&K Assembly from 107 to 114**, with reservation of nine seats for the **Scheduled Tribes** for the first time.
- It also empowers the **Lieutenant-Governor to nominate three members in the Assembly** — two from the Kashmiri migrant

community including one woman, and the third member being a representative of people from PoK who took refuge in India following the wars with Pakistan in 1947, 1965 and 1971.

Lalduhoma sworn in as Mizoram Chief Minister

- **Zoram People's Movement (ZPM) leader Lalduhoma** was sworn in as the Chief Minister of Mizoram
- Mr. Lalduhoma **announced 12 programmes** of his new government to be implemented in the next 100 days.
- Mr. Lalduhoma had served as the security in-charge of former **Prime Minister Indira Gandhi**
- He is a **former IPS**

Pakadwa vivah practice of Bihar

Recently, the **Patna High Court** has nullified a forced marriage, commonly referred to as "**pakadwa vivah**," which occurred a decade ago.

About

- It is a **traditional practice in the state of Bihar**.
- In 'Pakadwa Vivah', neither the consent of the boy nor the girl is taken for marriage. **Boys are taken hostage by kidnapping or coaxing** and then married to a girl as per customs and traditions.
- In this, the wishes of the boy and girl, who become bride and groom, have no importance.

New Chhattisgarh CM

- **Vishnu Deo Sai** has been chosen as new Chhattisgarh CM
- He will be **the first tribal leader** to hold the post.
- He is also **the first to hail from a region beyond the Other Backward Class** dominated central plains in Chhattisgarh's 23-year old history.

New Madhya Pradesh CM

- Mohan Yadav was sworn in as the **19th Chief Minister of Madhya Pradesh**
- He is a three-term MLA from Ujjain-Dakshin (South) and a prominent **Other Backward Class (OBC) leader**
- **Jagdish Devda and Rajendra Shukla** took oath as **Deputy Chief Ministers**.

New Rajasthan CM

- **Bhajan Lal Sharma** will be sworn in as the **14th Chief Minister of Rajasthan**
- **Deputy Chief Ministers** will be **Diya Kumari and Prem Chand Bairwa**

Aerodrome license for Ayodhya Airport

- The **Directorate General of Civil Aviation** has granted **aerodrome licence for the Ayodhya Airport**
- The Airports Authority of India has developed the airport at a **cost of ₹350 crore**.
- The DGCA permit comes **ahead of the Ram Mandir inauguration**.

Karnataka to reduce burden of school bags by 50%

- The Karnataka government has taken steps to reduce the burden of school bags by cutting 50% of textbooks for students of **classes I to X** from the **academic year 2024-25**
- Instead of providing textbooks once for the entire year, the state will give two books per year, divided into two parts, (**Summative Assessment**) **SA-1 and SA-2**.

Key points

- In 2019, a committee comprising education experts, paediatricians, doctors, legal advisers, and officials of the **Department of State Education Research and Training (DSERT)** conducted a study to reduce school bag burden.
- They concluded that the weight of school bags for students of class I to II could be in the **range of 1.5 to 2 kg**.
- For classes 3 to 5, the **proposed range was 2 to 3 kg**, for classes 6 to 8, the **proposed range was 3 to 4 kg**, and for classes 9 and 10, the recommendation was 4 to 5 kg.

Geological Survey of India opens first camp office in A.P

- The **Geological Survey of India (GSI)** opened its first camp office for **Andhra Pradesh in Vijayawada**.
- Andhra Pradesh is one of the mineral-rich States.
- The new office will **help maintain coordination with the State government** on matters related to mineral exploration.

Feeding Stations for oil spill-hit birds at creek in T.N

- After bird-life was badly hit by the recent Ennore oil spill, the TN state forest department has found close to 50 birds of different species completely 'painted' black with oil.
- Experts from the **Wildlife Trust of India (WTI)** and the **Besant Memorial Animal Dispensary (BMAD)** are planning to establish feeding stations for birds at the Ennore creek.

Key points

- TN State Department of Environment, Climate Change and Forests, the nodal agency for the oil spill clean-up, has roped in WTI to work with local volunteers and the Wildlife Warden, Chennai, **to assess how the affected birds could be rescued and rehabilitated.**
- The team is planning **to strategically set up 'cafeterias'** with nets to feed the birds with fresh fish and capture those that are sick.

Chavittu Natakam

- Chavittu Natakam is a **colourful and vigorous theatre form**
- It is considered to be a folk art form **noted for its attractive make-up of characters**, their elaborate costumes, detailed gesture, and well-defined body movements.
- It is believed that the art form flourished at **Kodungalloor in Kerala with the spread of Christianity.**
- The Portuguese are supposed to have introduced this art form in Kerala.
- **Chinna Thampi Pilla and Vedanayakan Pilla** are considered to be the originators of this art form.

International News

Visa-free entry to Indian citizens

Context

- **Malaysia** has become the latest country to extend the advantage of visa-free travel to Indian citizens.
- The facility will be extended to Indian travellers till December 31, 2024 and will be **valid for 30 days** from the date of entry.

Key points

- The initiative is aimed at ensuring **hassle-free travel for Indians** who have emerged as one of the major tourist groups visiting Malaysia in the recent past.

- At present there are **around 26 countries** that extend visa-free entry to Indian citizens for various reasons.

India backs UN resolution against Israel for not leaving Syrian Golan

Context

- India has voted in favour of a draft resolution in the **United Nations General Assembly (UNGA)** that expressed deep concern over Israel not withdrawing from the **Syrian Golan.**
- The Syrian Golan is a region in **southwest Syria** that was occupied by Israeli forces on June 5, 1967.
- The resolution also stressed the **illegality of the Israeli settlement** construction in the Golan.

India reminds Myanmar to return to 'federal democracy'

Context

As conflict intensifies between armed resistance groups and the Myanmar military in the **Chin, Shan and Sagaing provinces**, India reminded Myanmar to return to the path of federal democracy.

Key points

- India and Myanmar held discussions on a wide range of issues covering the situation along **the border, security, trade, commerce, connectivity, status of bilateral development projects** in Myanmar and concerns related to transnational crimes.
- India reiterated its support to Myanmar for a **transition towards a federal democracy**
- India continued to support people-centric socio-economic developmental projects, including connectivity projects and projects under the **Rakhine State Development Programme and Border Area Development Programme** for the benefit of the people of Myanmar

India's vote on Gaza-Israel conflict

- India voted **in favour of a United Nations General Assembly (UNGA) resolution** that called on **Israel for an immediate ceasefire**, the protection of civilians in accordance with international law and the release of all hostages.
- **India was among 153 countries who voted in favour** of the resolution, where only **10 countries**, including the U.S. and Israel,

voted against the resolution, and 23 abstained.

India and U.S. combat financial crimes

- India and the U.S had a bilateral dialogue on **anti-money laundering and countering the financing of terrorism**.

Key points

- The countries agreed about the pressing **need to accelerate global implementation of standards for virtual assets** like crypto currencies.
- The countries also discussed steps to **enhance transparency in beneficial ownership**.

Along the border with Assam, Bhutan will built a sizable green

- Bhutan intends to construct a sizable "international city" that would span more than **1,000 square kilometres** near its border with Assam.
- The concept was introduced as an **"economic corridor connecting South Asia with Southeast Asia via India's northeastern States"** by King Jigme Khesar Namgyel Wangchuck of Bhutan.
- The project includes the first railway line from India to Bhutan**, which will run to Gelephu and link to roads and border crossings into West Bengal and Assam.
- The goal of the Gelephu Smart city Project is to adhere to sustainability and environmental regulations while luring top-tier investment from carefully chosen foreign businesses.
- The concept calls for the construction of Bhutan's second international airport, "zero emission" enterprises, and a "mindfulness city"** with an emphasis on tourism and well-being.
- To encourage foreign investment, Gelephu will function as a **"Special Administrative Region" governed by distinct legislation**.

Chief guest at the 2024 Republic Day celebrations

- French President Emmanuel Macron** will be the chief guest at the 2024 Republic Day celebrations
- As Strategic Partners, India and France share a high degree of convergence on a range of regional and global issues.

- This year marks the **25th anniversary of the India-France Strategic Partnership**

China bans export of rare earth technologies

- China, **the world's top processor of rare earths**, banned the export of technology to extract and separate the strategic metals, as it overhauled a list of technologies deemed key to national security.
- It **also banned the export of production technology for rare earth metals** and alloy materials as well as technology to prepare some rare earth magnets.
- The move comes as Europe and the U.S. scramble to wean themselves off rare earths from China, which **accounts for 90% of global refined output**.
- Rare earths are a group of **17 metals used to make magnets for use in EVs and other electronics**.

