# CURRENT AFFAIRS

# INDEX

# MONTHLY CURRENT AFFAIRS
## MAY : 2024

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**Near Riddhi-Siddhi Circle, Gopalpura Bypass, Jaipur**

# 1. RAJASTHAN AFFAIRS

**Lok Sabha Elections in Rajasthan**

- On March 16, the Election Commission announced the assembly elections in 4 states along with the 2024 general elections.
- The Lok Sabha elections in the country were held in 7 phases from April 19 to June 1, while the counting of votes was done on June 4.
- Apart from this, the Election Commission also announced assembly elections in Sikkim, Odisha, Andhra Pradesh and Arunachal Pradesh.
- The term of the current 17th Lok Sabha is ending on June 16, 2024.
- There are 543 Lok Sabha seats in the country, out of which 84 seats are reserved for Scheduled Castes and 47 seats are reserved for Scheduled Tribes.
- The Lok Sabha elections in Rajasthan were held in two phases for 25 seats on April 19 and April 26 respectively.
- In the first phase, elections were held on 12 Lok Sabha seats in Rajasthan, while in the second phase, elections were held on 13 Lok Sabha seats.
- The total voting in the first phase in Rajasthan was 57.65%, while the total voting in the second phase was 65.03%.

| Voting percentage in Rajasthan | |
|---|---|
| Total | **61.34%** |
| Male | **62.12%** |
| Female | **60.48%** |
| Others | **53.05%** |

| Voting percentage in Rajasthan | | |
|---|---|---|
| | **Highest** | **Lowest** |
| District | Barmer (75.93%) | Karauli-Dholpur (49.59%) |
| Male | Barmer (76.54%) | Karauli-Dholpur (51.25%) |
| Female | Banswara (75.75%) | Karauli-Dholpur (47.66%) |
| Others | Jaipur Rural (87.50%) | Barmer (22.22%) |

| 18-19 years category | Banswara (77.93%) | Karauli-Dholpur (47.44%) |
|---|---|---|
| Disabled | Banswara (84.93%) | Bharatpur (44.37%) |

- The total voting percentage of **disabled voters in Rajasthan** was 68.63%.
- The voting percentage of voters above 85 years of age in Rajasthan was 57.8% and vote from home in the state was 98.30%.
- The village with the highest voting percentage in Rajasthan was Bhagwanpura village of Bundi district, where 92.46% voting took place.
- Bhagwanpura village also stood first in the Rajasthan Assembly elections with 97.04% voting.
- Note: The total voting percentage in the 17th Lok Sabha elections held in Rajasthan in the year 2019 was 66.34%.

**Important facts regarding Lok Sabha in Rajasthan**

- Currently, the number of Lok Sabha seats in Rajasthan is 25 and the number of Rajya Sabha seats is 10. Thus, a total of 35 MPs are elected from Rajasthan.
- In Rajasthan, 4 seats for Lok Sabha are reserved for Scheduled Caste (SC), which are as follows-
  1. Bharatpur
  2. Bikaner
  3. Sri Ganganagar
  4. Karauli-Dholpur
- In Rajasthan, 3 seats for Lok Sabha are reserved for Scheduled Tribe (ST) category, which are as follows-
  1. Banswara
  2. Dausa
  3. Udaipur
- Kota MP from Rajasthan, Shri Om Birla (Bharatiya Janata Party) is currently the Speaker of the Lok Sabha.
- Till now two persons have become the Speaker of the Lok Sabha from Rajasthan-
  1. Balram Jakhar
  2. Om Birla

Balram Jakhar has had the longest tenure as the Speaker of the Lok Sabha.

## 15 committees formed in Rajasthan Legislative Assembly

- 15 committees of Rajasthan Legislative Assembly were formed on 17 May 2024. Changes have been made in the structure of these committees, the size of many committees has been reduced to only 7 to 8 members.
- At present, 19 out of a total of 21 committees have been formed in the Rajasthan Legislative Assembly.
- The Assembly Speaker has formed these committees under Rule 183 (1) of the Rules of Procedure and Conduct of Business of the Rajasthan Legislative Assembly.
- Women MLAs have been made Chairpersons of two committees of the Rajasthan Legislative Assembly.

| Names of Committee | Chairman |
|---|---|
| Rules Committee | Vasudev Devnani |
| Ethics Committee | Harish Chaudhary |
| Committee on Local Bodies and Panchayati Raj Institutions | Hari Singh Rawat |
| Privileges Committee | Pushpendra Singh |
| Committee on Subordinate Legislation | Anita Bhadel |
| Petition Committee | Hameer Singh Bhayal |
| Committee on Government Assurances | Jitendra Kumar Gothwal |
| Question and Reference Committee | Sandeep Sharma |
| Committee on Environment | Dr. Dayaram Parmar |
| Library Committee | Surendra Singh Rathore |
| Committee on Women and Child Welfare | Shobha Chauhan |
| Committee on Welfare of Backward Classes | Kesharam Chaudhary |
| Scheduled Caste Welfare Committee | Dr. Vishwanath Meghwal |
| Scheduled Tribe Welfare Committee | Phool Singh Meena |
| Committee on Welfare of Minorities | Pabbaram Vishnoi |

## Rajasthan Legislative Assembly 4 committees were constituted on 17 April 2024, which are as follows:

- Public Accounts Committee: Tikaram Julie (Leader of Opposition)
- Estimates Committee 'A': Arjun Lal Nagar
- Estimates Committee 'B': Shrichand Kriplani
- State Enterprises Committee: Kalicharan Sarraf

### Rajasthan Legislative Assembly

- Assembly: 16th
- Number of members: 200
- Assembly Speaker: Shri Vasudev Devnani
- Leader of the House: Shri Bhajanlal Sharma
- Leader of the Opposition: Shri Tikaram Julie

| Political Party | Seats |
|---|---|
| Bharatiya Janata Party | 115 |
| Indian National Congress | 69 |
| Bharatiya Adivasi Party | 4 |
| Bahujan Samaj Party | 2 |
| Rashtriya Loktantrik Party | 1 |
| Rashtriya Lok Dal | 1 |
| Independent | 8 |
| Total | 200 |

- Out of the total 200 seats in Rajasthan Legislative Assembly, 34 seats are reserved for Scheduled Caste (SC) and 25 seats are reserved for Scheduled Tribe (ST) i.e. out of the total assembly seats of Rajasthan, 59 seats have been reserved.
- A total of 20 women MLAs were elected in the 16th assembly elections of Rajasthan (2023). (Of these, 9 are from BJP, 9 are from Congress and 2 are independents.) That is, the participation of women MLAs is 10% of the total assembly seats.

## Rajasthan High Court directed to give compensation to dependents in case of death due to heatwave

- Rajasthan High Court expressed concern over the ongoing heatwave on in the entire country including the state and directed the central and state government to ensure measures to avoid its adverse effects.
- Justice Anoop Kumar Dhand took suo motu cognizance of the heatwave and gave instructions.
- The High Court directed the Central and Rajasthan Government to immediately

implement the Heat Action Plan prepared under the Climate Change Project.

- The High Court has directed to declare heatwave and coldwave as a national disaster and the Rajasthan government to give compensation to the families of the deceased in cases of death due to heatwave.

- At present, there is no provision for compensation for death due to heatwave at the national and state level.

- The High Court directed to implement the bill to prevent deaths due to heat wave and cold wave, presented in Rajya Sabha on 18 December 2015.

- The Chief Secretary of Rajasthan, Secretary of Home and Health Ministry were directed to form a committee of various departments under the chairmanship of ACS or Principal Secretary of each department and take steps to prepare a heat action plan and prevent heat-related diseases.

- 67 people have died in Rajasthan (till 31 May) due to extreme heat.

- **Note:** In case of death of a person due to the disasters declared by the Central and State Government, his family members are given a compensation of Rs. 4 lakh and in case of disability, assistance of Rs. 74 thousand to Rs. 2.5 lakh is given.

## Disaster Management Act in the Center and State

- In Rajasthan, 'Rajasthan Disaster Management Act-2005' was implemented on 1 August 2007.

- It includes only 10 disasters declared by the Central Government and only 2 disasters declared by the State Government.

- Heatwave has not yet been included in the list of natural disasters.

- However, if it is not included in the disasters declared by the central government, the state governments can declare a disaster on their own and provide assistance.

- Note: The central government had declared COVID-19 a national disaster.

- The 'Disaster Management Act-2005' was introduced in the country to control disasters and provide compensation, under which the Center contributes 75% and the state contributes 25% to the disaster relief fund.

## Supreme Court bans issuance of new mining leases in Aravalli

- The Supreme Court has barred four states/ union territories from issuing and renewing new mining leases in Aravalli (Aravalis), India's oldest mountain range.

- These orders have been implemented for Delhi, Rajasthan, Haryana and Gujarat.

- The Supreme Court made it clear that its orders do not apply to legal mining activities under valid permits and licenses.

- The Supreme Court bench has constituted a committee to prepare a definition of the Aravalli range.

## Case

- The Supreme Court has taken cognizance of the Forest Survey of India's report on illegal mining in the Aravalli range and has asked the Rajasthan government to stop it.

- The Supreme Court gave these instructions while taking cognizance of the illegal mining report given by the Forest Survey of India (FSI) in 2018.

- FSI had reported that mining has been done at 3 thousand places in the Aravalli mountain range from Haryana to Rajasthan and Gujarat. 31 hills have been destroyed.

## Aravalli Mountain Range

- The Aravalli mountain range in India is one of the oldest mountain ranges in the world.

- Guru Shikhar in Rajasthan is the highest point of the Aravalli mountain range, whose height is 1,722 meters.

- This peak has been named 'Guru Shikhar' after Dattatreya, an incarnation of Vishnu.

## Importance of Aravalli

- Aravalli acts as a natural barrier against desertification.

- Aravalli prevents the dry winds coming from Afghanistan and Pakistan from entering the plains of the Ganges.

- Plays a role in regulating the climate.

- It serves as the watershed for many rivers including Sabarmati, Luni and Banas.

- It is also the origin of rivers.

- It serves as an important catchment area.

- Famous sites like Kumbhalgarh Fort, Dilwara Temple and Ranakpur Jain Temple are evidence of its rich cultural heritage.

## Sarpanch will be responsible for preventing child marriage in Rajasthan: High Court

- To prevent child marriage in Rajasthan, a division bench of Rajasthan High Court has passed an order and directed the state government to take steps to prevent child marriage in the state.
- The High Court has directed the state government to make public representatives up to the ward level of villages and towns aware and take their support in preventing child marriage.
- The High Court said that local public representatives will be held responsible if any child marriage takes place.
- The division bench of Justice Pankaj Bhandari and Justice Shubha Mehta gave this order on the PIL of Just Rights for Children Alliance and Bachpan Bachao Andolan.
- The court said that under the Panchayati Raj rules, it is the duty of the Sarpanch to prevent child marriage.

## Rajasthan Assembly will be paperless by December 2024

- Rajasthan Assembly will be fully computerized under the National e-Vidhan Application by December 2024.
- For this complete computerization, a tripartite agreement has been made between the Ministry of Parliamentary Affairs of the Government of India, the Government of Rajasthan and the Rajasthan Legislative Assembly Secretariat.
- Under this, computer screens will be installed on the tables of the MLAs. All the proceedings including the Question Hour will be online.

### National e-Vidhan Application (NeVA)
- It is one of the 44 mission mode projects under the Digital India program of the Government of India.
- It aims to make all state assemblies paperless by completely converting them into a digital form.
- NeVA includes a website and a mobile app.
- The Ministry of Parliamentary Affairs is the 'nodal ministry' for the implementation of NeVA in states and union territories.

## Dr. Kamla Beniwal

- Dr. Kamla Beniwal died on 15 May 2024.

- She became the second woman MLA of Rajasthan (from Amer) in 1952 (at the age of 25).
- She was the first woman minister of Rajasthan (at the age of 27) and the first woman deputy chief minister.
- Dr. Beniwal was elected an MLA from Rajasthan Amer and Bairat (present Virat Nagar) a total of 7 times.
- She has also been the governor of 3 states - Gujarat, Tripura and Mizoram.
- She was born on 12 January 1927 in Gaurir village of Jhunjhunu district of Rajasthan.

### First women in Rajasthan
- First woman Chief Minister: Vasundhara Raje
- First woman Governor: Pratibha Devi Singh Patil
- First woman Speaker of the Legislative Assembly: Sumitra Singh
- First woman MLA: Yashoda Devi
- First woman Lok Sabha member: Maharani Gayatri Devi
- First woman Rajya Sabha member: Sharda Bhargava

## Status of Accountability Law in Rajasthan

- A movement for social accountability law has been going on in Rajasthan for a long time.
- The state government also announced in the 2019-20 budget to bring the accountability law.
- In the year 2019, a committee was constituted by the state government in Rajasthan under the **chairmanship of former State Election Commissioner, Ramlubhaya to draft the accountability bill**.
- This committee presented its report and draft law in the year 2020.
- Note: Rajasthan Guaranteed Delivery of Public Service Act, 2011 and Rajasthan Right to Hearing Act, 2012 have already been implemented.
- Under this, there is a provision to hold officers and employees accountable for not doing work related to public services in Rajasthan.
- For this, a draft has been prepared in the state with the name of 'Rajasthan Guaranteed Delivery of Public Services and Accountability Bill-2022'. In the Rajasthan Guaranteed Delivery of Public Service Act, 2011, there was no provision for taking any

effective action against officers who did not do the work of the public.

- For this law, a movement is being organized by famous social activist Aruna Roy and her colleague activist Neel Day to make the citizens aware.
- It was due to the efforts of Aruna Roy that the first Right to Information Act was enacted in Rajasthan.
- This accountability law is being considered as the next important step of the Right to Information Act.

## Provisions in the draft

- Every work in government departments will have to be completed within a maximum of 30 days.
- Government departments will have to tell which officer or employee will do a certain work if asked by any person.
- A government employee will be held responsible and accountable for the work.
- If the work which can be done as per the rules and in a timely manner is not completed within the stipulated time limit, then financial, administrative and legal action will be taken against the concerned employee. Action will be taken to terminate the government job of any personnel who violate accountability 3 times in a row.

## Challenges

- Government officers and employees are of the opinion that this law will be very strict for them and it will become very difficult to do a government job.
- The effectiveness of this law is doubtful. Even under the Right to Information Act, government departments usually get rid of the RTI application by telling the information seeker that the information has to be given within 30 days.
- The state government lacks willpower. Apart from this, the government also faces the risk of displeasing of employees and bureaucracy.

## Solution

- **Understand the views of bureaucrats and employee organizations:** The state government should talk to various government personnel, organizations and officers to know their views. Their doubts should be resolved.
- **Legal opinion:** The Administrative Reforms Department should immediately refer the draft of this law to the Law Department and independent legal experts, so that

they can give their opinion.

- Citizens' suggestions should also be included: The state government should also know the opinion of citizens regarding this law.
- Special task team should be formed for this law: The resources of the department for this law are limited. In such a situation, the government can also form a special task team of officers and employees of the Finance, Law, Parliamentary Affairs, Personnel and Administrative Reforms Department.

## Status of other laws in Rajasthan

- The Right to Public Hearing Act 2012 is applicable in Rajasthan, which provides for providing the general public an opportunity to be heard near their place of residence.
- Under this, it is mandatory to hear public complaints or petitions within 15 days, and it is also mandatory to inform about the decision taken on the complaint/grievance within 7 days.
- It also provides for a penalty of Rs 500 to Rs 5,000 if the officers/employees are found guilty, but it is not really that effective at the ground level.

## Hatchery will be built for the conservation of turtles in the National Chambal Gharial Sanctuary

- **Sawai Madhopur-** The Forest Department will now work on the conservation of turtles on the lines of gharials in the Chambal River in and around Palighat.
- The Rajasthan Forest Department has built inland hatcheries at four places in the National Chambal Gharial Sanctuary.
- For the first time in Rajasthan, a hatchery will be built for the conservation of turtles.
- One hatchery has been built at Gumsh Ghat of Mandrayal Range and three hatcheries at Rajghat, Shankarpur and Andwapuraini Ghat.
- In the next phase, the Forest Department will also build a turtle hatchery at Palighat.
- 9 species of turtles are found in the National Chambal Gharial Sanctuary. Out of these, 4 species are of soft-shell turtles and 5 are of hard-shell turtles.
- Out of these, only 6 types of species are found in the local Chambal River. The **Batagur and Batagur dhongoka species** are included in the Critically Endangered and Endangered category.

## National Chambal Gharial Sanctuary

- The National Chambal Gharial Sanctuary is located in Palighat village of Sawai Madhopur, adjacent to the banks of Chambal River.
- The government gazetted the National Chambal Gharial Wildlife Sanctuary on 7 December 1979 to conserve the rare crocodile species of Chambal River in Rajasthan.
- These rare crocodile species are known as Gharial.
- The area of the National Chambal Sanctuary is about 425 km.
- This river sanctuary starts from the Kota Barrage of Rajasthan.
- The Chambal River flows in the northern and southern part of Rajasthan and its route passes through Sawai Madhopur.
- In the next part, the Chambal River Sanctuary covers Morena in Madhya Pradesh and Dholpur in Rajasthan.
- The total sanctuary area in Rajasthan is about 285 sq km.
- It was established as a river sanctuary. The National Chambal Sanctuary area is spread over three states, which include Madhya Pradesh, Rajasthan and Uttar Pradesh.

## 'Attendance Management System'

- This is a mobile app based system of the Public Health Engineering and Ground Water Department.
- Its objective is to ensure punctuality for the personnel and has been started through the 'SSO AMS' system.
- This app has been developed by the Department of Information Technology and Communication.
- Under this, the attendance of the officers and personnel of the department can be recorded through digital medium.
- It has a provision to register attendance through mobile app within the confines of the office and work place premises through geo fencing technology.
- For its operation, the SSO ID of the district level offices has been mapped with latitude and longitude.
- In the Geo Fence technology, 'mark in' can be done only on the GPS location of the office.

## 4 more Delphic clubs will be formed in Rajasthan

- The Delphic Council of Rajasthan and schools signed an MoU to form 4 Delphic clubs. On behalf of the Delphic Council of Rajasthan, the Council's General Secretary Mr. Jitendra Kumar Soni (IAS) signed an MoU with The Palace School Jaipur, Government Senior Secondary School Kishangarh, Delhi Public School and Vidyashram School.
- Its objective is to increase the participation of youth in the 6 Delphic arts (classical music, Indian film music, popular music, classical dance, folk dance, contemporary dance, photography).
- This will give momentum to the Delphic movement in the state and students will get a platform to showcase their art and culture.
- The Delphic Council of Rajasthan is a part of the Indian Delphic Council and the International Delphic Council.
- The Delphic Council will prepare an annual calendar with these schools and organize the Delphic Games.

## 'Shuddh Aahar – Milwat Par War' Campaign

- It was started on 15 February 2024 by the Food Safety and Drug Control Department of the Government of Rajasthan.
- Its objective is to provide pure and quality food items to the general public and to make them aware of adulterated food items.
- Under this campaign, along with regular action against adulterators in the district under the Food Safety and Standards Act 2006, Regulation 2011, various awareness activities will be organized.
- In this, action was taken by conducting a special campaign with the police department to prevent the sale of adulterated oil, ghee, milk spices, beverages and other adulterated food items like flour, gram flour etc.
- Under this campaign, a reward amount of Rs 51,000 has been announced to the informant if adulteration is certified.

## The 13th edition of The Great Indian Travel Bazaar

- A three-day event was held from 5 to 7 May 2024 in Jaipur to promote tourism in Rajasthan
- It was organized by the Department of Tourism, Government of Rajasthan, Ministry of Tourism, Government of India and FICCI.

- The 'Wed in India Expo' was organized on 5 May 2024 at Maharani Mahal Rambagh Palace, Jaipur.
- The aim of this expo is to make Rajasthan the best wedding destination.
- GITB was formally inaugurated at Jai Mahal Palace, Jaipur.
- An exhibition was organized at Sitapura, Jaipur on 6 and 7 May 2024.
- B2B meetings were organized with foreign tour operators to promote tourism in Rajasthan.
- **The Great Indian Travel Bazaar** was first organized in the year 2008 by the Rajasthan Tourism Department.

## Major sites of the 1857 revolution in Rajasthan will be declared heritage sites

- To highlight the contribution of revolutionaries of Rajasthan in the 1857 revolution against the British, the Rajasthan government will declare major sites as heritage sites.
- The Rajasthan government will take the help of Archaeological Survey of India and British documents for this.
- Under this, statues of the personalities who rebelled against the British will be installed and the sites associated with them will be declared historical heritage sites.
- Among these, the biggest rebellion against the British in **Auwa village** near Palia Marwar Junction will be highlighted.

## Auwa's role in the Erinpura rebellion

- In 1857, a military rebellion took place in Erinpura. Auwa Thakur Kushal Singh gave shelter to the rebel soldiers.
- 6000 soldiers of Auwa Thakur Kushal Singh Champawat joined the Erinpura rebellion due to which the number of rebels increased. To suppress this rebellion more troops were sent under the leadership of Jodhpur's commander Kushal Raj and British officer Heathcote.
- The **battle of Bithoda (Pali) was fought on 8 September 1857** in which Onar Singh was killed and Kushal Singh emerged victorious.
- After this Lawrence went outside the boundaries of Ajmer only once to fight **and the battle of Chelawas (Pali) was fought on 18 September 1857** in which Kushal Singh emerged victorious.
- This war is called the **"Gore-Kaalon ka Yuddh".**

- **Jodhpur's Political Agent Mock Mason** also came to participate in this war but due to confusion his camel went into the rebels' camp where he was murdered and his body was hanged outside the Auwa fort. The tomb of Mock Mason is situated in Auwa which is also called the tomb of the camel and the Rebari community of camels prays at this tomb.
- Holmes took possession of Auwa on 20 January 1858.
- While returning to Ajmer, he took the idol of Sugali Mata, the Kuldevi of Champawat Thakurs of Auwa, to Ajmer, which is currently kept in the Bangar Museum of Pali.
- **Sugali Mata** is said to be the goddess of the **1857 revolution in Rajasthan**.

## Waterway will be built from Barmer to Kutch

- Waterway will be built from Barmer in Rajasthan to Kutch in Gujarat.
- For this, the Rajasthan government has formed a State Level Committee for River Transport.
- Abhay Kumar, Additional Chief Secretary of the Water Resources Department, has been made the chairman of this committee.
- The length and width of this waterway will be about 490 km, 100 meters respectively.
- Its depth will be about 4 meters and cargo ships (termes) of 3,000 ton capacity will be able to sail.
- This will make inter-state trade cheaper than road transport. Along with tourism, local people will also get employment opportunities.