United Nations High Commissioner for Refugees (UNHCR)

The **United Nations High Commissioner for Refugees (UNHCR)** expressed gratitude to Indian authorities on the Andaman and Nicobar Islands for taking care of **142 Rohingya refugees**, whose boat was intercepted by coastal security agencies near **Shaheed Dweep**

About UNHCR

- The **United Nations High Commissioner for Refugees (UNHCR)** is a **United Nations agency** mandated to aid and protect refugees, forcibly displaced communities, and stateless people, and to assist in their voluntary repatriation, local integration or resettlement to a third country.
- It is **headquartered in Geneva, Switzerland**.
- UNHCR was created in 1950** to address the refugee crisis that resulted from World War II.
- The **1951 Refugee Convention** established the scope and legal framework of the agency's work, which initially focused on Europeans uprooted by the war.

Qatar court drops death penalty for eight Indians

- The **Ministry of External Affairs** confirmed that the **Court of Appeals in Doha has commuted the death sentence of Eight Indian nationals to life imprisonment**.

- All eight arrested last year were employees of the Dahra Global defense services company.
- The eight men were previously convicted of charges related to the death of a Qatari citizen during a robbery attempt.

Houthi attacks - a threat to global shipping

- The recent drone attacks on merchant vessels in the Red Sea by Houthi rebels have raised concerns about maritime security, disrupting global trade routes and potentially impacting economies.

Key Points:

- These attacks have prompted some shipping companies to reroute vessels, avoid the Red Sea, and increase operational costs
- India heightened its presence, deploying various resources to counter potential threats in the region and monitor maritime activity.
- On December 23, the crisis in the Red Sea reached Indian waters as Liberian-flagged merchant vessel Chem Pluto heading to Mangalore port was hit by a projectile about 271 miles from Porbandar in Gujarat, just outside the Indian Exclusive Economic Zone (EEZ).
- This comes in the backdrop of a sharp rise in missile and drone attacks on commercial shipping in the Red Sea by Houthi rebels in Yemen in the last couple of weeks following Israel's offensive against Hamas in Gaza.

production which is indicative of actual production.

- E.g., the Index of Industrial Production (IIP) measures output.
- There are two types of PMI — Manufacturing PMI and Services PMI.
- The index shows trends in both the manufacturing and services sector.
- PMI does not capture informal sector activity.

RBI enhances UPI payment limits

- The Reserve Bank of India (RBI) enhanced the UPI payment limits for healthcare and education to ₹5 lakh from ₹1 lakh, and the limit on recurring e-payment mandates for credit card and insurance premia payments as well as mutual fund investments to ₹1 lakh from the current limit of ₹15,000.
- It has also decided to lay down a regulatory framework for web-aggregation of loan products.
- This is expected to result in enhanced customer centricity and transparency in digital lending.

Net direct tax receipts

India's net direct tax collections had grown 23.4% to hit ₹10.64 lakh crore by November 30, attaining 58.34% of the Budget estimates for the year

- The gross direct tax kitty by the end of last month had reached ₹12.67 lakh crore, a 17.7% rise over the same period of the earlier year.
- Refunds paid out to income tax payers had reached ₹2.03 lakh crore.

Economy News

Nov. services PMI signals slowdown

Context

- India's services sector momentum faltered to a one-year low in November, as per the seasonally adjusted S&P Global India Services Business Activity Index
- Taken together with the manufacturing Purchasing Managers' Index (PMI), November marked the weakest rise in private sector activity in the country in a year.

About Purchasing Managers' Index (PMI)

- Purchasing Managers' Index (PMI) is an economic indicator, which is derived after monthly surveys of different companies.
- It measures activity at the purchasing or input stage.
- In this sense, it is very different from industrial

Green finance

- Green finance refers to the financial arrangements that are specific to the use for projects that are environmentally sustainable or projects that adopt the aspects of climate change.
- Environmentally sustainable projects include the production of energy from renewable sources like solar, wind, biogas, etc.; clean transportation that involves lower greenhouse gas emission; energy efficient projects like green building; waste management that includes recycling, efficient disposal and conversion to energy, etc.

Renewable energy investments

- Power Ministry estimates show that India will witness **more than 83% increase in investments** in renewable energy (RE) projects to **about \$16.5 billion in 2024** as the country focuses on energy transition to reduce carbon emissions
- This is in line with India's ambitious target of having **500 GW of renewable energy by 2030** and its resolve to reduce overall power generation capacity from fossil fuels to less than 50%.
- India has committed a **net zero emission target by 2070**.

Summit and Conference News

India not among 118 nations that pledged to push green energy

Context

- 118 countries pledged to triple renewable energy capacity **by 2030 at COP-28**.
- India is notable for not signing the **Global Renewables and Energy Efficiency Pledge**.
- **China**, with the largest renewable energy capacity, is also absent from the pledge.

Key point

- The **Global Renewables and Energy Efficiency Pledge** commitment aims for a global installed renewable energy generation **capacity of 11,000 GW**.
- The pledge also targets doubling the global average annual rate of energy efficiency improvements to **over 4% by 2030**.

Global Stocktake draft calls for phasing out fossil fuels

Context

- For the first time, a key document being negotiated at the **UN's annual climate summit** has underlined the need for the world to do away with all fossil fuels, in its draft text.
- In previous years, climate talks have generally circled around the need for the world to wean itself away from coal, but negotiations have generally ended in a stalemate.

About Global Stocktake

- The Global Stocktake is a **periodic review mechanism** established under the Paris Agreement in 2015.
- The stocktake takes place every five years, with the first-ever stocktake scheduled to conclude at the **UN Climate Change Conference (COP28)**

- Its primary objectives are to assess individual countries' efforts to reduce Greenhouse Gas (GHG) emissions and transition to renewable energy sources.
- The stocktake is **designed to keep countries accountable** and encourage them to increase their climate ambitions over time.

New climate draft on global stocktake

- The latest draft of the Global Stocktake has linked **the tripling of renewable energy capacity with a "phase-out"**, or a time-bound ending, of the use of fossil fuels.
- It is one of the key documents being negotiated at the **UN's climate summit in Dubai** recently.

Key points

- It is ensuring that the increase in **renewable energy capacity is strategically implemented to displace fossil fuel-based energy**, thereby significantly reducing global reliance on non-renewable and high-emission energy sources
- The latest draft also does away with the clause calling for a **"just and orderly phase-out of fossil fuel"**
- This has now been replaced with four pointed options demanding that fossil fuels — **responsible for 80% of greenhouse gas emissions** — be phased out in such a way that global temperatures do not rise **more than 1.5 degrees Celsius by 2100**, and energy companies become fossil fuel-free by mid-century.
- Unchanged from an earlier version of the text is the clause on a **"rapid phase-out of unabated coal power"**.

Did you know?

At the COP-26 in Glasgow two years ago, **on the insistence of India and backed by the United States and China**, the world had agreed to **"phase down" but not "phase out" coal**.

Dubai Consensus

- The COP-28 countries adopted for **transitioning away from fossil fuels** in energy systems, in a just, orderly and equitable manner.
- They named it the **Dubai Consensus**.
- The aim is to achieve **net zero by 2050**.

New Delhi Declaration

- Representatives from 28 countries and the European Union adopted the “**New Delhi Declaration**” of the **Global Partnership on Artificial Intelligence**.
- India is hosting the summit, and will chair the GPAI grouping in 2024.

Key points

- It affirms the countries’ commitment to principles for responsible stewardship of **trustworthy AI** rooted in democratic values and human rights and promoting trustworthy, responsible, sustainable and human-centred use of AI.
- GPAI is a grouping of countries in North and South America, Europe, and East Asia, which strive to work towards trustworthy development, deployment, and use of AI.

Global Stocktake

- It refers to a proposed **five-year review of the impact of countries’** climate change actions.
- Under the Paris Agreement, every country must present a climate action plan in five-year cycles.
- The **first global stocktake was scheduled for 2023 under the Paris Agreement**.
- It will assess whether the net result of the climate actions being taken was consistent with the goal of keeping the increase in **global average temperature from pre-industrial times to within 2 degrees Celsius**.
- It will help the world determine whether it needs to do more — and how much more.
- It also recognises that money needs to be made available for **Loss and Damage and energy transition in developing countries**.

Agreement News

India provides \$250 mn Line of Credit to Kenya

Context

- India extended a **\$250 million Line of Credit** for modernisation of agriculture in Kenya.
- Both sides will carry out **joint military exercises** and will collaborate on **counter-terror projects**.

Think:

Have a look at the Bordering countries of Kenya

Tata Power EV, IOCL to jointly set up over 500 charging points

- **Tata Power EV Charging Solutions Ltd.** and **Indian Oil Corporation Ltd. (IOCL)** have signed a memorandum of understanding (MoU)
- It is to roll out **fast and ultrafast electric vehicle (EV) charging points** across the country.