## Bahaj village (Deeg): 2,500 years old Yajna Kund, statue of Ashwani Kumaras and remains of tools made of bones found

- During the excavation of the mound in Bahaj village of Deeg, Rajasthan, the Archaeological Survey of India has found a 2,500 years old Yajna Kund, metal tools, coins along with the head of the Mauryan period Mother Goddess.
- Apart from this, statue panels of Ashwani Kumars of the Shunga period and tools made of bones and pieces of earthen pots believed to be of the Mahabharata period have been found.
- During the excavation, tools made of bones of ancient times and statues made of ancient baked clay of the Mauryan period have also been found.

- A couple statue of Ashwani Kumaras has been found which is from the Shunga period. The names of Ashwani Kumaras in the Mahabharata were Dastra and Nasatya.
- For the first time in India, the evidence of Ashwani Kumars of 200 BC has been found in Bahaj village.
- The Archaeological Department has also expressed the possibility of the ancient name of Bahaj village being Baj Nagar.
- After a long gap of 50 years, excavation work has been started on a large scale in the Braj region.

## Rajasthan's longest ropeway

- Rajasthan's longest ropeway will be established in **Jaipur**.
- It will connect Jaigarh and Nahargarh with Amer Palace.
- The length of this ropeway connecting these three tourist places is proposed to be 6.5 km.
- This will promote adventure tourism in the city. Along with this, tourists will be able to see three big monuments in a few hours.
- There will be 4 stations of this ropeway. The first station will be built in the rear section of Amer Mavtha.
- Tourists can be taken directly from Amer Mavtha to Madho Singh Ki Than (second station) behind Amer Palace. The third station will be built near the entry gate of Jaigarh, while the fourth station will be built at Nahargarh.
- This proposal has also been approved by the Central Government.

## Integrated Health Management System 2.0

- Integrated Health Management System 2.0 will be implemented to strengthen health services in Rajasthan and make the medical system completely online.
- This is an ambitious and visionary project with a view to provide easy access of healthcare services to the general public.
- This will be a state-of-the-art health management system, which will bring a positive change in the medical system of the state.
- Under this system, facilities like electronic health record, Digi Health Locker, relief to patients from queues, unified digital survey, KPI based dashboard, single window system for health related licenses and NOC etc., tele ICU, geo tagging based map of the hospital will be provided.

- This will bring most of the health services online making it easier for patients to get treatment.
- This will enable real time monitoring of consumption and availability of medicines.

## Incubation center for CA professionals and CA students will be built in Chaksu, Jaipur.

- Institute of Chartered Accountants of India (ICAI) will set up a Center of Excellence in the country for CA professionals and CA students.
- 11 Centers of Excellence will be built in the country at a cost of 500 crores. Out of these, 2 Centers of Excellence have been built in Chaksu, Jaipur and Hyderabad each and 9 are to be built.
- In its second phase, the process of building an incubation center in Chaksu has been started.
- It will have a residential facility and a staff of about 15 people including research associate professor, finance staff.
- There will be many types of labs in the incubation to support the ideas of the students and convert them into business models.
- Many facilities like research, teaching and learning, digital library, community, impact, technology and virtual lab will be made available.

## RSGL's Green Energy-Clean Energy Facility

- Rajasthan State Gas Limited (RSGL), a joint Enterprise of the Rajasthan government, has connected more than 25,000 citizens in Kota with Green Energy-Clean Energy Facility.
- Apart from this, services are being expanded by providing CNG facilities in Kukas and Neemrana of Jaipur and CNG and PNG facilities in Kota.
- RSGL has provided Domestic Piped Natural Gas (DPNG) facility to 5,064 families in Kota.
- RSGL is providing green energy to vehicles by operating 10 CNG stations.

## Monitoring of seasonal diseases will be done through ODK app

- The Medical and Health Department has made an important innovation towards strengthening medical and health facilities.
- The monitoring of seasonal diseases will now be done through ODK app.
- With this, effective steps can be taken quickly for the prevention and control of seasonal diseases in the state.

- The main objective of this app is to reduce the cases of malaria, dengue and chikungunya.

## 'Hari Van Vriksharopan Abhiyan'

- This campaign will be run in the state by the Medical and Health Department of Rajasthan.
- This important campaign will be run from 1st to 31st July.
- Under this, 1 lakh plants will be planted in the medical institutions of the state for environmental protection and increase in greenery.
- Its objective is to ensure better environment, greenery, shade and environmental protection in medical institutions.
- Under this, 5 plants will be planted in community health centers and medical institutions of lower level and 10 plants in higher medical institutions.
- After planting, the responsibility of its health, water and security for 5 years will be of the concerned institution.
- For the successful implementation of this campaign, Hari Van Mitra of 11 medical institutions will be honored at the state level.

## National Cooperative Spice Fair

- Organized by: Jawahar Kala Kendra, Jaipur from 19 to 28 May, 2024.
- Under the joint aegis of the Department of Cooperation and Rajasthan State Cooperative Consumer Federation.
- In the cooperative sector, Rajasthan is the only state in the country, which has been taking the initiative to provide pure spices to the people of Jaipur by organizing the Cooperative Spice Fair for many years.
- Objective: To benefit both the producer farmers and the common citizens.

## Kota Police's agreement with Meta to prevent suicide in Rajasthan

- To prevent suicide of students in Kota, Kota Police has signed an agreement with Meta Company ('Metaschema Tagging and Eschema).
- Rajasthan Police Director General (DGP) Utkal Ranjan Sahu has issued an order to implement this model of Kota Police in the entire state.
- Kota Police is operating this model throughout Rajasthan.
- Under this, now if anyone posts anything on Facebook and Instagram like messages expressing stress, intention of suicide and self-harm, photos or videos, then Meta will immediately flag it in its algorithm (system) and will immediately share its information with Kota Police.
- This information will contain the technical details of the posted material and the person.
- The police team on ground of the concerned district will go and stop the concerned person from committing suicide. His family members will also be alerted.

## MoU renewal for free surgery of children suffering from heart disease

- The MoU between the Medical and Health Department of Rajasthan and Shri Sathya Sai Heart Hospital, Ahmedabad and Rajkot, Gujarat (Prasanthi Medical Services and Research Foundation) was renewed.
- Through this MoU, children and adolescents from 3 months to 18 years suffering from heart disease will be able to receive the facility of free heart surgery under the State National Child Health Program RBSK.
- Under the RBSK program, mobile teams of trained health personnel conduct health screening of every child in Anganwadi centers, madrasas, government schools.
- Apart from this, children suffering from rare congenital diseases are identified and provided complete treatment free of cost in major hospitals.

## MoU between CUTS and Rajasthan Department of Commerce

- An agreement was signed between CUTS International and the Department of Commerce to promote investment in Rajasthan.
- This MoU was signed between the Department of Industry and Commerce, CUTS International and Rajasthan Export Promotion Council (REPC) to facilitate international trade and bring investment in the state.
- The objective of this cooperation is to promote industrial development and targeted investment in Rajasthan.

## Government efforts for cancer treatment in Rajasthan

- Apex Cancer Institute in Jaipur, State Cancer Institute, Tertiary Cancer Centers in Bikaner and Jhalawar are operational.
- Apart from this, PET scan facility is also

available in Jaipur and Bikaner in Rajasthan. In Rajasthan, screening of 3 types of common cancers such as oral, breast and cervical cancer is being done in district hospitals and sub-health centres.

- Cancer units are operational at the district level in Rajasthan.

- Hepatitis-B vaccine is being administered for the prevention of liver cancer.

- Efforts are being made to include HPV vaccine in the Universal Vaccination Programme for the prevention of cervical cancer.

- 8 cancer vans are operational in Rajasthan, one each at Ajmer, Bikaner, Bharatpur, Kota, Jodhpur and Udaipur zone headquarters and two vans in Jaipur.

- One medical officer and two staff nurses from district hospitals have been posted in the cancer care unit after getting special training from Asian Cancer Institute, Mumbai.

- In Rajasthan, a policy regarding cancer is being prepared with certified data of cancer patients with the technical support of ICMR-NCDIR Bangalore.

- Note: 17.9% deaths globally, 9.9% in India and 9.3% in Rajasthan are caused due to cancer.

## Blood Transfusion Services Section will be established in Rajasthan

- For the smooth functioning of blood banks in Rajasthan, a Blood Transfusion Services Section will be established under the Director of Public Health.

- This section will coordinate with the Drug Control Department in Rajasthan and ensure transparency and regular monitoring of all the work related to the blood bank.

- In this context, regular training will also be provided to all the doctors and paramedical staff related to the blood bank.

- By forming zonal teams, inspection of all blood banks will be ensured at regular intervals.

- The Medical Department will prepare online software for better vigilance of blood banks.

- It will have a bar code based inventory management and supply system.

- Real time monitoring of blood banks will be possible through this software.

## Ranking of e-filing system released by Rajasthan Government

- Recently, the Rajasthan Government has released the ranking of district collectors of 47 districts of the state regarding the e-filing system.

- In this ranking, 7 districts Salumbhar, Shahpura, Beawar, Kekri, Sanchore, Gangapur City and Khairthal-Tijara are included in the top-10 districts for the first time.

- Out of these, 3 districts Salumbhar, Shahpura and Sanchore are consistently at the top 3 positions-
  1. Jasmeet Singh Sandhu, Salumbhar
  2. Rajendra Singh Shekhawat, Shahpura
  3. Shakti Singh Rathore, Sanchore

- Salumbhar's District Collector Jasmeet Singh Sandhu is in the first position. He is disposing off one file in 11 minutes.

- In this ranking, Chittorgarh's District Collector Alok Ranjan is at the last position. Alok Ranjan is disposing off one file in 22 hours and 22 minutes.

### E-filing system

- Under the e-filing system, information about how long any officer, especially the district collector, keeps a file with himself without taking a decision, reaches the Chief Secretary and the Chief Minister directly.

- Under this, the time of arrival of any file to the officer in the state and the time of its disposal is noted.

- Its purpose is to increase administrative efficiency and ensure accountability of officers.

## Tigers in Rajasthan

- Currently, the number of tigers in Rajasthan has increased to 134.

- Ranthambhore Tiger Reserve in Rajasthan currently has the highest number of tigers (73).

### Rajasthan currently has 5 tiger reserves-

1. Ranthambore Tiger Reserve in Sawai Madhopur
2. Sariska Tiger Reserve in Alwar
3. Mukundra Hills Tiger Reserve in Kota
4. Ramgarh Vishdhari Tiger Reserve in Bundi
5. Karauli Dholpur Tiger Reserve

- Apart from this, the Union Ministry of Environment, Forest and Climate Change has also given in-principle approval to declare Kumbhalgarh as a Tiger Reserve in Rajasthan.

## Lands of 1 crore farmers of Rajasthan will be linked to Aadhaar

- Under the Digital India Land Records Modernization Program (DILRMP) of the Central Government, the lands of about 1 crore farmers of Rajasthan will be linked to Aadhaar number.
- For this, after 5 years, the Central Government has approved a budget of Rs 582.61 lakh for Rajasthan and released in amount of Rs 45.72 lakh.
- In this, Aadhaar will be integrated with the land records by the Revenue Board. The state's Information and Communication Department will give permission for linking land records with Aadhaar. After this, a provision will be made to link Aadhaar to the software related to online jamabandi.

## Shiprocket Conference to Increase Export Potential

- Organized in: Jodhpur (Rajasthan).
- Organization: Directorate General of Foreign Trade (DGFT) and e-commerce platform Shiprocket.
- Objective: To increase the export potential of MSME.

## Operation Anti Virus

- This operation was conducted in Bharatpur and Mewat region to curb cyber fraud.
- This operation was conducted in collaboration with the Indian Cyber Crime Coordination Center (I4C) of the Central Government.
- A joint research team was also formed to prevent and take action against cyber criminals of Mewat region.
- Mewat region in Rajasthan is called the Bastion of cyber fraud.

## Operation Clean Sweep

- This operation was started by Jaipur Police.
- Under this, a campaign was launched in Jaipur against drug smuggling.

## Mission Sun-Rakshan

- Mission Sun-Rakshan 24 has been started in the Animal Husbandry Department of Rajasthan to save animals and birds from the scorching heat.

- This campaign has been started with the aim of protecting cattle and birds from heat and heatstroke.

## Guidelines of Bhamashah Samman Samaroh-2024 released in the education sector

- The guidelines of Bhamashah Samman Samaroh-2024 have been issued by the Education Department of Rajasthan.
- The education department of the state has once again made a cut in the amount under the Bhamashah Samman.
- The Bhamashah Samman has also been cut at the district level.
- **Now 'Shiksha Shri' Samman will be given for a contribution of Rs 5 lakh or more**.
- Earlier, this honor was also given at the district level for a contribution of more than Rs 1 lakh.
- According to the new guidelines-
  - Contribution of more than Rs 1 crore: **'Shiksha Vibhushan'** award will be given.
  - Contribution from Rs 30 lakh to Rs 1 crore: **'Shiksha Bhushan'** Award
  - Contribution from Rs 5 lakh to less than Rs 30 lakh: **'Shiksha Shri'** Award
- Note: Till 2022, Shiksha Bhushan was given to those who contributed Rs 15 lakh to 1 crore, but in the year 2023, the contribution amount for this award was increased from Rs 30 lakh to 1 crore.

## Chandrapal Singh and Harikesh Meena awarded President's Police Medal Award

- Two security personnel of Rajasthan have been awarded the President's Police Medal.
- These include Chandrapal Singh of Bharatpur (medal posthumously) and Harikesh Meena of Jhunjhunu.
- Chandrapal Singh was working as a head constable in the 156 battalion of BSF. He was martyred in the terrorist attack on Bhuriwala post of Kupwara sector of Kashmir.
- He was awarded the President's Police Medal for his contribution to the service of the country.
- Apart from this, Jhunjhunu district jawan Harikesh Meena was also awarded the Police Medal for Gallantry.

## Ashira awarded 'The G. Keith Funston Prize in Economics' in USA

- Ashira of Rajasthan has been awarded the prestigious 'The G. Keith Funston Prize in

Economics' in the United States of America (USA).

- Ashira is a final year Bachelor of Science in Quantitative Economics student at Trinity College, USA.
- This award was given for her outstanding academic achievement in economics.

## Arijit Banerjee

- Arijit Banerjee, a 1991 batch Indian Forest Service (IFS) officer of Rajasthan, has been appointed as the new Head of Forest Force (HoFF) of the state.
- Banerjee's tenure will be till October 2026.
- Arijit Banerjee has been promoted to the pay scale of Principal Chief Conservator of Forests (PCCF) - Head of Forest Force of the Indian Forest Service.
- These orders will come into effect after the current HoFF Munish Garg retires on May 31.

### HoFF

- The HoFF in India is the highest-ranking officer of the Indian Forest Service (IFS).
- The Indian Forest Service is one of the three All India Services in Indian states and union territories.
- Each Chief of Forest Forces is an Indian Forest Service (IFS) officer and holds the rank of Principal Chief Conservator of Forests (PCCF).
- The HoFF is the head of the forest department in Indian states and is appointed by the Governor as one of the most senior Principal Chief Conservators of Forests in the state.
- They are selected on the recommendation of the Council of Ministers headed by the Chief Minister.
- The HoFF is equivalent in rank and influence to the state police chief (DGP), Chief Secretary and Lieutenant General of the Army.

## Nidan Medical Checksport developed for health care

- To deal with health related challenges, Jaipur's Darsh, Kanhava, Nakshatra and Rishabh have developed Nidan Medical Checksport.
- The Checksport app will provide quick help to patients and medical professionals.
- This will provide a centralized platform for communication between patients and doctors.

## TOFR Scheme

- TOFR full name: Tree Outside Forest in Rajasthan
- This is an important scheme of the Forest Department of Rajasthan.
- It has been started on the lines of the Central Government's 'Tree Outside Forest' scheme.
- Under this scheme, a target has been set to plant 5 crore saplings outside the forest area.
- This scheme is to increase greenery outside the forest area in Rajasthan.
- The scheme will be implemented in the current financial year with the cooperation of the Forest Department, various organizations and the general public.
- Under this, 4 crore saplings will be distributed to the general public, NGOs and other government and non-government organizations.
- Under this scheme, plantation will be done in 70 thousand hectares of area in the current financial year.

## PM Shri schools will be developed as excellent education centers

- PM Shri schools will be developed as excellent education centers by strengthening the infrastructure in Rajasthan.
- In this, co-curricular activities will be promoted along with the curriculum to ensure the all-round development of the students.

### PM Shri Vidyalaya Yojana

- The objective of this scheme is to completely transform the schools by ensuring access to quality, equal and inclusive education at all levels in accordance with the recommendation of the National Education Policy.
- In the first phase of the centrally sponsored PM Shri Vidyalaya Yojana, 402 schools of the state were selected.
- In the second phase of PM Shri Vidyalaya Yojana, 237 PM Shri Vidyalayas of Rajasthan were selected on 7 March 2024.
- So far, a total of 639 schools of Rajasthan have been selected in this scheme.

## Rajasthan's second multi-disciplinary research unit

- Rajasthan's second multi-disciplinary research unit will be set up in Pali.

- For this, Rs 5 crore have been sanctioned by the Indian Council of Medical Research (New Delhi).
- With this, separate research labs and separate resources will also be made available for the project in the college.
- After its complete setup is ready, research will be done on 9 major diseases including silicosis, depression, diabetes, menstrual hygiene and thyroid disorder.
- The cost of this research will also be borne by the Indian Council of Medical Research (New Delhi).
- Till now, there is no test available which uses biomarkers to detect the level of depression.
- After research, depression can be detected by taking a sample of the patient's blood like sugar is detected.
- Note: The first research unit out of the 17 medical colleges of Rajasthan Medical Education Society (RajMES) was started in **Dungarpur**.

## Gems and Jewellery Gem Bourse to be built in Jaipur

- A 12-storey Gem Bourse will be built on the lines of Mumbai and Surat in **Sitapura, Jaipur, Rajasthan.**
- It will be built in an area of 44 thousand square meters at a cost of 1500 crores.
- Jaipur's Gems and Jewellery Bourse will have 1500 offices, 300 kiosks, 1 large auditorium and 2 conference rooms.
- It will be built under the joint aegis of Gems and Jewellery Export Promotion Council and Jewellers Association.
- Jaipur has been known as the **market of coloured stones or Emerald Hub**.
- After the formation of Gem Bourse, color stone jewellery will also get a boost.
- Gems and jewellery worth Rs 11269.11 crore has been exported from Jaipur in the year 2023-24.

## Heavy water plant to be set up in Rawatbhata

- Another heavy water plant of Rajasthan will be set up in Rawatbhata (Chittorgarh).
- This plant will help the growing demand for heavy water in non-nuclear sectors such as electronics, semi-conductors, medicine.
- A proposal will be sent to the Department of Atomic Energy for the expansion of Rawatbhata heavy water plant.

- Recently, the heavy water plant located in Rawatbhata has created a world record by producing heavy water at the lowest power consumption.
- The Heavy Water Board will cooperate in increasing the use of green energy in the country.
- A pilot project of green energy hydrogen plant will be set up in Rawatbhata itself with the new technology of Bhabha Atomic Research Center to achieve the target of hydrogen gas by 2030.

## Heavy water

- Heavy water ($D_2O$) or deuteriumoxide is composed of two atoms of deuterium and one atom of oxygen.
- Deuterium is a stable isotope of hydrogen which has twice the mass of hydrogen due to the presence of an extra neutron in its nucleus.
- Deuterium is present in hydrogen and hydrogen-containing compounds such as water, hydrocarbons, etc.
- It can be used as a moderator and coolant in pressurized heavy water reactors (PHWR).

## Committee formed for ICJS 2.0 in Rajasthan

- ICJS full form: **Inter-Operable Criminal Justice System.**
- Recently, a meeting of the state level committee constituted for the implementation of Inter-Operable Criminal Justice System 2.0 was held under the chairmanship of Chief Secretary Sudhansh Panth.
- In this, the proposal was approved after a detailed discussion on the action plan prepared for ICJS 2.0. This approved proposal will be sent to the Government of India.
- It is based on the principle of 'One Data, One Entry'.
- Its main objective is to integrate the five pillars of the criminal justice system, i.e. police, e-prosecution, e-jail, e-court, e-forensic and to exchange data seamlessly.
- This project will play an important role in further strengthening smart policing.

## ICJS

- ICJS is a national platform to enable integration of key IT systems used for delivery of criminal justice in the country.

- It seeks to integrate the five pillars of the system, viz. Police (through Crime and Criminal Tracking and Network System), e-Forensics for forensic labs, e-Courts for courts, e-Prosecution for public prosecutors and e-Prison for prisons.
- The ICJS system is made available through a dedicated and secure cloud-based infrastructure with high-speed connectivity.

## Plants will be provided with geo-tagging in all districts of Rajasthan

- Intensive plantation will be done by the Rural Development and Panchayati Raj Department in Rajasthan.
- The Chief Executive Officer of the Zila Parishad in all the districts will prepare the necessary action plan by May 25 in coordination with the District Forest Officer of their district in collaboration with other departments.
- Before planting the saplings, geo-tagging of each sapling, fencing of the plantation site, adequate availability of saplings will be ensured from June 1 to June 30.
- Plantation campaign will be implemented in all districts from July 1 to August 15.

## 110 places will be developed as eco-tourism destinations in Rajasthan

- For promoting eco-tourism in Rajasthan, 110 eco-tourism destinations will be developed in various districts of the state by the Forest Department.
- In this, 10 tourist places of Jaipur and Udaipur each have been included.
- For this, budget will be allocated by the department.

## Drinking water and irrigation facility will be made available in Ramganjmandi (Kota) area from Takli Dam

- Ramganjmandi subdivision area is dependent on another district for water supply. Water is being brought for Ramganjmandi area from Rana Pratap Sagar Dam located in Rawatbhata, about 70 km away.
- Water will be supplied from Takli Dam in Ramganjmandi area by the Water Supply Department of Rajasthan.

## Takli Dam Medium Irrigation Project

- The Takli Dam Medium Irrigation Project was approved in 2006 during Vasundhara Raje's first tenure as Chief Minister.

- 2012 was set as target to complete the construction of this dam.
- But due to delay in budget and compensation and opposition from the villagers, the work could not go smoothly.
- The construction of Takli Dam was completed in 2023.
- By filling the Takli Dam, drinking water will be available in Ramganj Mandi and farmers will also get water for irrigation.