Key points

- Tata Power would **install more than 500 EV charging points** across multiple IOCL retail outlets to help alleviate range anxiety for EV owners travelling between cities.
- This will **contribute to accessibility and inclusivity** for a sustainable electric mobility future

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Ranks and Report News

World Malaria Report, 2023

Context

In 2022, India accounted for 66% of malaria cases in the WHO Southeast Asia Region, noted the **World Malaria Report, 2023**, published by the **World Health Organization (WHO)**.

Key highlights

- Almost **46% of all cases** in the region were due to **Plasmodium vivax**, a protozoan parasite
- The WHO Southeast Asia Region accounted for **about 2% of malaria cases globally**,
- These malaria cases declined by 76% from 23 million in 2000 to about five million in 2022.
- Malaria case incidence in this region decreased by **83%**, (from about 18 cases per

1,000 population at risk in 2000 to about three cases per 1,000 population at risk in 2022)

- In 2022, there were an **estimated 249 million cases globally**, exceeding the pre-pandemic level of 233 million in 2019 by 16 million cases.

One-third of all 2022 suicides were of daily wage earners, farmers, says NCRB report

Context

India reported a total of over **1.7 lakh suicides** in 2022, nearly **one-third of whom were daily wage earners, agricultural labourers**, and farmers, according to the **National Crime Record Bureau's (NCRB) Accidental Deaths and Suicides in India (ADSI) 2022 report**

Key points

- The suicide data published in the **ADSI-2022 report** showed that the **maximum suicides** in the year were reported **from Maharashtra (22,746)**, Tamil Nadu (19,834), Madhya Pradesh (15,386), Karnataka (13,606), Kerala (10,162), and Telangana (9,980).
- Apart from daily wage earners, and agricultural workers and farmers, the ADSI data showed that **9.6% of the suicides in 2022** were of persons who were **self-employed or salaried professionals**.
- This was followed by unemployed persons, who comprise **9.2% of all suicides reported in India in 2022**.
- Among all suicides reported in the year, over **12,000 were of students**.

Muslim student strength in higher education fell by 1.79 lakh in 2020-21

Context

Report based on analysis of UDISE+ and AISHE data shows:

- Muslim student enrolment in higher education (18-23 age group) **dropped over 8.5% in 2020-21**.
- This Reflects a significant decline in educational participation among Muslim youth.

Key points

- While 21 lakh Muslim students enrolled for higher education in 2019-20, the **number fell to 19.21 lakh in 2020-21**.
- The enrolment percentage of Muslim students in Classes 11 and 12 is lower than that in the previous classes.
- The States such as **Bihar and Madhya**

Pradesh have relatively low Gross Enrolment Ratio for Muslim students

- **Assam (29.52%) and West Bengal (23.22%)** recorded high dropout rates among Muslim students, while **Jammu and Kashmir** recorded 5.1% and **Kerala** 11.91%.

Unemployment rate in urban areas comes down: survey

Context

- The unemployment rate in urban areas of the country decreased from 7.2% in July-September 2022 to 6.6% in July-September 2023, according to the **Periodic Labour Force Survey (PLFS)**
- The survey is conducted by the **National Sample Survey Office (NSSO)**.

Key points

- If 6.6% is the unemployment rate for persons of age 15 years and above, for men, it was 6%. For women, it decreased from 9.4% in July-September last year to 8.6% this year.
- The **labour force participation rate (LFPR)** in urban areas increased to 49.3% in July-September 2023 for persons aged 15 years and above.
- While for males, **LFPR increased to 73.8%**, for females, **LFPR increased to 24.0%**

Glaciers shrank 1 m a year in a decade: WMO

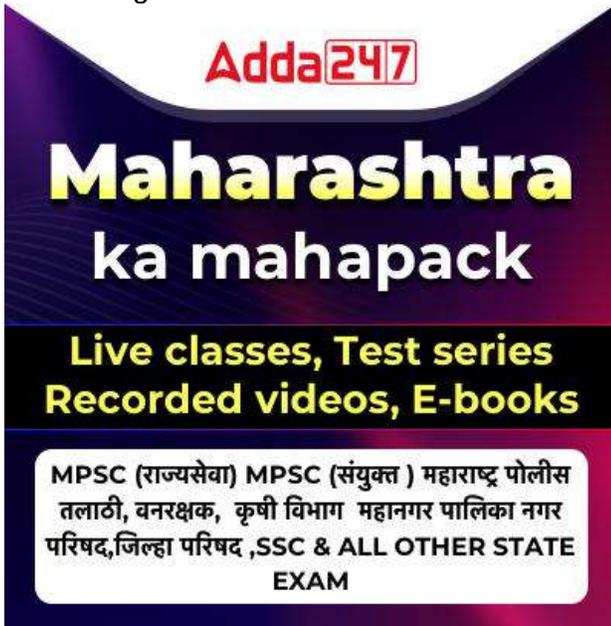
Context

According to **The Global Climate 2011-2020: A Decade of Acceleration report** by **World Meteorological Organisation**, the 2011-2020 decade, though warmest ever recorded in history, saw the lowest number of deaths from extreme events

Key points

- The **2011-2020 decade was the first since 1950** when there was not a single short-term event with 10,000 deaths or more
- The report also says that this was the first decade that the depleted ozone hole visibly showed recovery.
- Glaciers that were measured around the world **thinned by approximately 1 metre per year on an average between 2011 and 2020**.
- **Greenland and Antarctica lost 38% more ice** during the period than during the 2001-2010 period.
- The report further underlined that human-caused climate change significantly increased the risks from extreme heat events.

- Heatwaves were responsible for the highest number of human casualties, while tropical cyclones caused the most economic damage.



Adda247

Maharashtra ka mahapack

**Live classes, Test series
Recorded videos, E-books**

MPSC (राज्यसेवा) MPSC (संयुक्त) महाराष्ट्र पोलीस
तलाठी, वनरक्षक, कृषी विभाग महानगर पालिका नगर
परिषद, जिल्हा परिषद, SSC & ALL OTHER STATE
EXAM

New study on fixed dose combination' problem

A group of academics from India, Qatar and the United Kingdom recently published a worrying **new study in the Journal of Pharmaceutical Policy and Practice** on the volume of unapproved and even banned **fixed dose combination (FDC)** of antibiotics that are being sold in India.

Key points

- Using sales data of the pharmaceutical industry, the study documents that in the year 2020, **60.5% FDCs of antibiotics (comprising 239 formulations) were unapproved and another 9.9% (comprising 39 formulations) were being sold** despite being banned in the country.
- Many of these unapproved or banned FDCs contain antibiotics is alarming because of the increasing prevalence of antibacterial microbial resistance (AMR) in India.

Fixed dose combination (FDC)

- Fixed dose combination (FDC) are **combinations of one or more known drugs** and can be useful in the treatment of some diseases since the combination can improve patient compliance.
- For instance, if a patient has to take three different medications for a particular treatment, she may forget to take one.

- But if all three medications are combined into one tablet or one syrup, the chance of her forgetting to take one or two of the drugs is reduced.
- For **diseases such as AIDS**, it is well documented that FDCs have proven to be very useful in improving patient compliance, which at the end of day improves treatment outcomes.

Issues with the FDC

- All drugs have side effects and when formulated together, **there is a possibility that the active ingredient or even the excipients** (inactive ingredients) may affect the way that each drug functions
- One such law is the **Drugs (Prices Control) Order (DPCO)**, under which the government fixes the prices of individual drugs.
- Since drug combinations were traditionally not covered under the DPCO, the pharmaceutical industry decided that making FDCs provided an easy way to escape the remit of the DPCO.
- **Pharmaceutical companies in India use these FDCs to escape liability** under multiple laws without much concern for public health.

A report on Road fatalities by WHO

A World Health Organization (WHO) report -'**Global Status Report on Road Safety 2023**' stated that **Road traffic deaths fell by 5% to 1.19 million annually** worldwide between 2010 and 2021, with 108 United Nations member countries reporting a drop.

Key facts

- India registered a **15% increase in fatalities**.
- The total number of road traffic fatalities in India went up to **1.54 lakh in 2021 from 1.34 lakh in 2010**.
- The global motor vehicle fleet grew 160% and annual fatality rates per 1 lakh vehicles fell from 79 deaths to 47 deaths, which is a **41% reduction**.
- **28% of global road traffic deaths occurred in the WHO's South-East Asia Region**, 25% in the Western Pacific Region, 19% in the African Region, 12% in the Region of the Americas, 11% in the Eastern Mediterranean Region, and 5% in the European Region.
- **Nine in 10 deaths occur in low- and middle-income countries**.

WHO on use of e-cigarettes

- According to the **World Health Organization**, E-cigarettes as consumer products are not shown to be effective for quitting tobacco use at the population level.
- There is alarming evidence on its adverse population health effects

Key points

- Children in the age group of **13-15 years are using e-cigarettes at rates higher than that among adults** in all WHO regions
- E-cigarettes with nicotine are **highly addictive** and are harmful to health.
- They generate toxic substances, some of which are **known to cause cancer** and some that increase the risk of **heart and lung disorders**.
- It can also affect brain development and lead to learning disorders for young people.
- Foetal exposure to e-cigarettes can adversely **affect the development of the foetus in pregnant women**.
- Exposure to emissions from e-cigarettes also **poses risks to bystanders**.

Did you know?

- In India, the possession of e-cigarettes and similar devices is a violation of the **Prohibition of Electronic Cigarette Act, 2019**.
- Studies consistently show that young people who use e-cigarettes are **almost three times** more likely to use cigarettes later in life.

Demand for Coal is Expected to Drop by 2026

- Despite record production, global coal demand is **expected to fall by 2.3% by 2026**.
- According to the **IEA (International Energy Association)** analysis, the reduction is due to a shift toward renewable energy and plateauing demand in China.
- **India will continue to be a major driver of coal demand until 2026**.
- In 2023, global coal demand is expected to increase by **1.4%**, **surpassing 8.5 billion tons**.
- **Regional variations:** the EU and US forecast a 20% decline in demand, whereas India and **China expect an increase**.
- **Between 2024 and 2026, an El Nino to La Nina change is forecast, which will benefit hydroelectric generation**.

Factors contributing to the drop include :

- low-cost solar deployment and increased nuclear generation.

- China, which accounts for more than half of global coal use, predicts a drop in **2024 and a plateau in 2026**.
- Despite the drop, worldwide coal consumption is predicted to surpass 8 billion tons by 2026.
- **Coal demand is declining structurally as clean energy alternatives continue to expand**.

Unemployment: a concern for the state

- The recent breach of Parliament Security is a major occurrence in the last decade.
- **The assailants were either unemployed or dissatisfied with their current situation**.

About

- According to a review of employment-related statistics from the Centre for Monitoring Indian Economy (CMIE), things **got worse after the outbreak of Covid**.
- The percentage of the working-age population employed or actively looking for work is displayed in the Labour Force Participation Rate (LFPR) report.
- Except for the pandemic years, India's overall LFPR in **FY23 was 39.5%, the lowest level since at least FY17**.
- It was **8.7% for women and 66% for males, the lowest percentages since at least FY17**.
- Therefore, even after the epidemic, a growing percentage of Indians in their working years were neither employed nor eager to look for jobs.

Data on Foreign tourist visits

- There has been a significant **increase in the number of foreign tourists visiting India in 2023** with a footfall of **7.24 million** till October compared with **6.44 million** for the corresponding period in 2022.
- This is an **increase of 55.6%**
- The numbers though are still below the pre-pandemic levels.
- In 2018 and 2019, India saw **10.56 million and 10.93 million foreign tourist arrivals**, respectively, which dipped to 2.74 million in 2020 and further to 1.52 million in 2021, majorly due to the COVID-induced lockdown.

Schemes for Financial assistance

- **Swadesh Darshan 2** is the flagship scheme of the **Ministry of Tourism** which provides financial assistance to the State governments and Union Territories and Central agencies for the development of tourism infrastructure at various destinations.

- The **Prasad (Pilgrimage Rejuvenation And Spiritual Augmentation Drive)** scheme focuses on developing and identifying pilgrimage sites across India to promote religious tourism.
- It aims **to integrate pilgrimage destinations** in a prioritised, planned and sustainable manner to provide a complete religious tourism experience.
- The growth of domestic tourism hugely depends on pilgrimage tourism.

E-bus penetration in India

- **CRISIL report** on E-bus penetration in India was released recently
- The share of electric buses in new bus sales across India is **expected to double to 8% next fiscal from 4% in the last fiscal.**
- It is driven by the central government's focus on decarbonising the public transport sector and favourable **total cost of ownership (TCO)** for an e-bus vis-à-vis buses run on other fuels

Key points

- Efforts were underway to deploy e-buses via tenders already awarded under the **Faster Adoption and Manufacturing of (Hybrid and) Electric Vehicles, or FAME,** scheme and the **National Electric Bus Programme (NEBP)**
- Growth in e-buses is also supported by favourable ownership economics
- TCO for e-bus is estimated to be **15-20% lower than ICE and CNG bus,** over an estimated life span of 15 years with breakeven in 6-7 years.

Generative AI

- A report prepared by the global accounting/consulting firm, EY highlighted that by fully capitalising Gen AI technology and its applications across sectors, the country **can potentially add \$359-438 billion in FY2029-30** alone, reflecting a 5.9% to 7.2% increase over and above baseline GDP.
- Generative AI (Gen AI) has the potential to add a cumulative **\$1.2-1.5 trillion to India's GDP over seven years to 2030**
- Approximately **69% of the overall impact is expected** to be derived from sectors such as business, services, financial services, retail and healthcare.

India Skills Report

- India Skills Report is published by talent assessment agency **Wheebox in association with various agencies including All India Council for Technical Education, Confederation of Indian Industry and Association of Indian Universities.**

According to the report,

- **Kerala** has emerged as the most preferred **State to work in the India Skills Report 2024.**
- **Kochi and Thiruvananthapuram** have come second and fourth respectively among cities where both men and women prefer to work regardless of their age.
- Kerala also secured the second position in overall employability among the **18-21 age group** to reaffirm its status as a robust talent pool in the country.

For more - <https://wheebox.com/india-skills-report.htm>

Farming crisis forcing youths to take to illegal migration

- From **volatile weather patterns and climate change to plummeting crop prices and rising input costs, the agricultural sector is facing immense challenges.**
- This crisis is **hitting young people** particularly hard, **pushing many towards the perilous path of illegal migration.**

Reasons for the Exodus:

- **Dwindling Profits:** Declining agricultural incomes due to factors like unfair market practices and volatile prices leave many young farmers with bleak financial prospects.
- **Limited Opportunities:** The lack of alternative employment opportunities in rural areas, often characterized by limited infrastructure and education, further amplifies the pressure to seek greener pastures abroad.
- **Debt Burden:** Many young farmers inherit crippling debts from their families, adding to the financial strain and making migration seem like the only escape route.
- **Desire for a Better Life:** The allure of higher wages, better living conditions, and access to education and healthcare in developed countries acts as a powerful magnet for young people desperate for a brighter future.

Science and Technology News

Six exoplanets found orbiting a nearby bright star

Context

- Six exoplanets orbiting around a nearby **bright star (HD 110067)** in the Coma Berenices constellation has been discovered.

Key points

- HD 110067 is the bright star in the **Coma Berenices constellation** (around 100 light-years away), which is visible from Earth's Northern Hemisphere
- The masses of the planets and estimated **densities are relatively low**
- The low densities could be explained by large, hydrogen-rich atmospheres.
- All six planets are **in resonant orbits**, in which the planets exert regular forces on each other as they orbit.
- This feature suggests that the system remains practically unchanged since its birth, at least four billion years ago.
- **Scientific Significance:** Enhances understanding of exoplanetary systems.

Methane

Context

At the ongoing COP-28 climate talks in the United Arab Emirates, a group of well-endowed philanthropic bodies, including the **Sequoia Climate Foundation and the Bezos Earth Fund**, announced that they would collectively invest **\$450 million** in solutions to tackle methane emissions.

About

- Methane is an **organic compound**.
- Its molecule consists of carbon and four hydrogen atoms (CH₄).
- It's in the news of late because of its character as a **potent climate pollutant**.
- Methane has a **greater global warming potential (GWP) than carbon dioxide**.
- However, while carbon dioxide lasts for several decades at a time in the atmosphere before breaking down, methane breaks down in a matter of years. That is, it's a **short-lived climate pollutant**.
- Its sources include cattle-farming, landfills, wastewater treatment facilities, rice cultivation, and some industrial processes.

What is GWP?

- The GWP is a **measure of the warming caused by a substance relative to that due to the same mass of carbon dioxide**; the GWP100 measures this over a century at a time.
- If carbon dioxide has a GWP100 of 1, methane

is 28, nitrous oxide is 265, and sulphur hexafluoride is 23,500.

Google unveils 'Gemini,' AI tech trained to behave like humans

Google launched **project Gemini, an AI model trained to behave in human-like ways** that's likely to intensify the debate about the technology's potential promise and perils.

Key points

- The rollout will unfold in phases, with less sophisticated versions of Gemini called **'Nano' and 'Pro'** being immediately incorporated into Google's AI-powered chatbot Bard and its Pixel 8 Pro smartphone.
- Gemini will be able to **quickly summarise recordings made on the device** and provide automatic replies on messaging services, starting with WhatsApp
- Based on a demonstration of Gemini for a group of reporters, Google's **'Bard Advanced'** might be capable of unprecedented AI multitasking by simultaneously recognising and understanding presentations involving text, photos and video.