## Rajasthan ranked first in the country in voter awareness

- The Election Commission has released the ranking of the states on the basis of better performance in voter awareness on social media 'X', Instagram, Facebook and YouTube) across the country.
- In this ranking, Rajasthan and Jharkhand have jointly secured the first position.
- CEO Rajasthan's 'X', Instagram, Facebook accounts have received around 11 lakh impressions in the month of April.

### Ranking in terms of voter awareness

1. Jharkhand, Rajasthan (jointly)
2. Karnataka
3. Uttarakhand
4. Uttar Pradesh, Punjab (jointly)
5. Madhya Pradesh

- The current Chief Election Officer of Rajasthan is Praveen Gupta.

## Rajasthan ranked first in taking enforcement samples

- Rajasthan has secured the first position in the country in taking enforcement samples to prevent adulteration of food items.
- Against the target of 5,880 samples set by the Food Safety and Standards Authority of India this year, 98 Food Safety Officers in Rajasthan were given a target of 5,880 samples, where in 16,691 samples were taken in Rajasthan.

## Counting of Great Indian Bustard in Jaisalmer

- Counting of Great Indian Bustard was done during the annual waterhole survey in the National Desert Park, Jaisalmer. The number of Great Indian Bustard birds in Jaisalmer is currently 64, while it was 42 birds in the year 2022.
- The Great Indian Bustard is also known as Godawan in Rajasthan. It is the state bird of Rajasthan.

- The Great Indian Bustard is an endangered species that mainly lives in the dry grasslands.
- Waterhole technique is used to count wildlife in desert areas.
- Great Indian Bustard was counted only in Ramdevra and Jaisalmer.
- Under this, 21 Great Indian Bustard were seen in Ramdevra area, while 43 were seen in Sipla, Sudasari, Gajai Mata, Jamra, Chauhani and Barna areas of Jaisalmer.
- Apart from this, more than 1,000 chinkaras, 30 desert cats, 150 foxes and more than 100 vultures were also counted.
- The scientific name of Great Indian Bustard is 'Ardeotis nigriceps'.
- The state with the highest number of Great Indian Bustards in India is Rajasthan.

## Jaipur became the 11th busiest airport in India

- The Airport Authority of India (AAI) has released a report with the flight operation data of various airports.
- In terms of business from flight operations, Jaipur Airport has been ranked 11th in the country. Airports like Goa, Guwahati, Trivandrum, Srinagar are lagging behind Jaipur.

### Busiest Airports of India
1. Delhi
2. Mumbai
3. Bengaluru
4. Hyderabad
5. Kolkata

## Prem Kanwar

- She has become the only crocodile rescue expert from India.
- Prem Kanwar is working in Mukundra National Park.
- Prem Kanwar is the first woman forest worker of the country who attended the 27th conference of Crocodile Specialist Group in Darwin, Australia and took a month's special training in the International Forest Area.
- She was given special training in Australia for the rescue of crocodiles and their management.

## Rajasthan Forensic Science University

- It will be established in **Jaipur**.
- Its objective is to prepare experts of different wings in forensic science and promote research.
- Tests like narco, brain mapping will be conducted here. It will be equipped with robust infrastructure, experts, world class equipment.
- A budget of Rs 150 crore has been set for this. According to its draft, more than 10 research blocks will be built in the university.
- Institute of Forensic Biological Sciences will conduct research on forensic biology serology, DNA finger printing.
- Institute of Cyber Forensics and Cyber Security will conduct research on cyber forensics, cyber crime investigation, cyber security, artificial intelligence, machine learning and drone forensics.
- Institute of Behavioral Forensics will conduct research on lie detection, narco test, brain mapping.
- 50 courses including diploma, graduation, PhD will be made available in this university.
- Training will be given to officers of ED, CBI, IB, NIA, DRI.

## MoU for skill development and training between CSIR-CEERI and Rajasthan University (RU)

- For this, an agreement was signed between CEERI Pilani Director Dr. P.C. Pancharia and Rajasthan University, Jaipur Vice Chancellor Prof. Alpana Kateja. Under this, Rajasthan University will also start National Skill Development Course to promote semiconductor research, training and efficiency in the field of physics and electronics.
- Both the institutions will collaborate for credit, certificate, diploma and faculty training courses for this.
- Students of Rajasthan University will now be able to take special training in skill development at CSIR-CEERI Pilani.
- Semiconductors are used in modern electronic devices which are useful in the field of agrotech, biotech, biophysics and geology.

## Rajasthan's startup EF Polymer included in Forbes list

- Udaipur's startup EF Polymer is also included in Sustainable Farming in the prestigious American magazine Forbes' '30 Under 30 Asia of the year 2024'.

- This company was founded by Ankit Jain and Narayan Lal Gurjar in 2018.
- This startup makes a hydrogel called Fasal Amrit with advanced bio polymer technology.

## Rajasthan's major dams included in National Hydrology Project

- Under this, Rajasthan's major rivers and dams will be connected to SCADA system.
- Under this, data will be prepared using high-tech equipment by calculating the condition of rivers and dams, water level and inflow with automatic machines during monsoon. Water data will be shared among 12 departments.
- On the basis of this data, it will be convenient to supply water from the dams and flood situation can be predicted.
- On the basis of this, the concerned agencies will become active in advance and will be able to prevent the damage caused by floods.
- The central government has fixed a deadline to connect the dams built on Rajasthan's major rivers with SCADA (Supervisory Control and Data Acquisition).
- The three dams of Chambal river, Kota Barrage, Rana Pratap Sagar Dam and Jawahar Sagar Dam are also included in this project.

### National Hydrology Project (NHP)
- It was started in the year 2016 as a central sector scheme.
- In this, 100% grant was given to the implementing agencies at the all India level.
- This project is funded by the Ministry of Jal Shakti of the Central Government, Department of Water Resources, River Development and Ganga Rejuvenation (World Bank).
- Under this, there is a provision of expenditure with a budget outlay of Rs 3,680 crore in a period of 8 years.
- The duration of this project initially set for March 2024, has been extended to September 2025.
- The objective of this project is to improve the extent, reliability and accessibility of information related to water resources and strengthen the capacity of targeted Water Resources Management Institutions in India.

### SCADA System
- Full name: Supervisory Control And Data Acquisition
- This is a remote control based automated centralized system.
- Its entire system is centralized online. This will provide information about faults in water supply.
- It will issue alerts and provide the correct location of the fault which will save time by controlling the voltage.
- Online guidelines can also be given through the system to engineers about the problems in the line.

## Radar absorbing paint prepared for fighter planes by Defense Laboratory Jodhpur

- Radar absorbing paint prepared by Defense Laboratory Jodhpur, affiliated to Defense Research and Development Organization, will be applied on all fighter planes of the Indian Air Force.
- This will keep the fighter planes of the Air Force out of the reach of the radar of enemy countries.
- This technology is being transferred to 3 companies by DRDO.
- Under this, the companies will go to the Air Force base and get the fighter planes painted.
- DRDO Jodhpur had prepared radar absorbing paint in 2019, after which it was being tested for 5 years.
- This paint will also be used on objects of strategic importance.
- During the test, the radar of the fighter plane flying in the air could not harm the air base after it was painted with this paint.
- This will keep the airbase safe from the laser bombs of the fighter planes of enemy countries. The paint was successfully tested on Mig-29 fighter aircraft at the Navy base in Southern India.
- Radar absorbing paint is also used on France's Rafale fighter aircraft and America's F-14 fighter aircraft.
- Russia and China have also developed this technology.

### Features of radar absorbing paint
- Capable of absorbing waves up to 90 percent.
- Stable at low and high temperatures.
- Resistant to hydraulic oil, water, air turbine fuel.
- Capable of withstanding thermal shock cycling.
- Can be easily painted using a pressure gun.

## Electricity will be generated in a lignite based power plant in Bikaner by a joint venture of the Center-State.

- Electricity will be generated from lignite in a 125 MW capacity plant in Gudha West of Bikaner in Rajasthan.
- For this, an agreement will be made between Rajasthan State Electricity Generation Corporation and Government of India's company Neyveli Lignite Corporation and a joint venture company will be formed.
- This will make cheap electricity production possible in Rajasthan.
- Lignite is available in abundance in Rajasthan and due to it being a cheap fuel, the cost of electricity production from it has been estimated to be Rs 3.80 per unit.
- This will save about Rs 2,000 per tonne of transportation cost. Currently coal is procured from Chhattisgarh, Odisha for thermal power plants.
- For this reason, electricity production from lignite based plants will be cheaper by 90 paise to one rupee per unit in comparison to thermal power plants.
- Apart from this, there is a reserve of lignite in Jalipa Kapurdi Mines of Barmer.
- At present, electricity is being produced from lignite in Rajasthan, but this is being done by a private company Rajwest.
- Rajwest has 8 units of 135-135 MW capacity.

## RTU became the first technical university of Rajasthan with maximum NBA accreditation

- National Board of Accreditation (NBA) has awarded accreditation to Mechanical Engineering, Information Technology, Electronics and Communication Engineering branches of B.Tech Engineering program of Rajasthan Technical University Kota.
- NBA has already given recognition to 5 branches including Electrical, Civil, Computer, Instrumentation and Control, Production and Industrial.
- Under this, Rajasthan Technical University has become the first technical university in Rajasthan with maximum 8 NBA accreditations.
- RTU has already got NBA (National Board of Accreditation) in 8 out of 11 courses.

## The central government will encourage the private sector for research in critical minerals.

- The central government will encourage private sector participation to promote the development of important and strategic minerals in Rajasthan.
- This includes 29 types of critical, strategic and other minerals like rare earth elements, potash, lithium, tungsten, cadmium, cobalt, copper, graphite, titanium, beryllium, silver, zinc, gold, lead.
- It has been decided to conduct e-auction of Exploration License (EL) for scientific and global level exploration of these minerals.
- This will increase the participation of private sector for Exploration License (EL) and will speed up the exploration and development of minerals in the country.

## Bone and Tissue Bank to be set up in Sawai Mansingh Hospital, Jaipur

- Now, Human Leukocyte Antigen (HLA) Lab, Bone and Tissue Bank will be set up in Trauma Centre for serious accident victims and those coming for transplant in Sawai Mansingh Hospital, Jaipur.
- A budget of about Rs. 4 crore has been kept for this.
- Human Leukocyte Antigen (HLA) test is required for organ transplantation after organ donation.
- The tissues of the organ donor and receiver are matched. Then it is ascertained whether the donor's organ is suitable for the receiver or not.
- This will reduce the time taken in transplant.
- Along with HLA lab, bone and tissue bank is also being built in the hospital.
- If the damaged bone is left at the accident site or the bone is severely damaged, a new bone can be inserted to bridge the gap.
- This bank will also prove to be a lifesaver for patients struggling with bone loss due to bone tumors or cancer. It will have a dedicated staff.
- Bone and tissue will be stored in the bank at a temperature of minus 77 degrees Celsius.
- Bone for the bank will be collected with the consent of the relatives of brain dead patients.

## Rajasthan's first hi-tech city

- Rajasthan's first hi-tech city will be developed in Jaipur. (Announcement in Interim Budget 2024-25)
- Many states in India have developed satellite cities near their big cities. For Example Pune near Mumbai, Cyberabad near Hyderabad, Gift City near Ahmedabad etc.
- This hi-tech city tech township being built near Jaipur will provide world-class facilities to institutions and companies with IT, Fintech, Financial Management, AI, ML and other new age facilities.
- This will lead to economic development of the capital Jaipur it will also create many new employment opportunities for the youth of the IT sector.

## Water will be brought to Ramgarh Dam in the first phase

- Water will be brought to Ramgarh Dam in the first phase of the Eastern Rajasthan Canal Scheme.
- This will make water available for irrigation and drinking in the surrounding areas including Jaipur district.

## Siddhee Sharma and Anjali Jat

- Rajasthan's young under-19 women players Siddhee Sharma and Anjali Jat were selected for the Under 19 Women's Championship organized by the National Cricket Academy (NCA). It was organized by the National Cricket Academy (NCA) from 23 May to 2 June in Rajkot.
- Siddhee Sharma played in Team D and Anjali Jat in Team C.
- Siddhee Sharma is a right arm all-rounder and Anjali Jat is a right arm medium pace bowler.

## Juhi Prajapati

- Juhi is a gold medalist in the National Open Karate Championship.
- Juhi has won two gold medals in the BSF Open National Karate Championship representing Rajasthan in the age group of 10 and 11 years.
- More than 1500 players from 22 states participated in this championship.

## Asian Jiu-Jitsu Competition

- Venue: Abu Dhabi (United Arab Emirates)
- Organized: Under the joint aegis of the Olympic Council of Asia and the Asian Jiu-Jitsu Union.
- **Nandkishore Jakhar (Jaipur)** won the bronze medal in the 94 kg category.

## Goju-ryu Karate Championship

- Venue: Sri Ganganagar (Rajasthan)
- Organized by: International Olympic Committee and Commonwealth Federation.
- Ojaswa Gajraj won gold medal in under 13 category.
- Ojaswa is a Black Belt First Dan winner.

## National Karate Competition

- Venue: Himachal Pradesh.
- Pranika Bhargava and Mahendra Chauhan won gold medal.
- Viaan Jain, Shaurya Meena and Akshat Sinha won silver medal.
- Aryan won bronze medal.

## 4 players from Rajasthan selected in Indian team of Grappling.

- Asian Grappling Championship will be held in Tagaytay, Philippines.
- 4 players from Rajasthan have been selected in the Indian team.
  1. Dikshita Joshi (90 kg category)
  2. Deepak Nehra (77 kg category)
  3. Pushpendra Singh (71 kg category)
  4. Hansraj Meena (66 kg category)
- Surendra Singh of Rajasthan has been selected as an Asian Referee.

## India won under the leadership of Jagdish Tanwar

- World Tennis Championship (in 50 age group) was organized in Mexico.
- Under the captaincy of Jagdish Tanwar of Rajasthan, the Indian team defeated former world champion France by 2-1.
- The Indian team comprises Jagdish Tanwar (Captain) (Rajasthan), Nitin Kirtane, Ajit Sail and Hatinder Panwar.

## Jainarain Chaudhary

- Jainarain Chaudhary has been appointed as the head coach of the Indian women's volleyball team.

## Akshayraj Singh Rathore

- India won the bronze medal in the Central Asian Open Handball Championship held in Tashkent (Uzbekistan).

- In this, India defeated Kyrgyzstan by 34-31 in the bronze medal match in the men's category.
- India won the bronze medal due to the excellent goalkeeping of Akshayraj Singh Rathore of Rajasthan.
- The Indian team comprised Akshayraj Singh Rathore of Jaipur, Rajasthan, Rai Singh of Hanumangarh and Shahrukh Gauri of Bundi.

## Avalokit Singh

- Avalokit Singh of Jaipur has been selected for the World Junior Squash Championship to be held in Houston, USA.

- Ranked seventh in the current Under-19 national rankings, player Avlokit Singh has previously represented India three times in different age groups in the Asian Championships.

## Sanskar Saraswat

- Sanskar Saraswat of Rajasthan is a badminton player.
- Sanskar Saraswat of Rajasthan will represent the Indian badminton team in the Asian Junior Badminton Championship to be held in Yogyakarta, Indonesia.

# 2. NATIONAL AFFAIRS

## Polity and Governance

### Calcutta High Court cancels OBC certificates in West Bengal from 2010

- The Calcutta High Court on 22 May 2024 has canceled the OBC certificates distributed to 77 communities in West Bengal from the year 2010 to 2024.

- Most of These 77 communities, which were associated with the Muslim religion were issued certificates by the then Mamata Banerjee-led government.

- The High Court gave this decision in the context of a PIL challenging the provisions of the **'West Bengal Backward Classes (other than Scheduled Castes and Scheduled Tribes) (Reservation of Vacancies in Services and Posts)** Act, 2012'.

- The division bench of Justice Tapabrata Chakraborty and Justice Rajshekhar Mantha, while giving the verdict on the PILs challenging the process of issuing OBC certificates, said that some sections of Muslims were given OBC reservation for political purposes.

- The court struck down Section 16 of the 2012 Act as it allows the state government to 'add, modify or alter' the schedule containing backward **classes by mere order**.

- The High Court also clarified that citizens holding OBC certificates who are already in service, or have availed reservation or have been successful in any selection process of the state, will not be affected by it.

- According to the court, the advice of the Backward Classes Commission under the National Commission for Backward Classes Act, 1993 is generally binding on the state legislature.

- The court directed the state's Backward Classes Welfare Department to place a report before the legislature with recommendations to include new classes in the state list of OBCs or exclude the remaining classes in consultation with the commission.

- The bench clarified that the executive orders of the state government classifying 66 categories of OBCs before 2010 were not interfered with as these were not challenged in the petitions.

- **Note: The landmark 1999 Indra Sawhney judgment (on implementation of OBC quota) made quantitative data on backwardness mandatory for inclusion of castes in the OBC list**.

- Note: West Bengal has provision for 17% reservation for OBCs. OBCs in West Bengal are divided into two categories
    - OBC A
    - OBC B

- OBC A refers to extremely backward, while OBC B was refers to backward classes.

### Hindu marriage valid only if performed with proper rites and ceremonies: Supreme Court

- According to a recent Supreme Court judgment, **Hindu marriage is a 'sacrament' and cannot be recognised under Section 7(1) of the Hindu Marriage Act, 1955, unless it is 'performed with proper rites and ceremonies'**.

- The court said that where a Hindu marriage is not performed as per the applicable rites or ceremonies like Saptapadi, the marriage will not be considered a Hindu marriage.

- In other words, for a valid marriage under the Act, the requisite ceremonies must be performed and there must be proof of performance of the said ceremony in case any issue/dispute arises.

- The court said that marriage is not a commercial transaction. It establishes a sacred relationship between a man and a woman.

- The court further declared the marriage certificate of the couple to be invalid as a proof of 'Hindu marriage'.

- This marriage signifies their journey as husband and wife potentially leading towards a future family – the building block of Indian society.

- Hindu marriage strengthens the family unit for progeny and strengthens the feeling of brotherhood within different communities.
- According to the court, marriage provides a lifelong, dignified, equal, consensual and healthy union of two individuals.
- The marriage rites and ceremonies under sub-section (2) of Section 7 include Saptapadi, i.e., the marriage is considered complete after the bride and groom circle the sacred fire.

### Case

- This case is of a couple named Dolly Rani and Manish. Both of them are trained pilots.
- Both of them got engaged in March 2021 and after that in July, they went to a temple and got married and got a certificate and then got the marriage registered on that basis.
- The families of both of them fixed the date of 25 October 2024 to get them married according to Hindu customs.
- But due to increasing mutual differences, this matter reached the court for divorce.
- Note: In their marriage, the Saptapadi ceremony (7 rounds) and rituals of marriage were not performed as per official ceremony or customs.
- Apart from other things, the question before the court was whether a Hindu marriage can be given legal recognition without Saptapadi?
- Under this case, the Supreme Court extensively discussed the rituals of Hindu marriage and its legal and social implications.

### Compulsory acquisition of private property for 'public purpose' without following mandatory procedures is unconstitutional: Supreme Court

- The Supreme Court ruled on May 16 that compulsory acquisition of private property for 'public purpose' without following mandatory procedures would be unconstitutional.
- The bench of Justices P.S. Narasimha and Arvind Kumar said that the right to property is protected as a constitutional right and it has also been interpreted as a human right.
- The Supreme Court gave an order to protect the interests of landowners in case of land acquisition.

- According to this order, the government have the right to acquire people's properties, but for this they have to follow certain conditions.
- That is, acquisition of private property without following proper procedures is unconstitutional.
- During the acquisition of properties, the government has to follow 7 sub-rights under Article 300A.

### Right to Property

- In the original Constitution of India, the 'Right to Property' was a fundamental right under Article 31.
- Under the 44th Constitutional Amendment (1978) by the Central Government, the Right to Property was removed from the Fundamental Right and made a Constitutional Right under Article 300A.
- Under Article 300A, 'No person shall be deprived of his property except by right of law'.
- Thus, the Right to Property is an integral part of the 'Right to Law' in Article 300A.

### 7 Sub-Rights under Article 300A

- The Supreme Court ruled that these 7 rights are the fundamental elements of Article 300 (A).
1. Right to Notice: It is the duty of the State to inform the individual that the State intends to acquire his property.
2. Right to Hearing: The State has to hear the objections of the individual whose property is to be acquired.
3. Right to Reasoned Decision: The State has to give notice that it has decided to acquire the property of an individual.
4. Acquisition only for public needs: The state has to declare that the acquisition is being done for a public purpose.
5. Rehabilitation or fair compensation: The state has to ensure that the person gets fair compensation for the acquisition or there is a proper arrangement for his rehabilitation.
6. Efficient and timely process: The state will ensure that the acquisition is done efficiently and the entire process of acquisition is completed within the prescribed time frame.
7. Right to conclusion: The state has to ensure that the entire process reaches a final conclusion.

- Failure to comply with any of these conditions will be a violation of this law.
- These rights have also been included in many other acts related to acquisition, such as the Land Acquisition Act of 1894, the Land Acquisition, Rehabilitation and Resettlement Act of 2013.

## Inter-Services Organisations (Command, Control and Discipline) Act notified

- The Inter-Services Organisations (Command, Control and Discipline) Act has been notified by the Ministry of Defence.
- The Act came into force from May 10, 2024.
- It was passed by both Houses of Parliament to promote effective command, control and efficient functioning of Inter-Services Organisations (ISOs).
- It received the President's assent on August 15, 2023.
- The Act empowers the Commander-in-Chief and Officer-in-Command of the ISOs to exercise control over service personnel serving under them to maintain discipline and administration, without disturbing the specific individual conditions of service of each service.
- The Act will empower the heads of inter-services organisations and pave the way for speedy disposal of cases.
- This is an important step towards greater integration and cohesion among armed forces personnel.
- This Act has been implemented ahead of the planned reorganization of the Indian Army into integrated theater commands.

## Hearing in the Supreme Court in terms of Article 39b of the Constitution

- A 9-judge constitutional bench headed by Chief Justice of India DY Chandrachud was hearing the case.
- The bench comprised CJI DY Chandrachud, Justice Hrishikesh Roy, Justice BV Nagarathna, Justice Sudhanshu Dhulia, Justice JB Pardiwala, Justice Manoj Mishra, Justice Rajesh Bindal, Justice Satish Chandra Sharma and Justice Augustine George Masih.
- The apex court is hearing a total of 16 petitions including the main petition filed by the Property Owners Association (POA) of Mumbai.

- The POA had filed the petition against Chapter VIII-A of the Maharashtra Housing and Area Development Act (MHADA).
- This chapter, added to the Maharashtra Housing and Area Development Act 1986, provides that the state government has the right to acquire dilapidated buildings and land provided 70% of the owners request to do so.
- The MHADA Act was amended in the year 1986 enforcing the obligation under Article 39 (b). It added Section 1A, which included implementing schemes for acquiring land and buildings so that they can be transferred to needy people.
- The petition argued that the provisions of this chapter violate the provisions of the right to property.
- Under this petition, the Supreme Court will interpret the Constitution on the following issues-
  - Does private property come under the 'resources of the community' under Article 39b?
  - Can the state take control of the private property of an individual or community for public interest?
  - Can the state acquire and redistribute that property?

### Article 39b

- This comes under the Directive Principles of State Policy (DPSP).
- Under this, **the state will allocate natural and human resources in such a way that it benefits maximum people**.
- That is, the state has the right to distribute community or private resources appropriately for public interest and can also make policies.

- **Note:** Despite the state having the right, if the property of an individual has been acquired, then he also has the judicial option to challenge the government.
- The state's right over private property can be challenged on the following grounds:
  - The acquisition is not for 'public interest'.
  - The state has taken possession of the property with bad intentions.
  - If compensation has not been received at market price on this acquisition.

## For the first time in the country, along with the Chief Minister, a national political party has also been made an accused in the scam

- The Enforcement Directorate (ED) has accused Delhi Chief Minister Arvind Kejriwal and Aam Aadmi Party (AAP) for the first time in the money laundering case related to Delhi's excise policy.
- It is the first time in the country that a national political party has been accused.

### Basis of case against political party

- The ED has taken action in this case under Section 70 of the Prevention of Money Laundering Act (PMLA) which deals with the crime of companies.
- Section 70 gives the right to register a case against a political party.
- Under Section 70, when the crime of money laundering is committed by a company, every person who was in charge or responsible for conducting the business at the time of the crime will be considered guilty of the violation and action will be taken accordingly.
- According to this law, a company is a business unit under the Companies Act.
- Under this, a company is also considered as a 'person'.
- A company, unlike a political party, seeks profit. However, the scope of section 70 was expanded to include a political party as a 'company' under the definition of 'association of persons' in money laundering cases.
- Political party is defined as an association of citizens under section 29A.
- Since Aam Aadmi Party is also an association of persons, it will also fall under the definition of company.
- A company is a separate legal entity and its members or those who run it can be prosecuted independently.

### Enforcement Directorate (ED)

- It is a multi-disciplinary organisation that investigates money laundering offences and violations of foreign exchange laws.
- It functions under the Department of Revenue, Ministry of Finance.
- Headquarters: New Delhi.
- The current director of ED is Rahul Naveen.
- It has five regional offices in Mumbai, Chennai, Chandigarh, Kolkata and Delhi.

## Citizenship granted under Citizenship Amendment Act (CAA)

- After the notification of Citizenship Amendment Act (CAA) was issued, for the first time on 15 May 2024, citizenship certificates were handed over to 14 people.
- This was given after their application was processed online through the citizenship portal.
- The process includes application through the portal, process of forwarding the application by the District Level Committee (DLC), scrutiny of applications by the State Level Empowered Committee (EC) and granting of citizenship.

### Citizenship Amendment Act (CAA)

- The Citizenship (Amendment) Act came into force in the country on 11 March 2024.
- Under this Act, the Citizenship Act, 1955 was amended.
- This Act provides for granting Indian citizenship to migrants of Hindu, Sikh, Buddhist, Jain, Parsi and Christian communities who came to India from Afghanistan, Bangladesh and Pakistan before 31 December 2014.
- This is a law to grant Indian citizenship to refugees who came to India after being persecuted on religious grounds from India's three neighboring countries.
- Before CAA 2019, it was mandatory for any person to live in India for at least 11 years to get Indian citizenship, but now this time period has been reduced to 5 years for minorities from neighboring countries.

# 3. ECONOMY

## China became India's largest trading partner country

- China has been India's largest trading partner with bilateral trade of $ 118.4 billion in the financial year 2023-24.
- China overtook the United States in terms of trade with India.
- These figures were released by the economic research institute Global Trade Research Initiative (GTRI).
- Bilateral trade between India and the US was $ 118.3 billion in 2023-24.
- The US was India's largest trading partner in 2021-22 and 2022-23.
- India's exports to China grew by 8.7% to $16.67 billion in FY 2023-24.
- India's exports have increased in sectors such as iron ore, cotton yarn/fabric/madeups, handloom, spices, fruits and vegetables, plastics and linoleum.
- Apart from this, India's imports from China have increased by 3.24% to $101.7 billion.
- India's exports to the United States declined by 1.32% to $77.5 billion in 2023-24. It was $78.54 billion in 2022-23.
- India's imports from the United States declined by about 20% to $40.8 billion.

## Reserve Bank approves transfer of Rs 2.11 lakh crore to Central Government

- The Reserve Bank has approved the transfer of Rs 2.11 lakh crore as surplus to the Central Government for the financial year 2023-24.
- The Board, headed by RBI Governor Shaktikanta Das, decided to increase the contingent risk buffer to 6.50% for the financial year 2023-24.
- **Contingency risk buffer**: It refers to the amount of money that the RBI has to maintain to meet its current liabilities (such as day-to-day costs, employee salaries, etc.) and to perform its statutory duties such as monetary and foreign exchange functions. The Reserve Bank, in consultation with the Government of India, constituted a committee headed by **Bimal Jalan in 2018** to review the economic capital framework of the RBI.

- The Bimal Jalan Committee had recommended that the RBI should maintain a contingency buffer risk ranging from 6.5 per cent to 5.5 per cent of its balance sheet.
- The committee recommended that the surplus after creating the contingency buffer risk be transferred to the Central Government as dividend.
- The Reserve Bank adopted the Jalan Committee recommendation on August 26, 2019.
- Due to COVID-19, the RBI maintained a contingency buffer risk of 5.5% of its balance sheet from 2018-19 to 2021-22.
- Due to strong economic growth, the contingency buffer risk was increased to 6% in 2022-23 and 6.5% in 2023-24.

## SEBI has implemented new rules to curb rumours and a new method for market cap calculation

- SEBI has issued new guidelines to protect the stock market from rumours.
- According to this guideline, if there is a major change in the stock due to any unverified news or rumour, then within 24 hours the company will have to confirm that news and clarify its position.
- Under this, the 250 top listed companies will have to clarify the situation on the news affecting the stock within 24 hours.
- This guideline has come into effect on the top 100 listed companies from June 1, 2024, while it will be applicable to the next 150 companies by December 2024.
- SEBI has issued this circular for companies, stock exchanges and the country's leading business chambers ASSOCHAM, FICCI and CII.
- In this guideline, an Indian standard has been prepared for the verification of market related rumours.
- Now under SEBI's 'Listing Obligation and Disclosure Norms', it will be mandatory to verify any market related information.
- Apart from this, the method of calculating the market value of listed companies in the market has changed.

- According to the new instructions of SEBI, the market cap of companies will be determined by the average price of the last 6 months instead of daily trading.

- These changes will come into effect from 31 December 2024.

- Under this, the ranking of listed companies will be decided on the basis of average market cap from 1 July to 31 December, with 31 December being the cut-off date.

## Securities and Exchange Board of India (SEBI)

- It is a statutory body.

- It was constituted on 12 April 1988 as a non-statutory body through a resolution of the Government of India.

- It was given a statutory status in the year 1992 and the provisions of the Securities and Exchange Board of India Act, 1992 came into force on 30 January 1992. Its main function is to protect the interests of investors in securities and to promote and regulate the securities market.

- Its headquarter is located in Mumbai and regional offices are in Ahmedabad, Kolkata, Chennai and Delhi.

- It is currently chaired by Ms. Madhabi Puri Buch (the first woman chairperson of SEBI).

## Highest ever GST collection of Rs 2.10 lakh crore in April

- Goods and Services Tax (GST) collection of Rs 2.10 lakh crore was the highest ever in April.

- The Finance Ministry has said that the gross GST collection has increased by 12.4% as compared to the same period last year.

## State Bank of India (SBI) became the first bank to become a trading-cum-clearing (TCM) member of India International Bullion Exchange (IIBX)

- State Bank of India (SBI) has become the first bank to become a trading-cum-clearing (TCM) member of India International Bullion Exchange (IIBX) on 13 May 2024 at Gift City, Gujarat.

- This will enable SBI IBU GIFT City to trade on the IIBX platform and settle the trade on behalf of its customers.

- The entry of India's largest bank in this field as a trading-cum-clearing will boost trading volumes at IIBX.

## India International Bullion Exchange IFSC Limited (IIBX)

- It was launched on 29 July 2022.

- IIBX is sponsored by India's leading market infrastructure institutions such as NSE, INDIA INX (subsidiary of BSE), NSDL, CDSL and MCX.

- It is set up in GIFT City Gandhinagar (Gujarat).

- It is regulated by the International Financial Services Centres Authority (IFSCA).

- IIBX has been set up to provide a gateway for importing bullion (gold-silver) into India and to provide a world-class bullion exchange ecosystem to promote bullion trading, investment in bullion financial products and vaulting facilities in IFSC.

- Under this, an Indian jeweler can import bullion directly to India through IIBX by becoming a client or limited purpose trading member of IIBX.

## Sesame: Setu launches India's first Large Language Model (LLM)

- Sesame is India's first Large Language Model (LLM), designed specifically for the banking, financial services and insurance (BFSI) sectors.

- It has been launched by Pine Labs-owned Setu.

- It is a ChatGPT-like service for financial services.

- Fintech firm Setu, in collaboration with domestic AI research firm Sarvam AI, has designed it specifically for the banking, financial services and insurance (BFSI) sectors.

- Sesame empowers facilities like better credit underwriting, fraud detection, loan monitoring, upsell/cross-sell and personalized financial advisory with the help of data enabled by India's digital infrastructure.

- It was launched on 7 May 2024 at 'Adbhut India', an event organized by the non-profit People+AI.

- Setu and Sarvam AI together have made Sesame domain and sector-specific by training it on custom data that is important to India's BFSI sector.

- Note: Sarvam was founded in July 2023 by Vivek Raghavan and Pratyush Kumar.

**Setu**
- Setu is an application programming interface (API) infrastructure provider
- It offers services on bill payments, savings, credit and payments.
- It was founded in 2018 by Sahil Kini and Nikhil Kumar.
- The Reserve Bank of India (RBI) has granted the company a license to operate as an account aggregator.

## India's exports reach record US$778 billion in FY 2023-2024

- The total value of goods and services exported in FY 2022-2023 was US$776.3 billion.
- Service exports increased from US$325.3 billion to US$341.1 billion in 2023-2024.
- Merchandise exports declined from US$451.1 billion to US$437.1 billion in 2023-2024.
- India's exports to several countries including China, Russia, Iraq, UAE and Singapore have seen significant growth in FY 2023-2024.
- The UK, Australia, Saudi Arabia, Netherlands and South Africa are the other countries in the top 10 list.
- India's total imports reduced from US$ 898.0 billion in 2022-2023 to US$ 853.8 billion in 2023-2024.

- India's trade deficit reduced from US$ 121.6 billion in 2022-23 to US$ 75.6 billion in 2023-24.

## Domestic savings fall by over Rs 9 lakh crore in 3 years to Rs 14.16 lakh crore in 2022-23

- According to the latest National Income Statistics 2024 of the Ministry of Statistics and Programme Implementation, net domestic savings fell by Rs 9 lakh crore to Rs 14.16 lakh crore in three years to 2022-23.
- Net domestic savings reached a peak of Rs 23.29 lakh crore in 2020-21. Domestic savings have been declining continuously since 2020-21.
- Net domestic savings declined to Rs 17.12 lakh crore in 2021-22 and to a 5-year low of Rs 14.16 lakh crore in 2022-23.
- The previous low of net domestic savings was Rs 13.05 lakh crore in 2017-18.
- Apart from this, investment in mutual funds has almost tripled in 3 years from Rs 64,084 crore in 2020-21 to Rs 1.79 lakh crore in 2022-23.
- Domestic investment in shares and debentures has almost doubled in three years from Rs 1.07 lakh crore in 2020-21 to Rs 2.06 lakh crore in 2022-23. Bank advances (loans) to households have also doubled in three years to Rs 11.88 lakh crore in 2022-23, as against Rs 7.69 lakh crore in 2021-22.

# 4. INTERNATIONAL AFFAIRS

## India and Iran sign 10-year contract on Chabahar Port

- India and Iran signed an agreement on 13 May 2024 to operate the Shahid Beheshti terminal of Iran's strategically important Chabahar port for 10 years.
- Till now India operated Chabahar's Shahid Beheshti port on a short-term contract which is used to get renewed from time to time.
- Chabahar is the first international port terminal to be operated by India.
- The agreement was signed by Indian Ports Global Limited and Iran's Port and Maritime Organization (PMO) in Tehran, the capital of Iran.
- **Note:** Iran's Chabahar port has two terminals, Shahid Beheshti and Shahid Kalantari. India has got the right to operate only Shahid Beheshti Terminal.
- India will operate the Shahid Beheshti Terminal of Chabahar Port for the next 10 years and the contract will be automatically renewed for the next 10 years.
- This will replace the agreement signed in 2016, which gave Indian Ports Global Limited the right to operate Shahid Beheshti Port for one year.
- The contract was renewed after every one year.
- As part of this agreement, India Ports Global Limited (IPGL) will invest around $120 million in the development of Shahid Beheshti Terminal.
- The Indian government has also extended a loan of $250 million to Iran to improve rail and road infrastructure for better connectivity to this terminal.

## Chabahar Port

- Chabahar Port is Iran's only sea port located on the Gulf of Oman which provides Iran direct access to the Indian Ocean.
- Chabahar Port is located on the Makran coast in Iran's Sistan-Baluchistan province.
- The port is located about 120 km southwest of Pakistan's Balochistan province, where the China-funded Gwadar port is located.

- The nearest Indian port to Chabahar is Kandla Port in Gujarat. It is 550 nautical miles away from Kandla.
- The Chabahar port is also part of the 7,200 km long International North-South Transport Corridor (INSTC).
- It will connect India, Iran, Afghanistan, Armenia, Azerbaijan, Central Asia and Europe via St. Petersburg, Russia.

## Spain becomes 99th member of International Solar Alliance

- Spain has become the 99th member of the International Solar Alliance (ISA).
- Spain has ratified the International Solar Alliance Ratification Instrument required to become a member of the International Solar Alliance and deposited it with the ISA Head of Depository.
- India is the host country of the International Solar Alliance and Abhishek Singh, Joint Secretary in the Ministry of External Affairs, is currently the Head of Depository.

## International Solar Alliance

- Indian Prime Minister Narendra Modi and French President Francois Hollande agreed to establish the International Solar Alliance on the sidelines of the 21st Conference of Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris in 2015.
- It is headquartered in Gurugram (Haryana).
- Its objective is to motivate countries to use solar energy to combat global warming and climate change.
- Initially, countries located between the Tropic of Cancer and the Tropic of Capricorn were eligible to become members of the International Solar Alliance.
- At the first conference of the International Solar Alliance hosted by Prime Minister Narendra Modi and French President Emmanuel Macron in New Delhi on 11 March 2018, the ISA framework agreement was amended to allow all members of the United Nations to become its members.

- This provision came into force from 15 July 2020.
- Its goal is to bring together countries of the world to promote the widespread use of solar energy as compared to fossil fuels.
- So far, 119 countries have signed the ISA framework agreement, while 99 countries have ratified the International Solar Alliance ratification document, which is required to become full members.

## Norway, Spain and Ireland recognize Palestine as a nation

- Norway, Spain and Ireland have recognized Palestine as an independent nation. This recognition officially took place on 28 May 2024.
- Nearly two-thirds of the 193 members of the United Nations have recognised Palestine, including countries like India, Russia and China.
- Algeria was the first country in the world to recognise the two-nation solution, the Palestinian state.
- The United States, Canada, most of Western Europe, Australia, Japan and South Korea have not yet recognised Palestine.

## Proposal passed in the United Nations General Assembly to make Palestine a member

- Recently, a proposal was put forward in the United Nations General Assembly to make Palestine a member of the United Nations.
- This proposal was supported by 143 countries including India, while 9 countries including the United States and Israel opposed the proposal.
- However, passing the resolution from the United Nations General Assembly may give Palestine some special rights. From September 2024, Palestine can participate in the meetings of the United Nations General Assembly, but it will not have the right to vote in any UN resolution.
- After the resolution is passed by the United Nations General Assembly, this proposal will go to the United Nations Security Council.
- Palestine can become a member of the United Nations only with the consent of the permanent and temporary members of the United Nations Security Council.
- In April 2024, a proposal to make Palestine a member was introduced in the UNSC, but the proposal was not passed due to the veto of the United States.

## NPCI will develop a payment system on the lines of UPI in Namibia

- The National Payments Corporation of India (NPCI) on May 2, 2024 announced to help International Payments Limited (NIPL) develop an instant payment system like UPI for Namibia.
- For this, an agreement has been signed with the Bank of Namibia (BON).
- The agreement aims to increase digital financial services in the African country, support person-to-person (P2P) and merchant payment transactions in real time.
- This is NPCI's first collaboration with a central bank to deploy the UPI stack in the international market.
- NPCI International Payments Limited is the international arm of National Payments Corporation of India (NPCI), the company that developed UPI.
- It promotes the use of UPI in other countries.

## Armenia and Azerbaijan agree on settlement of disputed parts of shared border

- Armenia and Azerbaijan have agreed on a settlement on disputed parts of their shared border on 16 May 2024.
- The agreement includes the return of four border villages to Azerbaijan seized by Armenia in the 1990s.
- Under this, four border villages – Baghanis Ayrum, Asheghi Askipara, Ayrimli and Ghizilhajili – will return to Azerbaijan's control.
- This comes after Azerbaijan recaptured its breakaway region of Nagorno-Karabakh in 2023, which has been under control of Armenian separatists for decades.
- The Nagorno-Karabakh conflict was an ethnic and territorial conflict between Armenia and Azerbaijan over the Nagorno-Karabakh region.

## 'Walk the Talk' Yoga Program

- It was organized by the Permanent Mission of India to the United Nations and the World Health Organization (WHO) in Geneva (Switzerland).
- Union Health Secretary Apurva Chandra participated in it along with WHO Director-General Tedros Adhanom Ghebreyesus and other senior officials of the Indian delegation.

**WHO**
- **Foundation:** 7 April 1948
- **Director-General:** Tedros Adhanom Ghebreyesus
- **Headquarters:** Geneva, Switzerland

## First charter of BIMSTEC came into force

- Recently, the charter of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) came into force on 20 May 2024.
- Note: In April 2024, the Parliament of Nepal adopted the BIMSTEC Charter, thereby obtaining the consent of the group's members.

## Importance of BIMSTEC Charter

- With the Charter coming into effect, the organisation will now be able to admit new members and observers.
- The Charter provides a legal and institutional framework for cooperation in the region.
- The Charter also provides legal recognition to the group.
- It enables the establishment of agreements with countries or sub-regional, regional and international organisations and institutions.
- This has established a clear framework for the operation of BIMSTEC.
- The areas of cooperation have been restructured to reduce their number to 7 and each member-state will act as a leader of one area:
- Trade, investment and development - Bangladesh
- Environment and climate change - Bhutan
- Energy as well as security - India
- Agriculture and food security - Myanmar
- People-to-people connectivity - Nepal
- Science, technology and innovation - Sri Lanka
- Connectivity - Thailand

### BIMSTEC

- It is a regional multilateral organisation. Its members are located in the coastal and adjacent areas of the Bay of Bengal.
- Its 7 members are as follows-
  1. Bangladesh      2. Bhutan
  3. India               4. Nepal
  5. Sri Lanka         6. Myanmar
  7. Thailand
- It acts as a bridge between South and Southeast Asia.
- Its objective is to accelerate shared development and cooperation between coastal and adjacent countries in South and Southeast Asia.

- It was **established in the year 1997** through the Bangkok Declaration.
- It was formed under the name BIST-EC (Bangladesh, India, Sri Lanka, Thailand – Economic Cooperation).
- It included 4 member countries Bangladesh, India, Sri Lanka and Thailand.
- After the inclusion of Myanmar in the year 1997, its name was changed to 'BIMST-EC'. After the joining of Nepal and Bhutan in the year 2004, the name of the organization was changed to **'Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation (BIMSTEC)'**.

## World's first major law for artificial intelligence gets final EU approval

- EU member states have given final consent to the world's first major law to regulate artificial intelligence on 21 May 2024.
- This regulatory law sets out comprehensive rules for artificial intelligence technology.
- It aims to emphasize the importance of trust, transparency and accountability in dealing with new technologies in Europe.
- This law prohibits those applications of AI that pose a threat to human values and mankind.
- The AI Act has been approved by the European Union Council, which is a major piece of regulatory legislation.
- The AI Act applies a risk-based approach to artificial intelligence.

## European Union

- Current membership: 27 countries
- Established: November 1, 1993 by the Maastricht Treaty.
- Headquarters: Brussels, Belgium
- Current President: Ursula von der Leyen
- Current members: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. The United Kingdom, which was a founding member of the European Union, left the organization in 2020.
- This treaty was established to promote political and economic integration in Europe through a single currency (euro), integrated foreign and security policy, and common citizenship by advancing cooperation in the areas of rights, immigration, asylum, and judicial matters for citizens of member countries.

## New Caledonia dispute

- Recently, riots broke out amid recent protests in French-owned New Caledonia and several people died.
- France declared a state of emergency there on 15 May 2024.

## Reason behind the controversy

- This protest happened after the French Parliament passed a bill under which French residents living in New Caledonia for more than 10 years have been given the right to vote.
- This protest is happening due to the fear of reduction in the election rights of the native Kanak people there.

## New Caledonia

- This is an overseas territory under the authority of France, which is located about 1,500 km east of Australia in the South Pacific.
- 41% of the people here are Melanesian Kanak (natives) and about 24% are of European origin and most of the Europeans are French.
- This strait was given this name by British traveler Captain James Cook in 1774.
- In 1854, France took it under its control.