U.S. FDA approves pair of gene therapies for sickle cell disease

- The **U.S. Food and Drug Administration (FDA)** approved a pair of gene therapies for sickle cell disease, including the first treatment based on the breakthrough CRISPR gene editing technology.
- The agency approved **Lyfgenia from bluebird bio, and a separate treatment called Casgevy** by partners Vertex Pharmaceuticals and CRISPR Therapeutics for the illness.
- Both the therapies were approved for people aged **12 years and older**.

About Sickle cell disease

- It is a painful, **inherited blood disorder** that can be debilitating and lead to premature death.
- It affects an estimated 1,00,000 people in the U.S., most of whom are Black.
- In sickle cell disease, the body makes flawed, sickle-shaped hemoglobin, impairing the ability of red blood cells to properly carry oxygen to the body's tissues.
- The **sickle cells tend to stick together and can block small blood vessels**, causing intense pain. It also can lead to **strokes and organ failure**.

- The **only longer-term treatment** for sickle cell disease is a **bone marrow transplant**.

Web browsers

- **Web browsers** is an application that people use to send and receive messages via the internet.
- In other words, the browser is a **program that runs on your device**, with its purpose being to **fetch information** in different formats from the internet and show it on the device.
- It also does the reverse, receiving your input (say, a click), translating it to code, and transmitting it to some other machine across the internet.

Carbon capture and storage (CCS)

- CCS refers to technologies that can **capture carbon dioxide (CO₂)** at a source of **emissions** before it is released into the atmosphere.
- These **sources include the fossil fuel industry** (where coal, oil and gas are combusted to generate power) and industrial processes like steel and cement production.

Carbon-dioxide removal (CDR)

- CDR takes the forms of **both natural means like afforestation or reforestation and technologies** like direct air capture, where machines mimic trees by absorbing CO₂ from their surroundings and storing it underground.

India's fastest solar-electric boat launched

- **Barracuda- India's fastest solar-electric boat** was launched at the yard of **Navalt Solar and Electric Boats**, located off **Aroor in Alappuzha**.
- It is an example of **eco-friendly maritime transportation**

Key points

- It is named after the **swift, long fish, Barracuda**
- It was **designed by Navalt** and can be deployed even in the rough seas as a workboat to **ferry up to 12 passengers and cargo**.
- The **14-metre-long, 4.4-metre-wide vessel** can attain a top speed of 12.5 knots (23 kmph) and has a range of seven hours on a single charge.
- It has twin **50 kW electric motors, a marine-grade LFP battery, and 6 kW solar power**.

The Era of CRISPR Therapeutics

- **Exagamglogene Autotemcel** was authorised by the **MHRA (U.K.)** to treat **sickle-cell disease and thalassemia**.
- It is one of the **first dual-approved CRISPR medicines**, having also received **FDA (United States)** approval for sickle-cell disease.
- **This marks the beginning of a new era for millions of people suffering from genetic blood diseases** such as thalassemia and sickle cell Anaemia.
- There are about a million thalassemia sufferers worldwide, with 100,000 requiring blood transfusions. **Around 20 million people are affected with sickle cell anaemia**.
- CRISPR technologies of the first generation are in use, with increasing efficacy and efficiency.
- **Base-editing, prime editing, and epigenetic impact modification are examples of emerging approaches**.
- Verve Therapeutics is experimenting with base editing to treat familial hypercholesterolemia.

Touchscreen

- A touchscreen is a surface that combines two functions: **to receive inputs for a computer (say, tapping on an app) and to display the output (launching the app)**.
- Aside from smartphones, touchscreens are also found today on ATM machines, various household appliances (including TVs and AC panels), e-readers, billing systems, and electronic voting machines.
- The touchscreen was **invented by an engineer named E.A. Johnson at the Royal Radar Establishment in Malvern, U.K., in 1965**
- The two most common types of touchscreens are **capacitive and resistive**
- Of these, capacitive touchscreens are used in smartphones and other portable 'information appliances'.

NaMo app

- Prime Minister launched the **"Jan Man Survey" on the NaMo app** with exhaustive questions on the performance of his government and that of local representatives.
- The app is at the forefront of Mr. Modi's **digital interaction with people**.
- It has more than two crore subscribers.

Photoreception

- Photoreception is **activation of a biological process by light**.
- Most organisms, including humans, respond to light. Some animals react to light waves not perceived by humans.
- Vertebrates have **two types of photosensitive cells, rods and cones**, so called because of their shape.
- **The rods**, which are long and fat, contain large amounts of visual pigment and they mediate vision under dim illumination (scotopic vision).
- **The cone cells**, which are relatively small, mediate daylight vision (photopic vision) and colour sensation.
- The retinas of diurnal animals have localised areas with a high density of cone cells. (The eyes of most birds have two such areas.)
- In nocturnal animals, the retina is mainly made up of rod cells. **Rhodopsin, a photosensitive pigment** present in rods, is decolourised by photons (light particles) and slowly regenerated in the dark. This ensures better vision for them in dim light.

WHO prequalifies a malaria vaccine by Serum Institute

- The World Health Organization (WHO) added the **R21/Matrix-M malaria vaccine** to its list of prequalified vaccines.
- It is **developed by Oxford University and manufactured by Serum Institute of India**.
- In October 2023, the WHO had recommended its use for the prevention of malaria in children.
- The R21 vaccine is the **second malaria vaccine prequalified by the WHO**.

Key points

- The prequalification means larger access to vaccines as a key tool to prevent malaria in children, with it being a prerequisite for vaccine procurement by UNICEF and funding support for deployment by Gavi, the Vaccine Alliance.
- It added that both vaccines have been shown to be safe and effective in clinical trials, for preventing malaria in children.

Did you know?

- Malaria, a **mosquito-borne disease**, places a particularly high burden on children in the African region, where nearly half a million children die from the disease each year.
- In 2022, there were an **estimated 249 million malaria cases in the world**, and 6,08,000 malaria deaths across 85 countries.

Aerogel fibre

- Inspired by the structure of polar bear fur, researchers present a **knittable aerogel fibre**.
- The fibers are **washable, dyeable, durable, and well-suited** to be used in advanced textiles.
- This allowed the researchers to test them in a sweater that demonstrated impressive thermal insulation, among other features.
- Aerogels are an **ideal material for thermal insulation**.
- Encapsulated aerogel fiber has **excellent thermal insulation** while also being mechanically robust.

Dark Energy

- Dark Energy is a **hypothetical form of energy** that exerts a negative, repulsive pressure, behaving like the opposite of gravity.
- It is **causing the rate of expansion of our universe to accelerate over time**, rather than to slow down.
- That's contrary to what one might expect from a universe that began in a Big Bang.

Deep Fakes

- The Ministry of Electronics and Information Technology has send another advisory to social media firms to comply with the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.
- The advisory is aimed at getting social media firms to crack down more forcefully on fabricated 'deepfake' clips of people made with artificial intelligence.

About deep fakes

- Deepfakes are **fake content in the form of videos, pictures and audio** which are created using powerful artificial intelligence tools.
- The origin of the word "**deepfake**" **can be traced back to 2017** when a Reddit user, with the username "deepfakes", posted explicit videos of celebrities.
- The technology involves modifying or creating images and videos using a machine learning technique called **generative adversarial network (GAN)**.
- This AI-driven software detects and learns the subjects' movements and facial expressions from the source material and then duplicates these in another video or image.

Smart Lander for Investigating Moon (SLIM) spacecraft

- SLIM is a spacecraft built and launched by the **Japan Aerospace Exploration Agency (JAXA)** from the Tanegashima spaceport.
- It weighed only 590 kg
- SLIM was launched together with XRISM, a next-generation X-ray space telescope, onboard an **H-2A rocket**.

XPoSat

The Indian Space Research Organisation (ISRO) will launch **PSLV-C58 X-ray Polarimeter Satellite (XPoSat)** mission.

Key points

- XPoSat is the first dedicated scientific satellite from ISRO to carry out research in space-based polarisation measurements of X-ray emission from celestial sources.
- It carries two payloads — **POLIX (Polarimeter Instrument in X-rays)** and **XSPECT (X-ray Spectroscopy and Timing)**.
- POLIX has been developed by the **Raman Research Institute** and XSPECT is by the **Space Astronomy Group of URSC, Bengaluru**.

Award News

Indira Gandhi Peace Prize

- **Classical pianist Daniel Barenboim** and **peace activist Ali Abu Awwad** have been named the winners of the **Indira Gandhi Prize for Peace, Disarmament and Development for 2023**
- It is given for their **efforts in bringing together the youth and people of Israel and the Arab world** for a non-violent resolution of the Israel-Palestine conflict.

About

- The Indira Gandhi Prize for Peace, Disarmament, and Development is a **prestigious award presented annually to individuals or organizations** that have made outstanding contributions to the promotion of international peace, disarmament, and development.
- The award is named after the late **Prime Minister of India, Indira Gandhi**, and was established in **1986 by the Indira Gandhi Memorial Trust**.