- After becoming a colony of France in the 19th century, New Caledonia became a French Overseas Territory in 1946.
- New Caledonia is one of five island territories in the Indo-Pacific region controlled by France.
- In 1998, the Noumea Accord was signed, which set a plan for economic reform in the region, and also gave voting rights to indigenous Kanaks and immigrants who had been living here even before 1998.
- Under the terms of the Noumea Accord, voting rights in provincial elections were given only to those people and their descendants who had been living in New Caledonia before 1998.
- The aim was to give more representation to the indigenous Kanak people who had become a minority in terms of population.

## MoU signed between DAHD, Union Ministry of Fisheries, Animal Husbandry and Dairying and United Nations Development Programme (UNDP)

- The Department of Animal Husbandry and Dairying (DAHD) under the Union Ministry of Fisheries, Animal Husbandry and Dairying has signed a Memorandum of Understanding (MoU) with United Nations Development Programme (UNDP) India on digitization and capacity building of vaccine cold chain management, communication planning.
- Under this agreement, UNDP will support and strengthen India's first animal vaccine supply chain management system to protect communities and animals and prevent the spread of zoonotic diseases.
- This MoU will help build a digital future through digitization of cold chain and remote temperature monitoring by UNDP India.
- India has a population of 142.86 crore people and 53.57 crore white animals. India has a poultry population of 85.18 crore.
- Real-time information on vaccine stocks and flows will be provided by the Animal Vaccine Intelligence Network (AVIN) developed by UNDP.
- AVIN will also provide real-time information on vaccine storage temperatures.
- The aim of both DAHD and UNDP is to jointly build a strong, efficient and inclusive framework for animal health and welfare management in the country.

## United Nations Development Programme (UNDP)

- It was established by the United Nations in 1965 by merging the United Nations Extended Technical Assistance Programme with the United Nations Special Fund.
- Headquarters: New York (United States)
- It is the global development network of the United Nations, which helps member countries to address their development challenges.
- UNDP currently works in three main areas:
  o Sustainable development
  o Democratic governance and peace building
  o Climate and disaster resilience

## 46th Antarctic Treaty Consultative Meeting (ATCM)

- The 46th Antarctic Treaty Consultative Meeting (ATCM) and the 26th meeting of the Committee for Environmental Protection (CEP) were held in Kochi (Kerala) on 20 May.
- It was organized by the National Centre for Polar and Ocean Research (NCPOR), Goa, under the Ministry of Earth Sciences and the Antarctic Treaty Secretariat.
- ATCM and CEP are high-level global annual meetings held in accordance with the provisions of the Antarctic Treaty.

### Antarctic Treaty

- This treaty was signed in 1959 and entered into force in 1961.
- The Antarctic Treaty has established Antarctica as a region dedicated to peaceful, scientific cooperation and environmental protection.
- Currently 56 countries are involved in it.
- The CEP was established in 1991 under the Environmental Protection Protocol of the Antarctic Treaty (Madrid Protocol).
- The CEP advises the ATCM on environmental protection and conservation in Antarctica.
- India has been a Consultative Party to the Antarctic Treaty since 1983.
- To date, it participates in the decision-making process along with the other 28 Consultative Parties to the Antarctic Treaty.

- India's first Antarctic research station, Dakshin Gangotri, was established in 1983. Currently, India operates two research stations: Maitri (1989) and Bharati (2012).
- In 2022, India enacted the Antarctic Act, reaffirming its commitment to the Antarctic Treaty.

## 10th World Water Forum

- It was held in Bali, Indonesia from May 18-25, 2024.
- Its theme was 'Water for shared Prosperity'.
- The World Water Forum is the largest international gathering involving various stakeholders in the field of water.
- It is co-hosted by the World Water Council and a visiting host city.
- The forum has been held every 3 years since 1997.
- The first World Water Forum was held in Marrakech, Morocco in 1997 to find solutions to the global water crisis.
- The Marrakech Declaration was issued after this meeting.
- During this forum, the World Bank released a report titled 'Water for Shared Prosperity'.

## India and Nepal sign MoU for cooperation in audit

- India and Nepal have signed a Memorandum of Understanding to enhance cooperation in audit.
- This MoU was signed in Kathmandu by Comptroller and Auditor General of India, Girish Chandra Murmu and Auditor General of Nepal, Toyam Raya.
- Its objective is to exchange expertise in the field of audit between the highest audit institutions of the two countries.

# 5. SCIENCE AND TECHNOLOGY

## Agnibaan SOrTeD launched with world's first 3D printed engine

- Agnikul Cosmos Private Limited successfully launched Agnibaan SOrTeD (Suborbital Technological Demonstrator) from Agnikul Launch Pad 1 (ALP-1) located within Satish Dhawan Space Centre (SDSC)-SHAR at Sriharikota, Andhra Pradesh, India on May 30, 2024. Agnibaan SOrTeD is India's first launch from a private launchpad named 'Dhanush' established by Agnikul.
- This was the maiden flight of Agnibaan SOrTeD, powered by the world's first single-piece 3D printed semi-cryogenic engine.
- Agnibaan SOrTeD is India's second privately developed rocket, equipped with world's leading 3D printed engine technology.
- Agnibaan SOrTeD operates as a single-stage launch vehicle, with Agnikul's 'Agnilet' engine.
- This is also India's first semi-cryogenic engine-powered rocket launch.
- The main objective of this mission, which is also the first flight of Agnikul, is to serve as a test flight, demonstrate indigenous and homegrown technologies, collect critical flight data, and ensure optimal utilisation.
- This rocket is a significant milestone in India's private space exploration efforts, showcasing indigenous design and engineering capabilities.

### Agnikul Cosmos Private Limited
- Its manufacturer is Indian Aerospace.
- It is located within the National Centre for Research and Development (NCRD) at the Indian Institute of Technology (IIT) Madras.
- Established- 2017
- Headquarters- Chennai, Tamil Nadu

## DRDO successfully flight tests Rudram-II missile

- The Defence Research and Development Organisation (DRDO) successfully flight tested the air-to-surface Rudram-II missile from Su-30 MK-I platform.
- This flight test met all the test objectives.
**Rudram-II Missile**

- Rudram-II is an indigenously developed, solid propellant, air-launched missile system.
- The missile system incorporates several cutting-edge indigenous technologies developed by various DRDO laboratories.
- Rudram-II is a solid propellant air-launched missile.
- It is designed for air-to-surface strike.
- The Rudram missile is the first indigenously developed anti-radiation supersonic missile.
- It is designed to target enemy ground radars and communication stations in SEAD (Suppression of Enemy Air Defence) missions.
- Rudram-II is the latest version after the Mark-1 version.
- The Mark-1 version was tested by Sukhoi-30 MK-I in 2020.
- Rudram-II can be launched from multiple heights. It can receive signals from radars from a distance of over 100 km.

### DRDO
- It is an agency under the Department of Defense Research and Development.
- It works under the Ministry of Defense, Government of India.
- DRDO is responsible for military research and development.
- Establishment- 1958
- Chairman- Sameer V. Kamat
- Headquarters- New Delhi

## Test of anti-submarine missile system 'SMART' successful

- The Indian Navy has successfully tested the Supersonic Missile Torpedo (SMART) system off the Balasore coast (APJ Abdul Kalam Island) in Odisha on 1 May 2024.
- This test was conducted by the Defense Research and Development Organization (DRDO) for the Indian Navy.
- The full name of SMART is Supersonic Missile Assisted Release of Torpedo.
- It is a next generation anti-submarine missile system.

- It is a next generation missile, which is based on the Lightweight Torpedo Delivery System.
- It has been designed and developed by DRDO.
- This missile is capable of hitting long-range targets and can be launched from warships as well as coastal areas.
- This canister-based missile system has many modern sub-systems, including two-stage solid propulsion system, electromechanical actuator system, navigation system etc.

## ISRO's successful test of semi-cryogenic engine

- Indian Space Research Organization (ISRO) has passed another test in the development of semi-cryogenic engine on 6 May 2024.
- The test of igniting the preburner to start the semi-cryogenic engine was successful.
- This engine will help in increasing the payload capacity of ISRO's LVM3 rocket.
- India launched its Chandrayaan-3 mission by LVM3 rocket.
- The same rocket will be used in Chandrayaan-4 mission as well.
- ISRO's semi-cryogenic engine works on a combination of liquid oxygen (LOX) and kerosene and generates a thrust of 2,000kN.
- It uses a combination of triethyl aluminide and triethyl boron.
- This engine will replace the Vikas engine fitted in the second stage of the LVM3 rocket.

## ISRO successfully tests new liquid rocket engine

- The new liquid rocket engine manufactured through additive manufacturing technology by the Indian Space Research Organisation (ISRO) was successfully tested.
- The test was successfully conducted at the ISRO Propulsion Complex in Mahendragiri, Tamil Nadu on 9 May 2024.
- This newly designed PS4 engine has reduced the number of parts from 14 to one.
- This will lead to significant savings in the use of raw materials per engine, metal powder will be reduced from 565 kg to 13.7 kg and production time will be reduced by 60%.
- This new redesigned engine will be used in both the PSLV first stage reaction control system and the fourth stage of the PSLV launch vehicle.
- ISRO plans to incorporate this PS4 engine in the regular PSLV program.
- Additive manufacturing technology refers to 3D printing of PS4 engines.
- This will usher in a new era of advanced 3D manufacturing technology for India's space program.

## Successful test of BHISHM portable hospital

- Recently, the BHISHM portable hospital was tested by the Indian Air Force in Agra for airdrop from an aircraft on 14 May 2024.
- This test was done to deploy the portable hospital anywhere to deal with emergencies.
- According to the Ministry of Information and Broadcasting, the Bhishma portable cubes are part of a broader initiative called 'Project Bhishma'.
- **BHISHM stands for: Bharat Health Initiative for Sahyog, Hita and Maitri**
- It is designed to treat 200 injured people, with an emphasis on quick response and comprehensive care.
- These cubes are designed to enhance disaster response and medical assistance during emergencies.
- It also integrates Artificial Intelligence (AI) and data analytics to facilitate effective coordination, real-time monitoring and efficient management of medical services in the field.
- The entire unit consists of 72 easily transportable components that can be easily carried by hand, bicycle or even drones.
- It not only provides essential basic assistance but also advanced medical and surgical care.
- It has the ability to be deployed within 12 minutes.
- These cubes are robust, waterproof and lightweight, designed for various configurations, making them adaptable to diverse emergency situations.

## Country's first Loitering Aerial Munitions (LAM) developed

- Cadet Defence Systems in collaboration with Defence Research Development Organisation (DRDO) has developed the country's first Loitering Aerial Munitions (LAM) for the armed forces.

- LAM has a range of 150 km to 300 km with rocket-assisted canister launch and runway independent hybrid vertical take-off and landing (VTOL) system.
- Kamikaze drones are also known as loitering aerial munitions or suicide drones.
- These are similar to precision missiles and unmanned aerial systems (UAS).
- Unlike conventional missiles, kamikaze drones are able to fly in the airspace for a relatively longer period of time before striking a target, this is known as loitering.
- These systems can also feature a built-in warhead or payload, which is intended to explode during the warhead.
- Although LAMs have smaller warheads than precision missiles, they are able to evade radars due to their small size and flying skills.

## India's first indigenous bomber unmanned aircraft

- Flying Wedge Defence has launched an unmanned aircraft called FWD -200B.
- Flying Wedge Defence is a defence and aerospace technology firm.
- This is India's first indigenous bomber unmanned aircraft.
- The indigenous FWD-200B costs just ☐25 crore. The US Predator costs around ☐250 crore.
- The payload capacity of the FWD-200B is 100 kg. Its endurance is 12-20 hours.
- It has a ground control station (GCS) range of 200 kilometers.

## Chang'e-6 mission launched by China

- China has launched its spacecraft 'Chang'e-6' for its lunar research mission on 3 May 2024.
- This launch has been done through the rocket 'Long March-5 Y8'.
- This mission has been tasked with collecting the South Pole-Aitken Basin sample of the Moon and then bringing it back to Earth.
- Chang'e-6, will make a soft landing after reaching the Moon. Within 48 hours of landing, a robotic arm will be extended to remove rocks and soil from the surface of the Moon, while a drill will be used to make a hole in the ground.
- The primary goal of the Chang'e-6 mission is landing and collecting samples.
- If this mission succeeds in achieving its goal, China will become the first country

in the world to bring samples from a part of the moon that can never be seen from Earth.
- India became the first country to land near the south pole of the Moon with its Chandrayaan-3 mission in August 2023.
- The Chang'e 6 mission also carries the 'ICube Qamar' satellite developed by Pakistan.
- This small satellite has two optical cameras that can take pictures of the lunar surface.
- 'ICube Qamar' is Pakistan's first lunar mission.
- Pakistan's CubeSat satellite iCube Qamar has been designed and developed by the Institute of Space Technology (IST) in collaboration with Shanghai University of China and Pakistan's national space agency SUPARCO.
- **Note:** China's Chang'e-4 was the first unmanned landing on the Moon in 2018.
- **Note:** Chang'e-5 obtained samples from the moon in 2020.

## NASA presented a plan to develop first railway system on the moon

- The National Aeronautics and Space Administration (NASA) has presented its plan to build a robot train on the moon.
- This system has been named FLOAT.
- **FLOAT stands for: Flexible Levitation on a Track**
- NASA will build the first lunar railway system to provide reliable, autonomous and efficient transportation on the moon.
- NASA will use unpowered magnetic robots under the FLOAT project.
- These robots will lift up a three-layer flexible film track to prevent abrasion from lunar surface dust.
- The graphite layer will allow the robot to passively float on the tracks using diamagnetic levitation.
- The flex-circuit layer generates electromagnetic thrust to move the robot along the tracks in a controlled manner.
- These robots will be used to carry and bring about 100 tons of construction material to NASA's lunar base.

## PREFIRE mission launched by NASA

- The National Aeronautics and Space Administration (NASA) launched the PREFIRE mission on May 22 to study the emission of heat from the poles.

- The full form of PREFIRE is Polar Radiant Energy in the Far-Infrared Experiment.
- It was launched from Mahia, New Zealand on Rocket Lab's Electron rocket.
- The main objective of this mission is to study the Arctic and Antarctic regions.
- It will investigate the amount of heat emitted into space from the Earth's polar regions and analyze the factors affecting its climate.
- A thermal infrared spectrometer is also part of the mission to measure the far infrared energy emanating from the Earth's surface.
- Under this, two shoe box-sized cube satellites or CubeSats will be launched.
- Its second satellite will be launched after some time.
- In this, one satellite is named 'Ready, Aim, PREFIRE' and the other CubeSat is 'PREFIRE and ICE'.
- It measures how much heat the Earth's two coldest regions -- the Arctic and Antarctica -- emit into space and how it affects Earth's climate.
- It has been jointly developed by NASA and the University of Wisconsin-Madison (USA).
- Researchers want to understand Earth's energy budget through this mission.
- Energy Budget is the balance between the amount of heat coming to Earth from the Sun and the amount of heat going from Earth into space.
- The difference between the two determines Earth's temperature and climate.
- **Note:** A large amount of heat from the Arctic and Antarctica is emitted as far-infrared radiation.
- The PREFIRE mission will increase our knowledge about this matter. Its two CubeSats can study far-infrared radiation from the Earth's poles

## European Space Agency and 12 countries sign Zero Debris Charter

- 12 countries and the European Space Agency have signed the Zero Debris Charter on May 23, 2024.
- The Zero Debris Charter is an effort to make space debris neutral (no increase in debris) by 2030.
- This is the first time that some countries of the world have joined hands at the national level regarding this issue.

- Austria, Belgium, Cyprus, Estonia, Germany, Lithuania, Poland, Portugal, Romania, Slovakia, Sweden and the United Kingdom have all agreed to follow the charter.
- The European Space Agency estimates that there are currently more than ten million pieces of space debris larger than one cm in size in Earth's orbit.
- Each of these objects can damage satellites launched into space, etc.

## Atmospheric gases detected around 55 Cancri e

- With the help of NASA's James Webb Space Telescope, researchers have detected atmospheric gases around the exoplanet 55 Cancri e, a hot rocky planet 41 light years away from Earth.
- This is the best possible evidence so far of the existence of life in the atmosphere of a rocky planet outside our solar system.
- 55 Cancri e, also known as Janssen, is one of the 5 known planets orbiting the Sun-like star 55 Cancri in the constellation Cancer.
- It is about twice the diameter of Earth and has a slightly higher density. This planet is classified as a super-Earth.
- Note: Rocky planets larger than Earth and smaller than Neptune are called super-Earths.
- The planet named 55 Cancri e or Janssen is about 8.8 times more massive than Earth.
- The planet is likely to be tidally locked, meaning that one side of it always faces its sun, just as the moon always faces Earth.
- Note: An exoplanet is any planet outside our solar system that orbits another sun.

## Terrestrial planets

- In our solar system, Earth, Mars, Mercury, and Venus are terrestrial planets.
- They are called terrestrial because their surfaces are dense, rocky, like Earth's terra firma.
- The terrestrial planets are the four innermost planets in the solar system. None of the terrestrial planets have rings.
- Of the terrestrial planets, only Earth has a substantial planetary magnetic field.

## China launches first Hangor class submarine for Pakistan

- Recently, China launched the first of the 8 Hangor class submarines being built for Pakistan at Wuhan Shipyard in China.

- The first of the eight submarines of this class can be included in the fleet of the Pakistani Navy by 2028.
- It is a diesel-electric combat submarine.
- The Hangor class submarine is larger than the Indian Navy's Kalvari class submarines, with a displacement of 2,800 tonnes compared to 1,775 tonnes of the Kalvari class.
- The Hangor class has Air Independent Propulsion (AIP).
- If a submarine is equipped with an 'AIP system', the submarine will need to take oxygen only once a week. AIP allows submarines to remain submerged for a long time.
- AIP is planned to be installed on the first Scorpene class submarine INS Kalvari in the year 2024.

## Russia announces deployment exercise of tactical nuclear weapons

- Recently, Russia has announced to practice deployment of tactical nuclear weapons as part of military exercises, facing off against France, Britain and the United States.
- Note: Since Russia's invasion of Ukraine in 2022, Russia has warned of rising nuclear tensions with the possibility of other countries getting involved.
- Russia and the United States are by far the world's largest nuclear powers, possessing more than 10,600 of the world's 12,100 nuclear weapons.

### Tactical Nuclear Weapons
- Tactical nuclear weapons are also known as non-strategic weapons.
- Tactical (non-strategic) nuclear weapons (TNWs) usually refer to short-range weapons, including land-based missiles with a range of less than 500 km and air- and sea-launched weapons with a range of less than 600 km.
- Unlike nuclear weapon-powered intercontinental ballistic missiles (which can destroy entire cities), tactical nuclear weapons are less powerful and are intended for use against soldiers on the battlefield.
- The yield can be as low as about 1 kiloton. The US bomb dropped on Hiroshima during World War II was 15 kilotons.
- Strategic nuclear weapons are subject to arms control agreements between Russia and the US, but tactical weapons have never been part of any such agreements.

## Japan and US sign deal to develop interceptors for hypersonic missiles

- Under this agreement, both countries plan to develop interceptors by 2030.
- This plan will cost more than $3 billion. It was first announced in August.
- The interceptor is called Glide Phase Interceptor (GPI).
- Japan has included $480 million for the development of interceptors in the 2024 budget.
- Hypersonic missiles are difficult to intercept. They fly at five times the speed of sound. Their trajectories are irregular.

## First India-made semiconductor chips to launch in 2025

- The first India-made semiconductor chips will be produced in 2025 at Micron Technology's packaging unit in Sanand, Gujarat.
- Most of the chips made in Sanand will be exported, making India a leader in the global semiconductor market.
- The semiconductor chips will be used for data centres, smartphones, notebooks and Internet of Things (IoT) devices.

## First indigenously designed microcontroller chip launched

- IIT Madras-incubated startup Mindgrove Technologies has launched the country's first commercial, high-performance SoC (system on chip).
- It is named 'Secure IoT'.
- Mindgrove Technologies has received the shipment of its first system-on-chip – Secure IoT – from Taiwan.
- The system-on-chip is used in a printed circuit board (PCB) and is like the brain of the device.

## 3D-printed dummy ballot unit

- IIT Guwahati has developed a 3D-printed dummy ballot unit.
- Its main purpose is to inform citizens, mainly first-time voters and senior citizens, about the voting process.
- This dummy ballot unit was made using 3D printing technology and biodegradable material derived from corn starch.
- It was created by researchers from IIT Guwahati in just 48 hours.

## The deepest blue hole in the world

- This site, named Taam Ja' Blue Hole (TJBH) by Mexican researchers, is now the deepest known underwater sinkhole in the world.
- The Taam Ja' Blue Hole (TJBH), located in Chetumal Bay on the southeastern coast of the Yucatan Peninsula in Mexico, extends at least 1,380 feet (420 meters) below sea level.
- Blue holes are water-filled vertical caves or sinkholes found in coastal areas where the bedrock is made of soluble materials such as limestone, marble or gypsum.
- Other famous blue holes in the world: Dean's Blue Hole in the Bahamas, Dahab Blue Hole in Egypt and the Great Blue Hole in Belize.

## Successful testing of HIV vaccine

- Researchers at the Dubuque Human Vaccine Institute in the United States successfully tested the HIV vaccine.
- For the first time, researchers were successful in activating antibodies present in the body against HIV through vaccination.
- According to the report published in the journal Cell, the vaccine targets the outer region of the cell. The virus attacks this area first. The antibody prevents HIV infection.
- This is a big step towards HIV research.
- Through this vaccine, antibodies are activated, which are capable of preventing HIV.
- During its testing, 20 HIV negative individuals were given two to three doses of the vaccine.
- This vaccine has been developed by Dr. S. Munir Alam and Haynes.
- After two doses, 95% serum and 100% CD4 T-cells started reacting. This indicates that strong immunity has been initiated from it.
- Importantly, antibodies that had been largely dormant in the body began to work within a few weeks of the initial infection. This response normally takes several years.

### HIV
- Full Form: Human immunodeficiency virus.
- It is an infection that attacks the body's immune system. Acquired immunodeficiency syndrome (AIDS) is the most advanced stage of the disease.

- HIV targets the body's white blood cells, weakening the immune system.
- This makes it easier to get sick with diseases such as tuberculosis, infections and some cancers.
- HIV is spread through an infected person's body fluids, including blood, breast milk and semen.
- Antiretroviral therapy (ART) can treat and prevent HIV in its early stages.
- The WHO now defines advanced HIV disease (AHD) as a CD4 cell count less than 200 cells/mm3 or WHO stage 3 or 4 in adults and adolescents.
- HIV is a major global public health issue.
- It has killed about 40-4 million people globally so far.
- An estimated 39-0 million people were suffering from HIV at the end of 2022, of which two thirds (25-6 million) are in the African region.

### Symptoms
- Its infection gradually weakens the immune system.
- Main symptoms:
  - Swollen lymph nodes
  - Weight loss
  - Fever
  - Diarrhea
  - Cough.

## 'Ferroelectric diode'

- This is a semiconductor switching device that is capable of working even at a temperature of 600 degrees Celsius.
- With its help, the chip used in the computer is able to withstand high temperatures.
- According to research published in the journal Nature, sensors and computing devices using 'ferroelectric diode' can work in nuclear plants, during the extraction of oil and gas deep in the ground or even on the hottest planet Venus.
- A material called ferroelectric aluminum scandium nitride was used to make this computing device.
- This device can conduct advanced computing even in inaccessible places and adverse conditions.
- This can start a new era of non-silicon computing devices.

## World's first 'head transplant system'

- **Brainbridge, a neuroscience and biomedical engineering start-up from the United States, shared** the concept of the world's first 'head transplant system'.
- This concept is the brainchild of Dubai-based project leader biotechnologist Hashem Al-Ghaili.
- Under this, the robotic system simultaneously removes the head from the body of the donor and the recipient before replacing one head on the torso of the other through a conveyor belt.
- After this, such transplants would be done by artificial intelligence (A.I.) without human intervention, using a huge series of robotic tools and lasers.
- This system could be helpful for patients suffering from cancer, neuro-degenerative diseases like Alzheimer's and Parkinson's, and untreatable conditions like paralysis.

# 6. SPORTS

## Shyam Nikhil becomes India's 85th Grandmaster

- P Shyam Nikhil has become India's 85th Grandmaster.
- He achieved this feat by drawing with the GM Jinshi Bai (CHN) at the Dubai Police Masters 2024 on May 12.

## Vaishali Ramesh Babu becomes India's 84th Grandmaster

- The International Chess Federation (FIDE) on May 2 awarded the title of Grandmaster to India's young chess player Vaishali Ramesh Babu.
- Vaishali is the third Indian woman Grandmaster after Koneru Humpy and Harika Dronavalli.
- Viswanathan Anand is the first Indian player to become a chess Grandmaster
- Koneru Humpy is the first Indian woman to win the Grandmaster title.
- The youngest Indian chess Grandmaster is A. Praggnanandhaa.
- Vaishali and her brother A. Praggnanandhaa have become the world's first Grandmaster brother-sister pair.
- The Indian state with the most Grandmaster titles is Tamil Nadu.

### The International Chess Federation (Federation Internationale des Échecs - FIDE)

- is the governing body of chess and it controls all international chess competitions.
- It was started in Paris in the year 1924.
- It was recognized as a global sports organization by the International Olympic Committee in the year 1999.
- Its headquarters is in Lausanne, Switzerland.
- Its President is Arkady Dvorkovich and Vice President is Vishwanathan Anand.

## Neeraj Chopra secured second place in Doha Diamond League

- Javelin thrower Neeraj Chopra secured second place in Doha Diamond League.
- He threw the javelin to a distance of 88.36 meters.
- Jacub Vadlejch remained in first place, he had a throw of 88.38 meters.

## Neeraj Chopra won gold medal in Federation Cup

- Neeraj Chopra won the gold medal in men's javelin throw at the 27th National Federation Senior Athletics Championship in Bhubaneswar on 15 May 2024.
- He won the gold medal by throwing the javelin 82.27 meters away.

### Neeraj Chopra's Achievements

- Gold medal in Tokyo Olympics (2020)
- Diamond League (2022) Champion
- Gold medal in World Championship (2023)
- Gold medal in Asian Games

## 11th World Para Athletics Championship 2024

- Event: 17 May to 25 May 2024.
- Venue: Kobe (Japan)
- India finished sixth in the medal table while China finished first.

### Total medals of India

- Total medals of India: 17 (6 gold, 5 silver and 6 bronze medals)

### Medalists

| | | |
|---|---|---|
| Deepthi Jeevanji | Women's 400m T-20 event | Gold medal |
| Ekta Bhyan | Women's F51 event Throw | Gold medal |
| Thangavelu Mariyappan | Men's high jump T63 category | Gold medal |
| Sumit Antil | Men's F64 category Javelin throw | Gold medal |
| Simran Sharma | Women's 200m T12 category | Gold medal |
| Sachin Sarjerao Khilari | Men's shot put event | Gold medal |
| Rinku | Men's F46 category Javelin throw | Silver medal |
| Kashish Lakra | Women's F51 event Throw | Silver medal |
| Yogesh Kathunia | Men's F56 discus throw | Silver medal |

| | | |
|---|---|---|
| • Bhagyashree Maharao | Women's shot put F34 event | Silver medal |
| • Nishad Kumar | Men's T47 high jump | Silver medal |
| • Dharambir | Men's F51 category Throw | Bronze medal |
| • Ajeet Singh | Men's F46 category Javelin Throw | Bronze Medal |
| • Sandeep | Men's F64 Javelin Throw | Bronze Medal |
| • Preeti Pal | Women's T35 200m | Bronze Medal |
| • Preeti Pal | Women's T35 100m | Bronze Medal |
| • Navdeep | Men's Javelin Throw F41 Category | Bronze Medal |

- Note: The T20 category race is for intellectually disabled girls.
- Note: T35 is for girls who have coordination impairment.
- Note: Deepti won the gold medal in the 400m T20 category at the Hangzhou Para Asian Games with an Asian record time of 56-69 seconds.
- Nishad Kumar was the silver medalist at the Tokyo Paralympic Games 2020.
- Nishad also won a silver medal at the 2023 World Para Athletics Championships in Paris.

## Dipa Karmakar wins first Asian Championship gold medal

- Dipa Karmakar won the first gold medal for India in the women's vault event at the Asian Championships held in Tashkent, Uzbekistan.
- North Korean gymnasts Kim Son Hyang and Jo Kyong Byol won silver and bronze medals respectively.
- For the first time, an Indian gymnast has won a gold medal in any event at the Asian Championships.

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**Achievements of Dipa Karmakar**
- Gold medal at FIG World Cup (2018)
- Bronze medal at 2014 Glasgow Commonwealth Games
- First Indian female gymnast to qualify for the Summer Olympics.
- Finished fourth in the vault event at the 2016 Rio Olympics.

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## Asian Trampoline Gymnastics Championship 2024

- **Held:** 11-12 May 2010
- **Venue:** Hong Kong (China)
- Indian gymnast Srishti Dandagale won the silver medal at the Asian Trampoline Gymnastics Championship.
- India's Srishti Dandagale is the first Indian to win a medal at the Asian Trampoline Gymnastics Championship.
- In this, Dolgopolova of Kazakhstan won the gold medal, while S Hung of Hong Kong won the bronze medal.

## Thailand Open 2024

- Held: 14-19 May 2024.
- Venue: Bangkok (Thailand)
- Satwiksairaj Rankireddy and Chirag Shetty won the men's doubles title at the Thailand Open 2024.
- Satvik and Chirag won their first Superseries/Super 500 level title in 2019.
- This is Satvik and Chirag's second title of 2024 after winning the French Open in March 2024.

## Alorda Cup 2024

- Venue: Astana (Kazakhstan).
- India won a total of 12 medals. (2 gold, 2 silver and 8 bronze medals)
- **Indian boxer Nikhat Zareen won the gold medal.**
- Indian boxer Meenakshi has also won the gold medal in the same event in the 48 kg category.
- Nikhat won over Kazakhstan's Zhazira Urakbayeva in the women's 52 kg category.
- Anamika won silver medals in 50kg category and Manisha in 60kg category.

## Pritismita Bhoi

- Pritismita won the women's 40kg title at the World Youth Championships in Lima (Peru).
- She became the first Indian weightlifter to win the title with a clean and jerk world record.
- Pritismita lifted 57kg in snatch and 76kg in clean and jerk.
- She won the women's 40kg crown with a total of 133kg.
- She won three gold medals for her snatch, clean and jerk and overall performances.

## Indian team wins silver medals at Asian Relay Championships

- Indian men's and women's relay teams won two silver medals in 4x400m at the Asian Relay Championships held in Bangkok, Thailand.
- The men's relay team of Muhammad Anas Yahiya, T Santosh Kumar, Mijo Chacko Kurian and Rajiv Arokia won the silver medal.
- In the women's category, India's Vithya Ramaraj, M.R. Poovamma, Rupal and Prachi Choudhary won the silver medal.

## Archery World Cup Stage 2

- India won the gold medal in the compound women's team event at the Archery World Cup Stage 2 in Yecheon, South Korea.
- Jyothi Surekha Vennam, Preneet Kaur and Aditi Swami won the team gold medal
- This pair has won their third consecutive World Cup gold medal.
- The Archery World Cup, started in 2006 by the World Archery Federation, consists of four stages in different countries.
- Archers compete globally in four stages, with the top eight (four during 2006-09) advancing to the Archery World Cup Final, where the best archers from each category compete for the final crown.

## Manika Batra

- India's women's table tennis player Manika Batra has become the first Indian woman to enter the top 25 in the world women's singles rankings.
- She also equalled G. Sathiyan's five-year-old record for the highest rank achieved by an Indian in singles table tennis.
- Manika Batra won the gold medal in the individual and team categories at the 2018 Commonwealth Games.
- She was awarded the Major Dhyan Chand Gold Ratna in 2020.

## Sunil Chhetri

- Sunil Chhetri announced his retirement from international football on June 6 after the FIFA World Cup qualifier match against Kuwait.
- He played 145 matches for the national team and scored an impressive 94 goals.
- He has played a key role in India's victories in the SAFF Championship (2011, 2015, 2021) and Nehru Cup (2007, 2009, 2012).

- He played a key role in India winning the 2008 AFC Challenge Cup.
- With the most caps and maximum total goals for the Indian national team, he is the third-highest goalscorer in international football among active players, after Lionel Messi and Cristiano Ronaldo.
- He was awarded the Padma Shri award, India's fourth-highest civilian honour, in 2019 and the Arjuna Award in 2011.
- He is the first football player to win India's top sports honour, the Major Dhyanchand Sports Ratna award, in 2021.

## Abha Khatua sets national record in shot put event

- Abha Khatua has set a national record in women's shot put event.
- She made this record by throwing the shot put at 18.41 meters on 13 May in the National Federation Cup Athletics Competition in Bhubaneswar.

## 17th Indian Premier League 2024

- Its title was won by Kolkata Knight Riders on 26 May 2024 by defeating Sunrisers Hyderabad by 8 wickets in the final.
- This is the third title of Kolkata Knight Riders. Earlier, KKR had won this trophy in 2012 and 2014.

## IPL 2024 Award Winners

- Orange Cap (Most Runs in a Season) - Virat Kohli (741 Runs)
- Purple Cap (Most Wickets in a Season) - Harshal Patel (24 Wickets)
- Emerging Player of the Season - Nitish Kumar Reddy
- Most Valuable Player - Sunil Narine
- Fair Play Award - Sunrisers Hyderabad

### Indian Premier League (IPL) :

- It is the top domestic club-based professional cricket league in India.
- It is played in T-20 format (20-20 overs).
- It was started by the Board of Control for Cricket in India (BCCI) in 2008.
- Mumbai Indians and Chennai Super Kings have won the IPL title the most number of times (5-5 times).

## Asian Arm Wrestling Championship 2024

- Indian arm wrestlers won 7 medals at the Asian Championship 2024 in Tashkent (Uzbekistan)
- Won a total of 7 medals including 1 gold and 6 bronze.

- **Srimant Jha:** Gold in left-arm para category and bronze in right-arm para category.
- **Laxman Singh Bhandari**: 2 bronze medals in the Masters category.
- **Sachin Goyal:** Bronze medal in right-arm senior category.
- **Ibi Lollen:** 2 bronze medals in both women's right and left-arm categories.

## Madrid Open 2024

- Event: 23 April to 5 May 2024.
- Venue: Madrid, Spain

**Winners of Madrid Open 2024:**

| Category | Winners |
|---|---|
| Men's Singles | Andrey Rublev |
| Women's Singles | Iga Swiatek |
| Men's Doubles | Sebastian Bucsa/Jordan Thompson |
| Women's Doubles | Cristina Buksa/Sara Sorribes Tormo |

## Italian Open Tennis Tournament 2024

- Held: 6 to 19 May 2024.
- Venue: Rome, Italy

**Winners of Italian Open 2024:**

| Category | Winners |
|---|---|
| Men's Singles | Alexander Zverev |
| Women's Singles | Iga Swiatek |
| Men's Doubles | Marcel Granollers and Horacio Zeballos |
| Women's Doubles | Sara Errani and Jasmine Paolini |

- After Serena Williams, Swiatek has become the first woman to win both Madrid and Rome titles.
- The Italian Open is also known as the Rome Masters.

## Cristiano Ronaldo

- Cristiano Ronaldo has topped Forbes' list of highest-paid athletes for the fourth time.
- He became the world's highest-paid athlete after joining Saudi Arabia's Al-Nassr.
- According to the Forbes list, Ronaldo earned $260 million in the last 12 months, including $200 million from his club contract with Al-Nassr and $60 million from off-field earnings.

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| **Forbes' 5 highest-paid athletes in 2024** | |
|---|---|
| 1. Cristiano Ronaldo (soccer) | $260 million |
| 2. Jon Rahm (golf) | $218 million |
| 3. Lionel Messi (soccer) | $135 million |
| 4. LeBron James (basketball) | $128.2 million |
| 5. Giannis Antetokounmpo (basketball) | $111 million |

## Emilia Romagna Grand Prix Formula One Race

- Venue: Imola (Italy)
- Winner: Max Verstappen (Red Bull driver)
  - He is a three-time world champion.

## Miami Grand Prix Race

- Venue: Miami (Florida)
- Winner: Lando Norris (McLaren's F1 racer)
  - Lando Norris is a Belgian racing driver.

## Ravi Rongali

- India's Ravi Rongali secured a quota for the Paris Paralympics in the shot put F-40 event at the World Para Athletics Championships.

## La Liga Tournament

- Spanish football club Real Madrid has won the La Liga 2023-24 season title by defeating Cadiz 3-0.
- La Liga is the top domestic men's professional football tournament in Spain.

**La Liga**

- La Liga is a professional men's club-based football tournament in Spain.
- It is the country's highest-ranked domestic football tournament.
- La Liga is one of the most popular professional club-based football tournaments in the world.
- Currently 20 teams participate in La Liga - each team plays against the other team twice. The team with the most points becomes the champion of La Liga.
- The most successful team in La Liga is Real Madrid, which has won it 36 times.

## James Anderson

- England's veteran fast bowler James Anderson announced his retirement from Test cricket on 11 May.
- He has taken 700 wickets in 187 Tests - the most by any fast bowler in Test history.

- He is third on the all-time wicket-taking list only behind Sri Lankan spinner Muttiah Muralitharan (800) and late Australian Cricketer Shane Warne (708).

## China wins Thomas & Uber Cup title

- The Chinese men's team won their 11th Thomas Cup by defeating Indonesia by 3-1.
- The Chinese women's team won their 16th Uber Cup title by defeating Indonesia by 3-0 in the final.

### Thomas & Uber Cup 2024

- It was the 33rd edition of the Thomas Cup and the 30th edition of the Uber Cup.
- It is an international badminton championship.
- This championship is for the men's and women's national teams of the member associations of the Badminton World Federation (BWF).

## Brazil will host the 2027 Women's World Cup.

- The 2027 Women's World Cup will be held in Brazil.
- Brazil is the first South American country to host this tournament.

## Sultan Azlan Shah Hockey Trophy 2024

- Japan won its first Sultan Azlan Shah Hockey Trophy by defeating Pakistan by 4-1 in the penalty shootout in the final.
- This was the 30th edition of the Sultan Azlan Shah Trophy.
- Six teams - Japan, Pakistan, Canada, South Korea, New Zealand and the host team, Malaysia participated in the tournament.
- Malaysia finished third in this tournament.

### Azlan Shah Trophy

- Sultan Azlan Shah is a prestigious hockey tournament in Asia in which the world's top men's national hockey teams participate.
- This trophy is named after Sultan Azlan Shah, the former Sultan of Perak Malaysia.
- Australia is the most successful team in this competition, having won it 10 times.
- India has won the Sultan Azlan Shah Trophy 5 times (1985, 1991, 1995, 2009, 2010).

## BWF World Junior Badminton Championships 2025 to be hosted in Guwahati

- The Badminton World Federation has announced that Guwahati (Assam) will host the 2025 BWF World Junior Championships.
- This was announced during the BWF Annual General Meeting held in Chengdu on the sidelines of the BWF Thomas & Uber Cup 2024.
- The National Centre of Excellence in Guwahati has 14 badminton courts, an international standard gymnasium and a seating capacity of around 4000 spectators.
- India last hosted the BWF World Juniors in 2008 in Pune.
- Saina Nehwal is the first Indian to win the World Junior title.
- India hosted the BWF World Championships in Hyderabad in 2009.
- India hosted the Thomas and Uber Cup in New Delhi in 2014.

## Bajrang Punia

- The world wrestling governing body United World Wrestling (UWW) has provisionally suspended Tokyo bronze medallist Bajrang Punia till 31 December 2024.
- India's National Anti-Doping Agency (NADA) had provisionally suspended Bajrang Punia on 23 April 2024 after Bajrang Punia refused to give his sample for an anti-dope test.

### Dope test

- This test checks for the presence of psychoactive drugs in biological samples.
- Psychoactive drugs affect the functioning of the brain and cause changes in mood, awareness, thoughts, feelings and behaviour.
- This test can be done through liquids samples such as urine, saliva, sweat and blood or solid samples such as hair and nose.

# 7. AWARDS AND HONORS

### International Booker Prize 2024

- German writer Jenny Erpenbeck and translator Michael Hofmann have been awarded the 2024 International Booker Prize for 'Kairos', the story of a tangled love affair during the final years of East Germany's existence.
- Jenny Erpenbeck is the first German winner of the International Booker Prize.

### International Booker Prize

- This award rewards novels from around the world that have been translated into English and published in the United Kingdom or Ireland.
- Under this, 50,000 pounds ($64,000) in prize money are distributed between the writer and the translator.
- In the year 2023, this award was given to the book 'Time Shelter' by Bulgarian writer Georgi Gospodinov.

### Indian winners at Cannes Film Festival 2024

- Indian actress Anasuya Sengupta has been awarded the Best Actress award at the 77th Cannes Film Festival.
- She has become the first Indian to win the Best Actress award at this prestigious film festival.
- Apart from this, Chidananda Naik's film 'Sunflowers Were the First to Know' won the 'La Cinéf' award for the best short film.

| Indian Winners | Award | Film |
|---|---|---|
| Payal Kapadia | Grand Prix | All We Imagine as Light |
| Chidananda S Naik | La Cinéf (Premier Prix) | Sunflowers were the first ones to know |
| Anasuya Sengupta | Best Actress (Un Certain Regard) | The Shameless |

- 'Sunflowers Were the First Ones to Know' is a Kannada short film directed by Chidananda Naik, a student of Film and Television Institute of India (FTII). The biggest award of this festival, the 'Palme d'Or', was given to Sean Baker's film 'Anora'.
- The Palm d'Or is given to the director of the best feature film of the official competition.
- The only Indian film to win the Palm d'Or is Chetan Anand's Neecha Nagar (1946).
- Apart from this, cinematographer **Santosh Sivan has become the first Asian to be awarded the Pierre Angenieux Tribute Award for his 'exceptional quality of work and career'.**

### Whitley Gold Award 2024

- Dr. Purnima Devi Burman of India has been awarded the Whitley Gold Award for the second time.
- Purnima Devi Burman is a wildlife biologist from Assam.
- She was also awarded this award in 2017.
- Purnima Devi Burman was honored for her efforts to conserve the endangered bird, Greater Adjutant Stork, called Hargila in Assamese language, and its wetland habitat.
- Hargila birds are mainly found in the wetland areas of the North-East, especially Assam.
- The population of these birds had decreased to about 450, but due to the conservation efforts of Dr. Purnima, the population of Hargila birds in these areas has currently increased to more than 1800.

### Whitley Award

- The Whitley Fund for Nature (WFN) organization established the Whitley Gold Awards in 2007.
- It is a charitable organization registered in the United Kingdom.
- The Whitley Gold Award is also known as the 'Green Oscar'.

### Pulitzer Prize 2024

- The winners of the Pulitzer Prize 2024 were announced on 7 May.
- This year Brandan Som has been honored in the field of poetry, while Hannah Dreier of The New York Times has been awarded for active journalism.

- US newspapers 'The New York Times' and 'The Washington Post' have been announced to be awarded the prestigious Pulitzer Prize in three categories in 2023 for their remarkable work on events ranging from the war in Gaza to gun violence.
- The news agency 'The Associated Press' was awarded the Pulitzer Prize in the Feature Photography category for its coverage of the movement of migrants globally in the US.
- The Public Service Award has been given to the private journalism organization 'ProPublica'. It was given this award for its articles on the US Supreme Court.
- The news agency Reuters was awarded the Pulitzer Prize in the Photography category and the Associated Press in Feature Photography.

## Pulitzer Prize

- The Pulitzer Prize is a major award of the United States of America.
- It was established in 1917 by Hungarian-born American publisher Joseph Pulitzer.
- It is considered the most prestigious award in the field of journalism.
- This award is given in 21 categories to those who do remarkable work in the field of journalism, literature and music composition.
- This award is announced every year by Columbia University.

## Aarti honored with UK Royal Award

- Pink e-rickshaw driver Aarti of Bahraich district in Uttar Pradesh has been honored with the UK Royal Award in London.
- Aarti was given the Amal Clooney Women's Empowerment Award on behalf of the Prince's Trust.
- This award is given by King's Trust International.
- King Charles III founded the Prince's Trust International, now known as King's Trust International.
- This award honors women from all over the world for their impressive work in these fields without any geographical restrictions.
- Aarti has been given this honor for encouraging young girls through her work under the Pink E-Rickshaw initiative of the Uttar Pradesh government, in which she provides safe transportation to other women.

## UNESCO/Guillermo Cano World Press Freedom Prize 2024

- Palestinian journalists covering the conflict in Gaza have been awarded the 2024 UNESCO/Guillermo Cano World Press Freedom Prize.