Messi named Time's 'Athlete of the Year'

- Lionel Messi has been named Time magazine's **'Athlete of the Year' for 2023**
- He got an **eighth Ballon d'Or award** recently.

Documentary on 'Naatu Naatu' lyricist wins award

- A documentary on Oscar award winning lyricist Subhash Chandrabose has won an award at **12th Mumbai Shorts International Film Festival**.
- He is famous for the **'Naatu Naatu' song from the Telugu movie RRR**

Key points

- The documentary, produced and directed by **senior journalist Chilkuri Sushil Rao** was given a **special mention award at the festival**
- **Mr. Chandrabose won the Oscar for Best Original Song at the 95th Academy Awards**.

Sahitya Akademi Awards

Important awards

- **English language category: Neelum Saran Gour** for her novel **Requiem in Raga Janki**
- **In Hindi, writer Sanjeev** for his novel **Mujhe Pahachaano**.
- **Mr. Rajasekaran** for his novel **Neervazhi Padoom**

Award winners in news

- **Mr. Sastry** for his short story collection **Rameshwaram Kaakulu Marikonni Kathalu**
- **Mr. Ramakrishnan** for his literary study **Malayala Novelinte Deshakalangaal**.
- Scholar **Lakshmisha Tolpadi** for his collection of essays **Mahabharatha Anusandhanada Bharathayatre** in Kannada.
- Bengali author **Swapnamay Chakrabarti** for his novel **Jaler Upar Pani**.
- Among the authors who will receive the honour for their poetry collections are **Vijay Verma in Dogri, Vinod Joshi in Gujarati, Manshoor Banihali in Kashmiri, Ashutosh Parida in Odia, and Arun Ranjan Mishra in Sanskrit**.

Did you know?

- Sahitya Akademi Award is given to the most outstanding books of literary merit published in any of the major Indian languages recognised by the Akademi.
- The first Awards were given in 1955.
- Sahitya Akademi 'Yuva Puraskar' was instituted in 2011, it recognises young writers under the age of 35.

Female Athlete of the Year

- **U.S. gymnast Simone Biles** has been voted Associated Press' **Female Athlete of the Year** for a third time.
- Her triumphant return that included her record eighth U.S. national championship and a sixth world all-around gold made Biles the fourth woman in last 50 years to claim the honour for a third time **after tennis stars Serena Williams (five times), Chris Evert (four) and golfer Annika Sorenstam (three).**

Sports News

Five Indian weightlifters to take part in IWF Grand Prix II

Context

- Five Indian weightlifters will be representing the country at the **International Weightlifting Federation (IWF) Grand Prix II Weightlifting** competition starting in Doha.
- The event is a **qualifier for the 2024 Paris Olympics**

Key points

- India will be sending a total of five lifters, including two women.
- **Ajith Narayan and Achinta Sheuli** will be in the men's 73 kg.
- **Mirabai Chanu** will be attending the event for a weigh-in.
- **Bindyarani Devi** will figure in the non-Olympic women's 55kg weight division while **Gurdeep Singh** will be in action in the +109kg, another non-Olympic weight division.

UWW Rising Star of the Year

- **Antim Panghal (53kg)** has been named **United World Wrestling (UWW) Rising Star of the Year 2023** in women's section.
- Antim **won a silver** in her senior Asian championships debut, defended her U-20 World title and then won bronze at the World championships.
- She has been a **two-time World under-20 champion and senior Worlds bronze medallist**

Khelo India Para Games

- Tokyo Olympics champion **Manish Narwal** **claimed gold in the 10m air pistol SH1** category of the Khelo India Para Games.
- In table tennis, **Paralympics and Para Asiad medallist Bhavina Patel** won 3-0 over Gujarat

statemate **Shamim Chawda** in the Class 4 category.

- The **Khelo India Para Games (KIPG)** are an annual sports event under the Khelo India initiative for disabled athletes.

Fifth Fazza Dubai Para Badminton International 2023

- **Mansi Joshi and Thulasimathi Murugesan** emerged champions in women's doubles.
- Tokyo Paralympics champion **Pramod Bhagat** got two silver medals.

90th National billiards and snooker championships

Karnataka's **Natasha Chethan** won the sub-junior girls' snooker title in the 90th National billiards and snooker championships in Chennai.

International Hockey Federation(FIH) annual awards

- Indian men's hockey team midfielder **Hardik Singh** and women's side captain **Savita** won the **FIH Player of the Year and Goalkeeper of the Year (women) awards** respectively.
- This is **Hardik's** second big award after the **Hockey India Balbir Singh Sr Award** for Player of the Year 2022.
- This is **Savita's** third consecutive **FIH Women's Goalkeeper of the Year** award.

Schemes and Committees News

PLI 2.0 for steel sector

The government is working on **Production Linked Incentive (PLI) scheme 2.0** to ensure adequate raw material supply for the steel sector in 2024.

About Production Linked Incentive Scheme 2.0

- The scheme proposes a financial incentive to boost domestic manufacturing and attract large investments in the value chain.
- The target segments under PLI 2.0 Scheme shall include Laptops, Tablets, All-in-One PCs and Servers and Ultra Small Form Factor.
- **Implementation:** Companies, both global and domestic, that meet the eligibility criteria specified in the PLI 2.0 Scheme guidelines will receive support for manufacturing goods in India within the specified target segment.
- The classification of applicants into the **Hybrid (Global/Domestic) category** will be

determined by whether the company is domestic or global.

- **Tenure:** The incentives provided under the PLI 2.0 Scheme will be applicable for a period of 6 years
- **Base year:** For the calculation of net incremental sales of manufactured goods, the base year will be the financial year 2022-23.

Women account for 49% of Ayushman cards

- The Indian Ministry of Health recently revealed that nearly 49% of Ayushman cards, also known as Pradhan Mantri Jan Arogya Yojana (PMJAY) cards, are held by women.
- This signifies a significant step towards inclusivity and equitable access to healthcare in India.

Key takeaways:

- **Increased participation:** The figure reflects the growing awareness and utilization of the Ayushman Bharat scheme among women.
- **Empowering women:** Access to quality healthcare empowers women to take charge of their health and well-being, leading to improved overall health outcomes.
- **Focus on women's health:** The scheme also includes 141 health benefit packages specifically designed for women, addressing various health concerns and needs.

COVID-19-hit MSMEs can tap new relief window from Jan. 1

- Micro, Small & Medium Enterprises (MSMEs) adversely affected by the COVID-19 pandemic can tap new relief window from Jan. 1
- This new window will open for them to submit fresh claims under the Vivad Se Vishwas I scheme, offering relief from pending litigation related to taxes, interest, and penalties.

Vivad Se Vishwas I scheme:

- The Vivad Se Vishwas I scheme was launched in 2020
- The aim is to resolve tax disputes between businesses and the government through mutual agreement.

DevINE scheme

- The Ministry of Development of North Eastern Region (DoNER) convened a meeting with the Chief Ministers of the States in the region

- The meeting comes in the wake of a review by the Prime Ministers Office (PMO) that found that the scheme was yet to take off despite adequate funds.

About Prime Minister's Development Initiative for North East Region (PM-DevINE) Scheme

- It is a **Central Sector Scheme** with 100% central funding.
- It will be implemented by the Ministry of Development of North Eastern Region (DoNER).
- It will have an outlay of **Rs.6,600 crore** for the **four year period from 2022-23 to 2025-26**.
- The infrastructure projects will be funded in line with the priorities laid down under the **PM Gati Shakti program**.
- The objectives of PM-DevINE are to:
 - Fund infrastructure convergently, in the spirit of PM Gati Shakti;
 - Support social development projects based on felt needs of the NER;
 - Enable livelihood activities for youth and women;
 - Fill the development gaps in various sectors.

Palna Scheme

- The Women and Child Development Ministry aims to establish **17,000 creches in anganwadis** across the country.
- The Ministry plans to **depute two additional creche workers** in each anganwadi.

Key points

- These initiatives are being taken under the 'Palna' scheme to address the need for quality daycare facilities or creches for children of working women by providing a safe and secure environment for the nutritional, health and cognitive development of the children, thereby enabling more women among all socio-economic groups to take up gainful employment in the **organised and unorganised sector**.
- According to government data, **participation of women in the workforce has increased to 37% in 2022**.
- As of March 31, 2021, **13.87 lakh anganwadi and mini-anganwadi centres** are operational across the country.

Major oil and gas firms pledge to go carbon neutral by 2050

Context

- Several oil and gas companies have committed to become net zero — or carbon

neutral — by 2050, according to the 28th Conference of Parties (COP-28) president-designate **Sultan Al Jaber**

- The **International Energy Agency (IEA)** estimates that oil and gas operations account for **around 15% of total energy-related emissions globally**, or about 5.1 billion tonnes of greenhouse gas emissions.

Defence News

U.S., U.K., Australia defence chiefs tout deep space radar and AI in joint deal

Context

- U.S., Australia, and Britain defense chiefs meet in California.