## UNESCO/Guillermo Cano World Press Freedom Prize

- This award was established in 1997.
- This award is given annually and honors an individual, organization or institution that has made an outstanding contribution to the protection and dissemination of press freedom anywhere in the world.
- This award was established on the initiative of the Executive Board of UNESCO and is formally awarded by UNESCO on the occasion of World Press Freedom Day on 3 May.
- The award is named in memory of Colombian journalist Guillermo Cano Isaza.

## Ruskin Bond awarded Sahitya Akademi Fellowship

- Eminent writer Ruskin Bond has been awarded the Sahitya Akademi's highest honour, the Sahitya Akademi Fellowship.
- Bond was named the recipient of the Academy's highest honour in September 2021.
- His notable works include Vagrants in the Valley, Once Upon a Monsoon Time, Angry River, Strangers in the Night, All Roads Lead to Ganga, Tales of Fosterganj, Leopard on the Mountain and Too Much Trouble.
- **Honors received:** Padma Shri (1999), Padma Bhushan (2019), Sahitya Akademi Bal Sahitya Award (2012) and Sahitya Akademi Award (1992)
- The 1978 Hindi film Junoon is based on Ruskin Bond's historical novel A Fright of Pigeons (Indian Rebellion of 1857).
- Ruskin Bond played a small role in the 2011 film '7 Khoon Maaf' directed by Vishal Bhardwaj, which is based on his story 'Susanna's Seven Husbands'.

## Major Radhika Sen receives 'United Nations Military Gender Advocate Award'

- Major Radhika Sen of the Indian Army has been awarded the United Nations Military Gender Advocate of the Year Award for the year 2023.
- The award was presented by Secretary-General Antonio Guterres on 29 May on the occasion of the United Nations

International Peacekeepers Day.

- The award recognises the efforts of a military peacekeeper in promoting the principles of the 2000's Security Council resolution.
- The resolution calls for the protection of women and girls from conflict-related sexual violence and the gender-related responsibilities of the United Nations.
- According to the United Nations, Major Radhika Sen served in the organization's Stabilisation Mission in the Republic of Congo. There she helped establish the Community Alert Network in North Kivu.
- Major Radhika Sen is the second Indian peacekeeper to receive this award.
- Before her, Major Suman Gawani, serving in the United Nations Mission in South Sudan, received this honor in 2019.

## Srinivas R Kulkarni will be awarded the Shaw Prize in the 'Astronomy' category

- Indian-origin professor of 'Astronomy' in the US, Srinivas R Kulkarni, will be awarded the prestigious Shaw Prize in Astronomy 2024 in the Millisecond 'Astronomy' category.
- This award will be given to him for his unprecedented 'discoveries' about pulsars, gamma-ray bursts, supernova and other variable or transient 'astronomy objects'.
  - Mr. Kulkarni is the George Ellery Hale Professor of 'Astronomy and Planetary Science' of the Physics, Mathematics and 'Astronomy' Division at the California Institute of Technology.
- The Shaw Prize consists of three annual awards:
  - Award in the field of life sciences.
  - Award in the field of medicine.
  - Award in the field of mathematical sciences.
- Each award category carries a prize money of two hundred thousand US dollars.

## Pt. Lachhu Maharaj Award 2024

- This award is given by the Pt. Lachhu Maharaj Ballet Foundation.
- Pt. Lachhu Maharaj Award is given for outstanding contribution in the field of dance and performing arts.
- Pt. Lachhu Maharaj Award was not given since the year 2014. Now the awards for 10 years have been given together.
- In the meeting of the award committee, the foundation announced the awards from the year 2015 to 2024.
- Pt. Rajendra Gangani was awarded the Lachhu Maharaj Award 2024.

| | Pt. Lachhu Maharaj Award Winners | | | |
|---|---|---|---|---|
| **S.No.** | **Award Winner** | **Awards for the Year** | **Relating to the place** | **Exponent of dance form** |
| 1 | Uma Sharma | 2015 | New Delhi | Kathak |
| 2 | Rama Vaidyanathan | 2016 | New Delhi | Kathak |
| 3 | Uma Dogra | 2017 | Jaipur | Kathak |
| 4 | Hema Malini | 2018 | Mumbai | Kathak , Film Actress |
| 5 | Saira Banu | 2019 | Mumbai | Kathak , Film Actress |
| 6 | Sandhya Puricha , of the Sangeet Natak Academy  chairman | 2018 | Mumbai | Bharatanatyam |
| 7 | Dr. Malabika Mitra | 2021 | Kolkata | Kathak |
| 8 | Prachi Shah | 2022 | Mumbai | Kathak , Film Actress |
| 9 | Asim Bandhu Bhattacharya | 2023 | Mumbai | Kathak |
| 10 | Pandit Rajendra Ganganai | 2024 | Jaipur | Kathak |

**Pt. Lachhu Maharaj**
- Pt. Lachhu Maharaj Award has been established in honor of the famous Kathak exponent Lachhu Maharaj. He was a famous classical Kathak dancer and choreographer.
- He choreographed Kathak dance in films like Mahal, Mughal-e-Azam, Chhoti-Chhoti Baatein and Pakeezah. In 1957, he was awarded the Sangeet Natak Akademi Award.
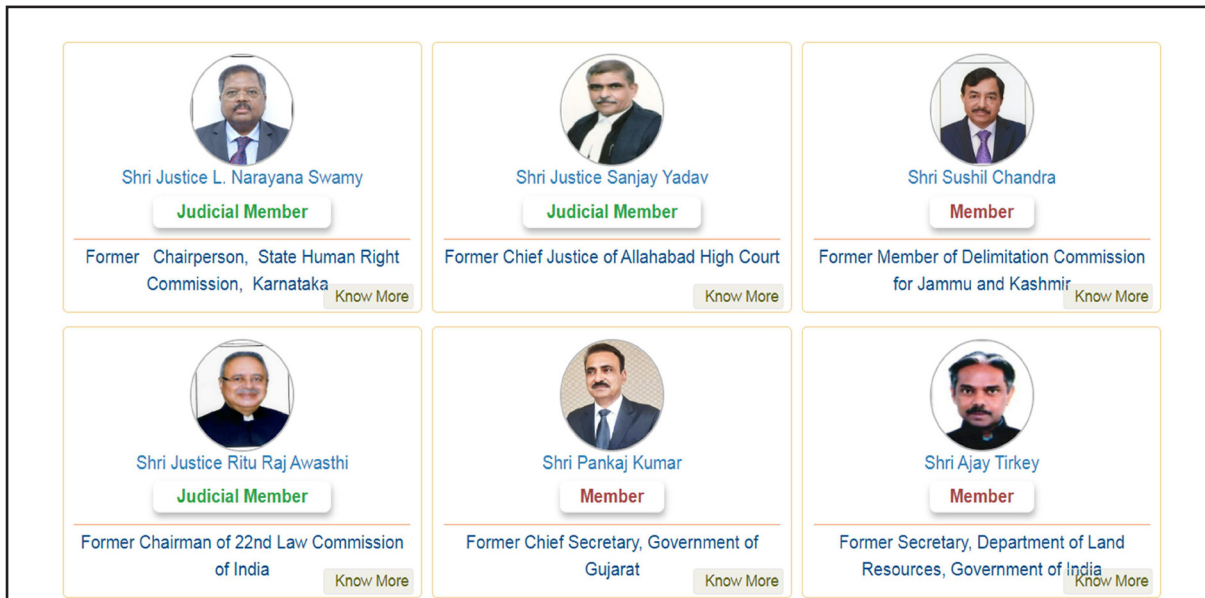
# 8. PERSON IN NEWS

## Pradeep Kumar Tripathi

- Indian Administrative Service (IAS) officer Pradeep Kumar Tripathi has been appointed as Lokpal Secretary till 30 July.

## Lokpal

- Justice Ajay Manikrao Khanwilkar is the current Lokpal of India.
- The first Lokpal of India was Justice Pinaki Chandra Ghose.
- The Lokpal also has six other members.
- The three judges Justice Lingappa Narayana Swamy, Justice Sanjay Yadav and Justice Ritu Raj Awasthi are the judicial members of the Lokpal.
- The other members of the Lokpal are Ajay Tirkey, Pankaj Kumar and Sushil Chandra.



- The Chairman and members of the Lokpal are appointed by the President.
- The President appoints them after receiving recommendations from a selection committee, which is headed by the Prime Minister.
- Apart from 1 chairperson, Lokpal can have up to 8 members - four judicial and four non-judicial.
- The tenure of Lokpal chairperson and members is 5 years or till the age of 70, whichever is earlier.

## Rakesh Ranjan

- Indian Administrative Service (IAS) officer Rakesh Ranjan has been appointed as the chairperson of the Staff Selection Commission (SSC).

## Jaya Badiga

- Indian-American lawyer Jaya Badiga has been appointed as a judge in the Sacramento County Superior Court in the US state of California.
- She is a certified family law specialist and has worked in family law for over ten years.
- She is the first Telugu woman to be appointed as a judge in the US.

## Sameer V. Kamath

- The Appointments Committee of the Cabinet has given an extension to Dr Sameer V. Kamath, Secretary, Department of Defence Research and Development and Chairman, DRDO, till 31 May 2025.
- Dr Kamath was appointed in August 2022. He took over from Dr G. Satish Reddy.
- Dr G. Satish Reddy has been appointed Scientific Advisor to the Defence Minister.

## Idashisha Nongrang

- Ms Idashisha Nongrang has been appointed as the first woman Director General of Police (DGP) of Meghalaya on 19 May 2024.
- Ms Nongrang replaced Lajja Ram Bishnoi.
- Her tenure as state police chief will last till 19 May 2026.
- Ms Nongrang belongs to the Khassi community.

## Krishna Swaminathan

- Vice Admiral Krishna Swaminathan was appointed as the Vice Chief of the Indian Navy on 1 May.
- Krishna was appointed in place of Admiral Dinesh Kumar Tripathi (current Navy Chief).
- During the program, Krishna Swaminathan was honored with a Guard of Honor by the Navy.
- He has been awarded the Ati Vishisht Seva Medal and Vishisht Seva Medal.
- He has also commanded warships other than INS Vikramaditya.

## Sanjay Bhalla

- Vice Admiral Sanjay Bhalla took over as the Chief of Personnel of the Indian Navy on 10 May.
- He has worked as an expert on many major warships. These include INS Nishank, INS Taragiri and INS Beas.
- Sanjay Bhalla has been awarded the Ati Vishisht Seva Medal for distinguished service.
- He has also been awarded the Navy Medal and Navy Commendation Card.

## Sanjay Kumar Mishra

- Justice (Retd.) Sanjay Kumar Mishra has been appointed as the first Chairman of the GST Appellate Tribunal (GSTAT) on 6 May 2024.
- Union Finance and Corporate Affairs Minister Nirmala Sitharaman administered the oath of office to him.
- He has been appointed for a term of four years.
- Sanjay Kumar was selected by a committee headed by the Chief Justice of India.
- Sanjay Kumar Mishra is a former Chief Justice of Jharkhand High Court.

**GSTAT :-** GSTAT is the appellate authority established under the Central Goods and Services Tax Act, 2007.

- It hears various appeals under the State and Union Territory GST Act.
- It consists of a head bench and various state benches.
- As per the approval of the GST Council, the Central Government has notified the Head Bench located in Delhi and 31 State Benches at various locations across the country.
- GSTAT will start functioning from the Head Bench located in Delhi from July 1, 2024.

## Dilip Sanghani

- Dilip Sanghani has been elected as the Chairman of Indian Farmers Fertilizer Cooperative Society (IFFCO).
- Balveer Singh has been elected as the Vice Chairman.

## Indian Farmers Fertilizer Cooperative Society

- It is a multi-state cooperative society.
- It participates in the manufacture and marketing of fertilizers.
- It was established in 1967. Its headquarters is in New Delhi.

## Pratima Singh

- Pratima Singh has been appointed as the new Director of the Department for Promotion of Industry and Internal Trade (DPIIT).
- She is a 2009 batch Indian Revenue Service (IRS) officer.
- Pratima Singh's tenure will continue for five years from the date of assuming charge or until further orders.

## DPIIT

- It is a central government department under the Ministry of Commerce and Industry, Government of India.
- This department came into existence in its present form on 27 January, 2019.
- The erstwhile Department of Industrial Policy and Promotion was renamed as Department for Promotion of Industry and Internal Trade (DPIIT) when internal trade was added.
- The department was originally established in 1995 and was restructured in the year 2000 with the merger of the Department of Industrial Development.

## Sanjiv Puri

- Sanjiv Puri, Chairman and Managing Director of ITC, has been elected as the President of Confederation of Indian Industry (CII) for 2024-25.
- Sanjiv Puri replaces R. Dinesh

### Confederation of Indian Industry

- It is a non-governmental industry managed organisation established in 1895.
- It plays an active role in the industrial development process of India.
- It is headquartered in New Delhi.
- It is a membership-based organisation, and the membership is of private and public sectors.
- It works to create and sustain an environment conducive to India's growth through consultative processes with business, political, academic and other civil leaders to shape global, regional and industry dynamics.

## Kami Rita Sherpa

- Kami Rita of Nepal has broken his own world record by climbing Mount Everest 29 times.
- He reached the summit for the 29th time on 12 May 2004.
- Mount Everest is the highest peak in the world, with a height of 8,848.86 metres.
- Kami Rita is known as the 'Everest Man' and he belongs to the ethnic Sherpa community.
- Sir Edmund Hillary and Tenzing Norgay were the first people to climb Mount Everest.
- Junko Tabei was the first woman to climb Mount Everest.

## Purnima Shrestha

- Purnima Shrestha, a 32-year-old mountaineer and photojournalist from Gora, Nepal has become the first woman to conquer Everest three times in 13 days.

## Jyoti Ratre

- Jyoti Ratre has become the oldest Indian woman to climb Mount Everest.
- She is 55 years old. This was her second attempt to climb the world's highest peak.

## AI anchors 'Krish' and 'Bhoomi' launched

- Government-owned TV channel DD Kisan has launched two AI anchors, 'Krish' and 'Bhoomi'.

- These AI anchors are capable of communicating in fifty languages and presenting news 24 x 7, tirelessly, all year round.
- These anchors will broadcast important information about agricultural research, global trends, market updates from agricultural mandis, weather forecasts and government schemes.
- It enhances the ability to educate and inform farmers.

## William Lai Ching-te

- He has recently become the President of Taiwan.
- Lai is also known as William.
- He has replaced Tsai Ing-wen.
- Taiwan has an independent government since 1949.

### Taiwan

- It is a country in East Asia. It is officially called the Republic of China.
- Taipei is its capital.
- The main island of Taiwan is also known as Formosa.

## Gitanas Nauseda

- Gitanas Nauseda has been elected President of Lithuania.
- Gitanas Nauseda defeated Prime Minister Ingrida Simonyte to secure a second term as President of Lithuania.

## Mohammad Mokhber

- Iran's first vice president Mohammad Mokhber has been appointed interim president.
- He will hold office for a maximum period of 50 days.
- According to Iran's constitution, if a president dies while in office, the first vice president takes over for an interim period of 50 days with the approval of the supreme leader.
- Mohammad Mokhbar became the first vice president when Ebrahim Raisi was elected president in 2021.

## General Tu Lam

- General Tu Lam has been elected as the new president of Vietnam.

## Donald Trump

- Former US President Donald Trump has become the first former US president to be convicted of a crime.

- A New York jury found him guilty of illegally influencing the 2016 election by paying money to a porn star.
- **Note:** Conviction in any case will not prevent Trump from contesting the presidential election.

## Vladimir Putin sworn in as Russian President for the fifth time

- Russian President Vladimir Putin was sworn in as President for the fifth time in Moscow on 7 May 2024.
- Mr Vladimir Putin, who has been in power for the longest time after former President Joseph Stalin, and the new term is till 2030.
- Putin has been leading Russia as President or Prime Minister since December 1999.
- Putin was sworn in as President for the first time in 2000, after which he has also become President in 2004, 2012 and 2018.
- Putin got 87.3% votes in the presidential election held in Russia between 15-17 March 2024.

## Mikhail Mishustin

- Russian President Vladimir Putin on 10 May reappointed Mikhail Mishustin as the country's Prime Minister.
- Mikhail first took office on 16 January 2020.
- He has been credited with keeping the Russian economy stable even after the COVID-19 pandemic and the Ukraine war.

## Idriss Deby Itno

- Military dictator and interim President of the Central African country Chad Mahamat Idriss Deby Itno has won the presidential election.
- Idriss Deby's term will last for 6 years.

## Lawrence Wong

- Lawrence Wong became the new Prime Minister of Singapore on 15 May 2024.
- He became the first leader to change leadership in 20 years and only the fourth leader since the country's independence.

## Jeremiah Manele

- Jeremiah Manele has been elected as the new Prime Minister of Solomon Islands.
- He will replace Manasseh Sogavare.
- Jeremiah Manele is considered pro-China.

## Solomon Islands

- The Solomon Islands are an island group in the southwestern Pacific Ocean.

- In recent years, China has tried to increase its influence in the region.
- With Jeremiah Manele being elected as the Prime Minister of Solomon Islands, the US fears that China will establish military dominance in the region, which is just 1200 miles from Australia.

## Jose Raul Mulino

- Jose Raul Mulino has been elected President of Panama.

# Demise

## Ebrahim Raisi

- Iran's President Ebrahim Raisi died in a helicopter crash.
- Iran's Foreign Minister Hussein Amir Abdullahian also died in the same helicopter crash.
- After Raisi's death, Iran's Vice President Mohammad Mokhber is serving as the acting President of Iran.
- Iran's supreme leader is Ayatollah Ali Khamenei.

## Salam Bin Razzaq

- Famous Urdu writer Salam Bin Razzaq died on 7 May.
- More than 50 stories of Salam Bin Razzaq have been broadcast on All India Radio.
- Salam was awarded the Sahitya Akademi Award in 2004.
- Salam received many honors including the Ghalib Award, Maharashtra Urdu Sahitya Academy Award.

## Sushil Kumar Modi

- Sushil Kumar Modi died on 13 May 2024.
- He also served as the fourth Deputy Chief Minister of Bihar.
- He was a member of the four legislative houses - Lok Sabha, Rajya Sabha, Bihar Legislative Assembly and Legislative Council.

## Alice Munro

- Alice Munro, the first Canadian writer to win the Nobel Prize in Literature, died on 13 May 2024.
- She is one of the most famous writers of Canada. She received the Nobel Prize in Literature in 2013.
- Her last work was titled 'Dear Life', which is a collection of short stories.

**Colonel Vaibhav Anil Kale**

- Former Indian Army officer Colonel Vaibhav Anil Kale was martyred in Rafah area of Gaza on 15 May.
- The United Nations had deployed Vaibhav Anil Kale for security work at the European Hospital in Rafah.
- He also participated in the United Nations Peace Mission in Congo in 2009-10.

**Malti Joshi**

- Famous storyteller Malti Joshi passed away on 15 May 2024.
- Malti Joshi was a famous storyteller of Hindi and Marathi languages.
- She was awarded the Padma Shri in 2018.

**Surjit Patar**

- Padma Shri awardee famous Punjabi poet Surjit Patar passed away on 11 May.
- Patar has also been awarded Sahitya Akademi Award.

# 9. PLACES IN NEWS

**Mussoorie: India's first 'Khagol Paryatan Abhiyan', 'Nakshatra Sabha' launched by Uttarakhand Tourism.**

- Nakshatra Sabha began at George Everest in Mussoorie.
- A partnership has been signed between Uttarakhand Tourism Development Board and astro-tourism company Starscapes to launch Nakshatra Sabha.
- It is an initiative designed to provide a comprehensive 'astrology' experience.
- It aims at stargazing and engages participants in various activities like stargazing, special solar observations, astrophotography competitions and camping under the stars.
- It aims to create an engaging platform that brings together astronomy enthusiasts, adventurers and travellers to witness the wonders of the universe while enjoying the natural beauty of Uttarakhand.

**Sikkim: First state to operate artificial intelligence-powered traffic management system**

- The Sikkim Transport Department implemented an artificial intelligence-powered traffic management system across the state from May 25.
- The main objective of this initiative is to modernise the traffic management system and improve regulatory efficiency.
- This artificial intelligence-powered traffic management system will automatically verify documents and detect violations.
- As per government notifications, all vehicle owners will have to keep all their vehicle documents updated.

**Abu Dhabi: IIT Delhi's first international campus**

- IIT Delhi has launched its first international campus in Abu Dhabi, United Arab Emirates (UAE).
- Students can get admission through Joint Entrance Examination 2024 or Joint Entrance Examination (JEE) 2024.
- Earlier, IIT Madras had set up a campus in Zanzibar, Tanzania last year.

**Vijaypur (Madhya Pradesh): GAIL's first 10 MW Green Hydrogen Plant inaugurated**

- Gas Authority of India Limited (GAIL) inaugurated its first Green Hydrogen (GH2) Plant at Vijaypur Complex in Madhya Pradesh.
- The plant has a capacity to produce 4.3 tonnes per day (TPD) of hydrogen through a 10 megawatt (MW) Proton Exchange Membrane (PEM) electrolyser.
- The 10 MW capacity PEM electrolyser has been imported from Canada.
- The hydrogen produced at this plant will be 99.99% pure.
- It will be produced at a pressure of 30 kilograms per square centimetre ($kg/cm2$).
- This initiative is in line with GAIL's target of achieving net-zero status by 2040 and the National Green Hydrogen Mission (NGHM) target of reaching 5 million tonnes annual green hydrogen production capacity for India by 2030.

**Thiruvananthapuram Airport: First Airport in India to receive Zero Waste to Landfill Award**

- The international airport located in Thiruvananthapuram, Kerala has become the **first airport in India to earn the Zero Waste to Landfill (ZWL) accreditation** by CII-ITC-CESD (Centre of Excellence for Sustainable Development).
- As per the ZWL assessment, the Thiruvananthapuram airport has effectively implemented key waste management practices, leading to a remarkable 99.50% waste diversion from landfill.
- The airport has diverted 100% of its plastic waste and 100% of municipal solid waste (MSW), which includes both wet and dry waste, from landfill.

**Sophisticated Waste Management System:**

- Thiruvananthapuram International Airport has installed a sophisticated waste management system conforming to ISO 14001:2015 standards.

## IIT Kanpur: Centre of Excellence in Defence Technology launched

- IIT Kanpur and Defence Research and Development Organisation (DRDO) have jointly launched the DRDO-Industry-Academic Centre of Excellence (DIA COI) at the IIT Kanpur campus, focused on interdisciplinary research in advanced defence technologies.
- The centre aims to lead focused research in various defence areas.
- These include advanced nanomaterials, rapid material design, high energy materials and bioengineering.
- The Defence Research and Development Organisation (DRDO) will fund projects and set up key technological facilities.