Key Points:

- Emphasis on high-tech collaboration in **deep space radar, AI, and quantum computing**.
- **Aim** is to strengthen forces against global threats, particularly from **China**.
- Highlight on the **"Deep Space Advanced Radar Capability"** program development.
- Plans for radar detection sites in all three countries by the end of the decade.
- Sites will have the capability to peer **35,000 km into space**.

Offshore patrol vessels

The Defence Ministry signed a **₹1,614.89-crore contract with Mazagon Dockyard Shipbuilders, Mumbai** for procurement of six next-generation offshore patrol vessels for the Coast Guard.

Key points

- Of the six vessels being procured, four would replace the existing ageing vessels and the other two would augment the Coast Guard fleet
- These **modern and high-tech ships** will play a critical role in enhancing surveillance, law enforcement, search and rescue, maritime pollution response, and other important capabilities
- The vessels would be equipped with **multipurpose drones and AI capability**.

India receives price bids for 26 Rafale jets, 3 submarines

- India has received price bids from France for the purchase of **26 Rafale-M carrier-based fighters as well as three additional Scorpene-class conventional submarines**.

- The 26 jets are meant to fill the gap in the numbers till the indigenous Twin Engine Deck-Based Fighter is inducted into service.

Did you know?

- The Navy currently operates two aircraft carriers, the **INS Vikramaditya and the indigenously built INS Vikrant**.
- The major difference between the existing Scorpenes and the new ones is their integrated combat system (ICS).
- The earlier submarines had systems from France, while the new ones will have indigenous ICS, with significant localised solutions provided by **Bharat Electronics Limited in collaboration with French suppliers**.

Indian Navy unveils new epaulets for admirals

- The Navy unveiled the **new design of epaulets for admirals**, with the octagon in the new design drawn from the naval ensign and inspired by **rajmudra of Chhatrapati Shivaji**.
- The new design is a **"true reflection of our rich maritime heritage"** and reiterates the **"resolve to do away with Ghulami ki Maansikta"**.
- The new epaulets have the golden Navy button top, followed by an octagon, an Indian sword and a telescope crossed, followed by stars indicating the ranks.

Important Days

Armed Forces Flag Day

- Armed Forces Flag Day on **December 7** honors soldiers, sailors, and airmen for safeguarding borders and ensuring peace at the cost of their lives.
- Armed Forces Flag Day, established on **August 28, 1949**, serves as a remembrance and fundraising initiative by the **Ministry of Defence**.
- Citizens contribute by purchasing badges and stickers on this day, with funds aimed at improving armed forces personnel's lives.
- Funds raised are crucial for providing better facilities and resources to selfless soldiers, sailors, and airmen.

World Human Rights Day

- **World Human Rights Day is celebrated annually on December 10th**
- It commemorates the adoption of the **Universal Declaration of Human Rights**

(UDHR) by the United Nations General Assembly in 1948.

- This day is significant as it **Raises awareness** about **human rights issues** and encourages action to protect them.
- This **landmark document outlines the fundamental rights and freedoms inherent to every human being, regardless of race, sex, nationality, religion, or any other status.**
- Even Though it is a **Non-binding declaration**, it **serves as a foundational document** for international human rights law.
- **Theme for 2023: "Dignity, freedom, and justice for all."**
- This theme **emphasizes the universality of human rights** and the need to continue working towards a world where everyone's rights are respected and protected.

International Universal Health Coverage Day

- The United Nations proclaimed **12 December** as **International Universal Health Coverage Day (UHC Day)**
- International Universal Health Coverage Day **aims to raise awareness of the need for strong and resilient health systems** and universal health coverage with multi-stakeholder partners.
- The theme for this year's International Health Coverage Day 2023 is - **Health For All: Time for action.**
- This is basically to call for specific actions that focus on health systems resilience.

Vijay Diwas

- Vijay Diwas is observed on **16th December** every year **to mark India's victory over Pakistan in the 1971 war.**
- The Government of India decided on 3rd December 1971, that India would go for war with Pakistan to save Bengali Muslims and Hindus.
- This war was fought between India and Pakistan for 13 days.
- On 16th December 1971, the chief of the Pakistani forces with **93,000 soldiers** had surrendered unconditionally to the allied forces consisting of Indian Army and Mukti Bahini in Dhaka.
- **Mukti Bahini** refers to the armed organizations that fought against the Pakistan Army during the Bangladesh Liberation War. **It was a guerrilla resistance movement.**

- **Bangladesh** was born on this day. Hence, Bangladesh celebrates **its independence day (Bijoy Dibos) on 16th December every year.**

International Migrants Day

- International Migrants Day is celebrated on **18 December.**
- On this International Migrants Day, IOM **aims to position migration as one of the solutions to global challenges**, such as adapting to the impacts of climate change or providing better economic opportunities for communities.
- The theme for the 2023 is **"Act today for a better tomorrow for all: Improving the health of migrants to unleash the power of migration"**

Good governance Day

- Good governance is observed annually on **December 25.**
- The day aims to let the citizens, the students, who are the future of the country **know about the government's responsibilities and duties** that it needs to fulfill.
- The day is also celebrated to commemorate the birth anniversary of India's former **Prime Minister, Atal Bihari Vajpayee.**

Veer Baal Divas

- Prime Minister will participate in a programme to pay homage to the courage and martyrdom of the sons of **Guru Gobind Singh, the 10th and last Sikh 'Guru'.**
- The Union government has organised many participative programmes across the country to mark the day which has been named **"Veer Baal Divas"**.
- A digital exhibition detailing the life story and sacrifice of the **'Sahibzades' (martyred sons of Guru Gobind Singh)** will also be displayed in schools and childcare institutions across the country.

Key points

- The Prime Minister announced the observation of "Veer Baal Divas", to mark the martyrdom of Guru Gobind Singh's sons **Sahibzadas Baba Zorawar Singh Ji and Baba Fateh Singh Ji.**
- Veer Baal Divas tells us what is India and its identity and every year, **Veer Bal Divas** will inspire us to recognise our past and make our future.

- This will also remind everyone about the strength of our young generation.

Misc. News

Tea Board issues order to growers on pesticide use

The Tea Board has asked tea estates and small tea growers across India to avoid using on their plantations chemicals or pesticides that have no label claim.

About Tea Board of India

- It is a **statutory body** under the **Ministry of Commerce** that was **set up in 1953** for the development of tea industry in India. It started functioning in 1954.
- Its vision and mission is to make the country a leading producer of tea across the globe for which it established several programmes and schemes.
- The Board is **constituted of 31 members (including Chairman)** drawn from Members of Parliament, tea producers, tea traders, tea brokers, consumers, and representatives of Governments from the principal tea producing states, and trade unions
- The Board is **reconstituted every three years**.
- The board has its headquarters located in **Kolkata**

West Antarctic Ice Sheet

- Genetic analyses of an **Antarctic octopus** show that the **West Antarctic Ice Sheet (WAIS) collapsed** during the Last Interglacial about 1,29,000 to 1,16,000 years ago when temperatures were only about 1 degree C warmer than preindustrial levels.
- The findings suggest that WAIS collapse and resultant sea-level rise could be caused by even the minimal temperature rises.
- Total WAIS collapse would have devastating global ramifications — it could raise the **global sea level by roughly 3 to 5 meters**.

Pegasus spyware found on journalists' phones after Apple alert

- The recent discovery of **Pegasus spyware** on the phones of several journalists in India has sparked major concerns about privacy, press freedom, and national security.

Key Points:

- The **Security Lab of Amnesty International** announced that the **founder editor of The Wire news website Siddharth Varadarajan** and another journalist in India **were targeted with Pegasus spyware** this year
- The **journalists had received an alert from Apple** that they were being **targeted by "state-sponsored hacking"**, following which they provided their phones to the non-profit for testing.

About:

- Pegasus is a **sophisticated Israeli-made software that allows attackers to remotely access a phone's data**, including messages, calls, emails, and even location information.
- Pegasus attack is also called as a **"Zero Click attack"**

Person in News: Vijaykanth

- **Vijaykant**, the charismatic actor and influential politician who transcended the screen to win over the hearts of millions in Tamil Nadu, **passed away at the age of 71**.
- **He was born in Madurai as Muthuraman**
- Vijaykanth made his **acting debut in 1976** and quickly rose to stardom with powerful performances in action-oriented roles.
- Vijaykanth, who was **known for his action films and philanthropic work**, launched the **Desiya Murpokku Dravida Kazhagam (DMDK) in 2005** as an alternative to the ruling **Dravida Munnetra Kazhagam (DMK) and All India Anna Dravida Munnetra Kazhagam (AIADMK)**.

Cyclone Michaung

Context

Cyclone Michaung has intensified in its move across the southwest Bay of Bengal and is likely to make **landfall on the Andhra Pradesh coast between Nellore and Machilipatnam**

What are cyclones?

- A cyclone is a **large-scale system of air that rotates** around the center of a low-pressure area. It is usually accompanied by violent storms and bad weather.
- As per NDMA, a cyclone is characterized by inward spiraling winds **that rotate anticlockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere**.

Think:

Why are cyclones more frequent in Bay of Bengal compared to the Arabian sea?

How are Cyclones named?

- IMD uses a specific naming convention for cyclones in the **North Indian Ocean**, including the Arabian Sea and Bay of Bengal.

History

- In the **mid-1900s**, storms were named alphabetically, and the practice of **using feminine names started**.
- WMO/ESCAP(**World Meteorological Organisation/United Nations Economic and Social Commission for Asia and the Pacific**) nations agreed to name cyclones in 2000.
- WMO/ESCAP member nations, including India, decided to assign names to cyclones.
- The decision was made in **Muscat in 2000**, involving 13 countries.

Member Nations:

- The WMO/ESCAP group, deciding cyclone names, includes India, Qatar, Maldives, Myanmar, Oman, Bangladesh, Pakistan, Sri Lanka, Thailand, UAE, and Yemen.

RSMC(Regional Specialized Meteorological Centre) Role:

- IMD, as one of the six RSMCs globally, names cyclones in the North Indian Ocean based on suggestions from 13 countries in the WMO/ESCAP region.

Naming Criteria:

- Cyclone names must be neutral, non-offensive, short, easy to pronounce, under eight letters, and unique.
- Countries provide names with pronunciation and voice over.

Type of Disturbance **Wind Speed (km/h)**

Low-Pressure Area	Less than 31
Depression	31-49
Deep Depression	50-61
Cyclonic Storm	62-88
Severe Cyclonic Storm	89-117
Very Severe Cyclonic Storm	118-167
Super Cyclonic Storm	168 and higher

Garba dance of Gujarat makes it to UNESCO list

Context

Gujarat's traditional dance form 'Garba' was included in the list of Intangible Cultural Heritage by the **United Nations Educational, Scientific and Cultural Organization (UNESCO)**.

Key points

- The popular dance form is the **15th cultural item** from India to make it to the UNESCO list.
- **Kolkata's Durga Puja was the last one added** two years ago.
- The inclusion has been made under the provisions of the 2003 **Convention for the Safeguarding of Intangible Cultural Heritage**.
- The international cultural body described the 'Garba' as a ritualistic and devotional dance performed in India.

Loss of green cover in Cauvery basin

- A paper published by scientists and researchers at the **Indian Institute of Science (IISc), Bengaluru** highlighted that natural vegetation on nearly **12,850 sq. km of land in the Cauvery basin was lost in the 50 years from 1965 to 2016**.

Key points

- **Karnataka has lost much more than any other State** in the basin.
- It accounts for **three fourths of the lost cover**, while **Tamil Nadu's share is around one fifth**.
- The natural vegetation **cover went down by around 46%**
- The quantum of reduction of dense vegetation was 35% and that of degraded vegetation, 63%
- Areas that suffered adverse changes in the extent of forest cover include the **Brahmagiri Wildlife Sanctuary, Bandipur National Park, Nagarhole National Park and the Cauvery Wildlife Sanctuary**.

Dal Lake

- It is a **lake in Srinagar**, the summer **capital of Jammu and Kashmir**.
- It is surrounded by the **Pir Panjal mountains**.
- It is integral to tourism and recreation in Kashmir and is named the "**Jewel in the crown of Kashmir**" or "**Srinagar's Jewel**".
- Spread across an area of around 26 square kilometers, it is the **second-largest lake** in Jammu & Kashmir.

- The wetland is divided by causeways into four basins; **Gagribal, Lokut Dal, Bod Dal and Nagin**.
- Dal Lake is also popular for the **floating market (known as Raad)** where vendors have their own **Shikaras** and approach tourists.

Iran set to remove visa requirement for Indians

- Iran is expected to **remove visa requirement for Indian travellers**.
- This is aimed at boosting the flow of tourists into Iran.
- This is the **first time** that Tehran has included ordinary Indian passport holders on the list.
- India has recently been placed on similar visa-exemption lists of countries such as **Malaysia and Sri Lanka**.

Ethanol production

- The Government has allowed the **use of cane juice, B-molasses** to make ethanol
- It is a reversed decision as initially the decision was to ban the use of sugarcane juice for making ethanol as it allowed utilisation of the juice as well as B-heavy molasses to produce the green fuel but capped the **diversion of sugar at 17 lakh tonnes**.

First winter Arctic expedition

- The **Raman Research Institute (RRI)** is participating in the **first winter Indian expedition to the Arctic region**.
- The institute researchers would examine the characterisation of the radio frequency environment in the **Svalbard region of the Arctic in Norway**.
- The survey will **help astronomers assess the suitability of this uniquely located region** for carrying out precision astronomy measurements.

Key points

- India has been running its own research station, **Himadri, in Svalbard since 2008**.
- The winter expedition is a bid to maintain a year-long presence at the station.
- The month-long scientific expedition is being funded by the **Earth Sciences Ministry**.
- The **National Centre for Polar and Ocean Research, Goa**, is the nodal agency spearheading the expedition

JN.1 variant

- The Union Health Ministry has asked all States to maintain a constant vigilance over the COVID-19 situation in the country in view of the upcoming festive season and the recent surge in cases in some parts of the country.
- The alert comes following the detection of the country's first case of the new **JN.1 variant of COVID-19 in Kerala**.

No job quota for people with blood disorders

People with blood disorders such as **thalassemia, haemophilia and sickle cell disease** are **not eligible** for reservation in government jobs **under the Persons with Disabilities category**.

Key points

- The three diseases were included on the list of disabilities under the **Right to Persons with Disabilities Act of 2016**
- Under **Section 34** of the law, “**persons with blood disorders including Thalassemia are not eligible for reservation in jobs in government establishments**”.
- A **4% quota in government jobs** was available for those with no vision and low vision; no hearing and low hearing; locomotor disability, including cerebral palsy; leprosy cured; dwarfism; muscular dystrophy; autism, and intellectual disability; acid attack victims; and others.

Volcano erupts in southwest Iceland

- A volcano erupted close to an Iceland power plant after weeks of intense seismic activity **southwest of Reykjavik**.
- The eruption was only 3-km from the evacuated **fishing port of Grindavik** on the **Reykjanes peninsula**.

NGC 2210

- The **densely packed globular cluster** is known as NGC 2210
- It is in the **Large Magellanic Cloud (LMC)**.
- The LMC is **about 157,000 light-years from earth**, and is a satellite galaxy of the Milky Way, meaning that the two galaxies are gravitationally bound.

Mohini Giri

Former chair of the **National Commission for Women and Padma Bhushan awardee** Dr. V. Mohini Giri passed away

About

- She was an **iconic women's rights activist**
- She founded the **Guild of Service in 1979**, which was dedicated to empowering women, underprivileged children and war widows.
- Dr. Giri was the **founder trustee of Women's Initiative for Peace in South Asia** and trustee of various organisations.

Namdapha flying squirrel

- A **nocturnal flying squirrel** has resurfaced in Arunachal Pradesh after going missing for 42 years.
- The **Namdapha flying squirrel** (*Biswamoyopterus biswasi*) was last described in 1981 based on a single individual found in the 1,985 sq. km. **Namdapha Tiger Reserve in Arunachal Pradesh's Changlang district.**

About Namdapha Flying Squirrel

- IUCN Status: **CR**
- Wildlife Protection Act Status: **Schedule II**
- Found in Arunachal Pradesh in the **Namdapha National Park**
- It is among the 25 "most wanted lost" species that are the focus of Global Wildlife Conservation's "Search for Lost Species" initiative.

One-stop health sector regulator

- The Central government is exploring **setting up a health sector regulator that will bring private and government health insurance schemes** under its purview to facilitate affordable insurance coverage for all
- The Ministries of Finance (MoF) and Health are in "initial discussions" over the need for a sector watchdog.
- Doctors' bodies have urged that private and government insurance be brought under a single regulator. Meaning, regulating government schemes like **Pradhan Mantri Jan Arogya Yojana, the Central Government Health Scheme, Employees' State Insurance Corporation, etc.**

11th century Jain sculptures discovered in Mysuru district

- Three 11th century Jain sculptures were discovered at **Varuna village in Mysuru district.**
- Entire belt comprising **Varuna, Varakodu and Vajamangala** had been thriving Jain centres in the past.

About Jainism

- Jainism is an ancient religion that is rooted in the philosophy that **teaches the way to liberation and a path to spiritual purity** and enlightenment through disciplined nonviolence to all living creatures.
- Jainism **came to prominence in the 6th century B.C.**, when Lord Mahavira propagated the religion.
- There were 24 great teachers, the last of whom was **Lord Mahavira.**