## Shaksgam Valley

- India has lodged a strong complaint over the construction work being carried out by China in the Shaksgam Valley.
- This valley is part of present-day Pakistan-occupied Kashmir (PoK).
- According to reports, China is building infrastructure in the strategic Shaksgam Valley.
- Pakistan signed a border agreement in 1963 to end its border disputes with China and handed over the Shaksgam Valley to China.

- India never accepted the 1963 Sino-Pakistan Border Agreement.
- India believes that the Shaksgam Valley or Trans Karakoram Tract is part of the Hunza-Gilgit region of Pakistan-occupied Kashmir.
- It is bordered by the Xinjiang province of the People's Republic of China to the north. The northern areas of Pakistan-occupied Kashmir lie to its west and south and the Siachen Glacier region to the east.
- China's recent attempts to build a road in the valley, especially near the Aghil Pass, raise concerns for India's security, especially due to its proximity to the Siachen Glacier, the world's highest battlefield.

## Narsinghgarh: Tripura's first international cricket stadium

- Tripura's first international cricket stadium is being built in Narsinghgarh located in West Tripura district.
- This stadium will be ready to host major cricket events by February 2025.
- This will be the first stadium in the northeastern state. It is being constructed with a budget of Rs 200 crore.
- This stadium is being constructed under the joint aegis of BCCI and Tripura Cricket Association. The capacity of this stadium will be more than 25,000.

# 10. IMPORTANT FACTS

### IndiaSkills 2024

- It is the country's largest skill competition, which was organized from 15-18 May 2024 at Yashobhoomi, New Delhi.
- This competition provides a platform to the youth to showcase their talent at the national and international level.
- It is organized by the National Skill Development Corporation (NSDC) of the Ministry of Skill Development and Entrepreneurship (MSDE).

### 'Pirul Lao-Paise Pao' Mission

- The Uttarakhand government has launched the 'Pirul Lao-Paise Pao' mission to prevent forest fires.
- Under this mission, with the aim of reducing forest fires, Pirul will be purchased at the collection center at the rate of Rs 50 per kg.
- This mission will be operated by the Pollution Control Board, for which a corpus fund of Rs 50 crore will be kept separately.
- According to data from the Forest Survey of India (FSI), Uttarakhand has recorded the highest number of forest fires in the country since April 28.
- The increasing frequency of forest fires in Uttarakhand is attributed to a mix of natural events and human activities.
- These forests, which are mainly filled with highly flammable pine trees spread over 3.94 lakh hectares, are highly flammable and hence prone to fire.

### Luna impact crater

- Recently, a satellite of NASA Earth Observatory has recorded an image of a crater named Luna in the Kutch region (Banni grasslands) of Gujarat.
- According to the US space agency NASA, a recent geochemical analysis shows that 'this crater shows typical signs of being formed by a meteorite hitting the Earth (impact crater).'
- According to NASA's report, the footprint of the Luna impact crater was captured by OLI (Operational Land Imager) on the Landsat 8 satellite on February 24.

- Impact craters on Earth are relatively rare and less than 200 of them have been confirmed.
- NASA said that many meteorites, which do not get destroyed even after entering the Earth's atmosphere, fall into water sources.

### India's first semiconductor chip imaging tool

- IT services major Tata Consultancy Services has partnered with the Indian Institute of Technology-Bombay to develop India's first quantum diamond microchip imager.
- This sensing device will have the potential to achieve new levels of accuracy in testing semiconductor chips, reduce chip failures and improve the energy efficiency of electronic devices.
- Over the next two years, TCS experts will develop this device in collaboration with Dr. Kasturi Saha, Associate Professor, Department of Electrical Engineering, IIT-Bombay.
- Semiconductor chips are an essential component of all modern electronic devices.
- In various industries including communications, computing, healthcare, military systems, transportation, clean energy and others, these chips serve as the brain of devices.
- Currently 4 semiconductor units are under construction in India, of which 3 are in Gujarat and one in Assam.

### 'Haj Suvidha App'

- This initiative has been taken by the Union Ministry of Minority Affairs and the Haj Committee of India to facilitate the pilgrims for Haj2024.
- This app has been developed with the aim of making the journey easier.
- In this, the passengers will get information about digital Quran, Namaaz timings, pillars of Hajj, method of Hajj, Muzdalfa, Arafat.
- Apart from this, passport, tickets, documents, accommodation facility will also be available in Saudi Arabia.

# Environment

## The United Nations Forum on Forests (UNFF)

- It was held from 6-10 May 2024 at the United Nations Headquarters in New York.
- The UN Forum on Forests is a functional commission of the United Nations Economic and Social Council (ECOSOC).
- Its membership is universal i.e. any country can be its member.
- It was established in 2000. It has achieved many milestones, including the adoption of the first United Nations Forest Instrument in 2007, the Global Forest Financing Facility Network (GFFFN) in 2015, and the first United Nations Strategic Plan for Forests 2030 and its six global forest goals in 2017.

## World Hydrogen Summit 2024

- The World Hydrogen Summit 2024 was held from 13 to 15 May 2024 in Rotterdam, Netherlands.
- The Ministry of Renewable Energy of India set up its first pavilion at this conference.
- The World Hydrogen Summit is the largest global green hydrogen event that promotes the use of green hydrogen technology and green hydrogen-based fuel in the world.

### National Green Hydrogen Mission

- India launched its National Green Hydrogen Mission in January 2023 with an outlay of Rs 19,744 crore.
- Its main objective is to achieve a green hydrogen production capacity of 5 million tonnes by the end of 2030.
- The National Hydrogen Mission aims to develop green hydrogen production capacity of at least 5 MMT (million metric tonnes) per annum by 2030, add 125 GW of renewable energy capacity, reduce fossil fuel imports by more than Rs 1 lakh crore, reduce annual greenhouse gas emissions by about 50 MMT.
- Apart from the Green Hydrogen Mission, scheme guidelines have been notified for the use of green hydrogen in key sectors such as steel, transport and shipping.
- To promote innovation and boost the green hydrogen ecosystem in India, the Department of Science and Technology has launched the Hydrogen Valley Innovation Cluster.
- Currently, 44% of India's energy needs are met from non-fossil energy sources. This will increase to about 65% by 2030.

## Kishtwar High Altitude National Park

- Currently, a group of scientists have spotted 4 snow leopards (Panthera uncia) in Kishtwar High Altitude National Park in the Chenab Valley region of the Union Territory of Jammu and Kashmir.
- India is home to 2% of the global range of the snow leopard. It is the flagship species of High Mountain Asia.
- According to data released by the Center in January 2024, there are 718 snow leopards in India, most of which live in areas that are not under legal protection.
- The iconic snow leopards are called the 'grey ghost of the mountains'.
- Kishtwar High Altitude National Park is located in Kishtwar district of Jammu and Kashmir.
- This protected area is located above an altitude of 4,300 meters. And due to extreme weather, this area becomes inaccessible.
- Apart from the snow leopard, the park also houses Siberian ibex (Capra sibirica), Himalayan musk deer (Moschus leucogaster) and wolves.
- Kishtwar High Altitude National Park is the habitat of the snow leopard.
- This national park connects three Himalayan landscapes: the Greater Himalayas of Jammu and Kashmir, the Trans-Himalayas of Ladakh (through Zanskar) and the Lesser Himalayas of Himachal Pradesh.

## Soil Nailing and Hydroseeding

- Recently, the Tamil Nadu State Highways Department is working on a project to stabilize slopes by growing grass at five locations along the major roads of the Nilgiris to prevent soil erosion.
- The name of this project is – **'Slope Stabilisation using Soil Nailing and Hydroseeding method'.**
- Soil nailing is a geotechnical engineering technique that involves adding reinforcement to a defined area to strengthen the soil.
- 5 locations in the Nilgiris were selected for nailing due to the possibility of landslides and alternative methods of slope stabilization are being adopted to prevent roads from being blocked by landslides in future.
- Hydroseeding is a process of applying a mixture of seeds, fertilizers, organic

material and water to the soil to help grass and plant grow.

- It helps to bind the top layer of soil and prevent erosion.

## Humboldt glacier

- Venezuela's last glacier melted recently.
- The Humboldt glacier has shrunk so much that scientists have removed it from the classification of a glacier and reclassified it as an ice field.

- Venezuela is the first country in the world to have lost all of its glaciers in modern times.
- The South American nation's only remaining glacier, the Humboldt, was in the Andes mountain range.
- The Sierra Nevada de Merida mountain range in Venezuela was once home to six glaciers.
- By 2011, five glaciers had melted and disappeared, leaving only the Humboldt Glacier, also known as La Corona.

# 11. INDEX AND REPORTS

## World Press Freedom Index 2024

- This index was released by the global organization 'Reporters Without Borders' (RWB) on 3 May 2024.
- India is ranked 159th in this index. (It was ranked 161 in the year 2023)
- Norway tops this index. (For the sixth consecutive year)
- Eritrea (180th place) is in the last place.
- Among India's neighboring countries, China is ranked 172nd, Sri Lanka 150th, Nepal 74th, Myanmar 171st, Bangladesh 165th and Pakistan 152nd.
- Reporters Without Borders (RWB) is a French non-governmental organization also known as Reporters Sans Frontiers (RSF).
- The World Press Freedom Index is based on 5 indicators including political indicators, economic indicators, legislative indicators, social indicators and security indicators.

## Global Electricity Review 2024

- It has been released by energy think tank Ember.
- According to this report, India overtook Japan to become the world's third largest solar energy producer in 2023.
- Solar power produced a record 5.5% of global electricity in 2023.
- As per the global trend, India generated 5.8% of its electricity from solar power last year (2023).
- Solar power's contribution to electricity generation in India increased from 0.5% in 2015 to 5.8% in 2023.
- India was ranked fourth in terms of global solar generation growth in 2023 ($18 terawatt hours or TWh).

## World Migration Report 2024

- The United Nations' International Organization for Migration (IOM) released the 'World Migration Report 2024' on May 7, 2024.
- According to the report, India received remittances of more than $111.22 billion in the year 2022.

- Remittance refers to the money sent to their country by people working abroad.
- India has become the first country in the world to receive more than $100 billion in inward remittances.
- Mexico overtook China to take the second position with inward remittances of $61.10 billion in 2022.
- According to the 2024 report, global international remittances stood at $831 billion in 2022, while in 2021 it was $791 billion.

## International Organization for Migration (IOM)

- It is a Geneva-based United Nations agency.
- The International Migration Report is published by the International Organization for Migration every two years.

## Travel and Tourism Development Index 2024

- This index has been prepared by the World Economic Forum in collaboration with the University of Surrey.
- India is ranked 39th in this index. (54th position in 2021) and India's score is 4.25.
- The United States (USA) ranks first in this.
- India is the top performing country in South Asia and low-middle-income countries.
- The United States, Spain, Japan, France and Australia are among the top five countries in the 2024 list.
- India's overall Travel and Tourism Development Index (TTDI) score is 2.1% lower than the 2019 level.

## Global Land Outlook Thematic Report on Rangelands and Pastoralists

- This report was released by the United Nations Convention to Combat Desertification (UNCCD).
- According to this report, rangelands cover 54% of entire land, 50% of rangelands have been degraded, putting at risk 1/6th of humanity's food supply and 1/3 of Earth's carbon stocks.
- Currently, rangelands cover 80 million sq km of Earth's terrestrial surface area (more than half of Earth's land area), and are thus

the largest land cover or land use type in the world.

- In India, from the Thar Desert to the Himalayan grasslands, rangelands cover about 1.21 million sq km.
- Rangelands mostly consist of natural grasslands used by livestock and wild animals for grazing and foraging.
- They also include savannas, shrublands, wetlands, tundra, and deserts.

## India's majority population has declined by 7.82%

- The Prime Minister's Economic Advisory Council released a report on May 9, 2024.
- According to this report, the population of the majority has declined in India.
- According to this report, the majority population in India has declined by 7.82% from 1950 to 2015. This is the second largest decline among South Asian countries after Myanmar.
- The Hindu population was 84.68% in 1950, which declined to 78.06% in 2015.
- The share of minority groups in India - Muslims, Christians, Buddhists and Sikhs - has increased while the population of Jains and Parsis has declined.

- The Muslim population in the country has increased by 43.15% and the Christian population by 5.38% during the same period.
- Similarly, during the same period, the share of Sikh and Buddhist population has increased by 1.85% and 0.81% respectively.
- However, the share of Jains and Parsis in the population mix has declined and in 2015 it was 0.36% and 0.004% respectively.
- Minority population has decreased significantly in Bangladesh, Pakistan, Sri Lanka, Bhutan and Afghanistan.

## Mumbai and Delhi among top 50 richest cities in the world

- The latest ranking of the world's richest cities has been released by Henley & Partners and New World Health.
- New York tops the list of the top 50 richest cities in the world. 11 cities in the top 50 are from the US.
- Five of the top 10 richest cities are from the Asia-Pacific region. The top 10 include Tokyo (third), Singapore (fourth) and Beijing (10th).
- Mumbai and Delhi are ranked 24th and 37th respectively in this ranking.

# 12. IMPORTANT DAYS & WEEKS

## 64th Foundation Day of Maharashtra and Gujarat

- Maharashtra and Gujarat celebrate their foundation day on 1 May every year.
- On 1 May 1960, the states of Maharashtra and Gujarat were formed by dividing the Bombay state due to conflict between Marathi and Gujarati speaking population.
- The Parliament of India passed the 'Bombay Reorganisation Act 1960' for the division of Bombay State.
- This Act came into force on 1 May 1960.

## World Press Freedom Day

- World Press Freedom Day is celebrated every year on 3 May.
- Its purpose is to evaluate the freedom of the press around the world and to protect media freedom and pay tribute to the journalists who lost their lives in the attack during duty.
- Theme for the year 2024 is- 'A Press for the Planet: Journalism in the Face of the environmental crisis.'

## International Firefighters' Day

- International Firefighters' Day is celebrated every year on 4 May.
- The purpose of celebrating this day is to honor those firefighters who put their lives at stake to save the lives of people and wildlife from fire.
- The symbol of this day is 'two ribbons of red and blue', in which red color represents fire and blue color represents water.

## World Hygiene Day

- 'World Hygiene Day' is celebrated every year on 5 May.
- This day is also known as 'World Hand Hygiene Day'.
- On this day, a global campaign is run under the leadership of the World Health Organization (WHO).
- The aim of this campaign is to make people aware of hygiene and encourage health care.
- The main theme of the year 2024 is 'Power of Hand Hygiene'.

## International Midwife Day

- 'International Midwife Day' is celebrated every year on 5 May.
- Its purpose is to honor the dedication of the midwife who takes care of the woman during pregnancy.
- The main theme of the year 2024 is 'Midwives: A Vital Climate Solution'.

### Midwife

- Women who take full care of the woman during pregnancy and the child for a few days after birth have been named 'midwife'.

## World Athletics Day

- World Athletics Day is celebrated every year on 7 May.
- Its objective is to encourage youth to participate in athletics.
- The main theme of the year 2024 is 'World Mile Challenge'.

### Athletics

- Athletics is mainly a special collection of running, jumping, throwing and walking competitions.
- It generally includes track and field, road running, cross country running and race walking competitions.

## World Thalassemia Day

- Every year 8 May is celebrated as 'World Thalassemia Day'.
- This day is celebrated to bring awareness among people about the importance of necessary vaccination for the prevention of thalassemia disease.
- The main theme of the year 2024 is - 'Empowering Lives, Embracing Progress: Equitable and Accessible Thalassaemia Treatment for All.'

### Thalassemia

- Thalassemia is a chronic blood disorder.
- The red blood cells (RBC) of a patient suffering from this disease do not produce enough hemoglobin, which causes anemia.

- A patient suffering from severe thalassemia needs a bone marrow transplant or regular blood transfusion to survive.

## World Red Cross Day

- Every year 8 May is celebrated as 'World Red Cross Day'.
- This day is dedicated to those people who suffer from food shortage, various natural disasters and epidemics including war.
- The main theme of the year 2024 is 'I give with joy, and the joy I give is a reward'.
- World Red Cross Day is celebrated to commemorate the birthday of John Henry Dunant, the founder of the Red Cross and the first Nobel Prize winner for Peace.

## Gurudev Rabindranath Tagore Jayanti

- Gurudev Rabindranath Tagore's 163rd birth anniversary was celebrated on 9 May 2024.
- According to the Bengali calendar, Tagore's birth anniversary falls on 9 May, while according to the Gregorian calendar, Tagore was born on 7 May 1861 in Jorasanko Thakurbari, Kolkata.
- His father was Devendranath Tagore and mother was Sarada Devi.

### Rabindranath Tagore

- Rabindranath Tagore is the only litterateur of India who received the Nobel Prize for Literature in the year 1913 for the poetry composition 'Gitanjali'.
- He is also the first Asian to receive the Nobel Prize and the first non-European to receive the Nobel Prize in literature.
- He is the only poet in the world whose compositions are the national anthems of two countries - India's national anthem 'Jana Gana Mana' and Bangladesh's national anthem 'Amar Sonar Bangla'.
- In 1921, along with agricultural economist Leonard Elmhirst, he founded the 'Rural Reconstruction Institute' near his ashram, later it was renamed Sriniketan.

## National Technology Day

- Every year 11 May is celebrated as National Technology Day.
- The theme for the year 2024 is 'From Schools to Startups - Igniting Young Minds to Innovate'.
- This day is celebrated to commemorate the successful nuclear test conducted by India and to recognize the important contribution of scientists and engineers who played an important role in the technological progress of the country.
- The first National Technology Day was celebrated on 11 May 1999.

## International Family Day

- Every year on 15 May, 'International Day of Families' is celebrated all over the world.
- The purpose of celebrating this day is to raise awareness about the role of family among children and youth.
- The main theme of the year 2024 is 'Families and Climate Change'.

## International Day of Light

- 'International Day of Light' is celebrated every year on 16 May.
- This day is celebrated to commemorate the role of light in various fields of science, culture, arts, education and sustainable development, and medicine, communication and energy.
- The theme of the year 2024 is 'Light in Our Lives'.
- This day is celebrated to commemorate the anniversary of the first successful laser operation of the laser by physicist and engineer Theodore Maiman.

## Sikkim Foundation Day

- Sikkim Statehood Day is celebrated every year on 16 May.
- Sikkim became the 22nd state of the Republic of India on 16 May 1975.
- By the 35th Constitutional Amendment, Sikkim was included in the Republic of India as the 22nd Associate State. Sikkim was given the status of a full state by the 36th Constitutional Amendment.

## National Dengue Day

- Every year on 16 May, National Dengue Day is celebrated by the Ministry of Health and Family Welfare.
- The purpose of celebrating this day is to create awareness among the people about the prevention of dengue.
- The theme of the year 2024 is 'Dengue Prevention: Our Responsibility for a Safer Tomorrow'.
- Dengue is a viral disease. It spreads due to the bite of an infected female Aedes Mosquito.

- In case of dengue, a person may have symptoms like high fever, body pain, pain in the eyes and skin rashes. Dengue causes a decrease in platelets in the blood.

## World Agri-Tourism Day

- Every year on 16 May, World Agri-Tourism Day is celebrated.
- The purpose of celebrating this day is to increase the income of farmers by integrating agriculture and tourism sector.
- Agricultural tourism refers to a form of tourism in which rural culture is presented as a tourist attraction.

## World Telecommunication and Information Society Day

- World Telecommunication and Information Society Day is celebrated every year on 17 May.
- The main objective of celebrating this day is to raise global awareness of social changes brought about by the Internet and new technologies.
- The main theme of the year 2024 is 'Digital Innovation for Sustainable Development'.

## World Hypertension Day

- World Hypertension Day is celebrated every year on 17 May.
- The purpose of celebrating this day is to make people all over the world aware about it.
- The main theme of the year 2024 is - 'Measure Your Blood Pressure Accurately, Control It, Live Longer'.

## World AIDS Vaccine Day

- World AIDS Vaccine Day is celebrated every year on 18 May.
- It is known as HIV Vaccine Awareness Day.

## International Museum Day

- International Museum Day is celebrated every year on 18 May.
- The purpose of celebrating this day is to spread awareness about museums among the general public and make them aware of their history by making them visit museums.
- The theme of the year 2024 is 'Museums for Education and Research'.

## World Bee Day

- 'World Bee Day' is celebrated every year on 20 May.

- The purpose of celebrating this day is to raise awareness about the importance and conservation of bees and other pollinators.
- Bees are the largest pollinators. According to the United Nations, about 35% of the world's agriculture still depends on pollinators.
- The main theme of the year 2024 is 'Bee Engaged with Youth'. This day is celebrated to commemorate the birthday (20 May) of Anton Jansa, who pioneered the technique of modern beekeeping in the 18th century.

## World Metrology Day

- World Metrology Day is celebrated every year on 20 May.
- The purpose of celebrating this day is to create awareness about metrology, the science of measurement and its application.
- The main theme of the year 2024 is 'Sustainability'.
- World Metrology Day is celebrated to commemorate the anniversary of the signing of the Metre Convention. This convention was signed on 20 May 1875.

## National Anti-Terrorism Day

- Anti-Terrorism Day is celebrated every year on 21 May in India.
- This day is celebrated on the death anniversary of former Prime Minister Rajiv Gandhi.
- The purpose of celebrating this day is to keep the youth away from the path of terrorism and violence, spread the message of peace and humanity and make people aware.

## International Tea Day

- Every year 21st May is celebrated as International Tea Day.
- The purpose of celebrating this day is also to encourage discussion about the working conditions of tea workers, workers' rights, wages, social security, employment safety and health.
- International Tea Day is celebrated with a motto which is 'From Field to Cup'.
- On the recommendation of India, the United Nations has declared 21st May as International Tea Day.
- China is the largest producer of tea in the world, followed by India and Kenya.

## International Biological Diversity Day

- International Biological Diversity Day is celebrated every year on 22nd May to promote biodiversity issues.
- It is an international day approved by the United Nations to create awareness about biodiversity issues.
- The theme of International Day for Biological Diversity (IDB) 2024 is 'Be Part of the Plan'.

## World Hunger Day

- It is celebrated every year on 28th May.
- Its main objective is to raise awareness about the plight of millions of people who do not get enough food.
- The theme for the year 2024 is 'Prosperous Mothers. Prosperous World'.

## The United Nations declared 24 May as 'International Markhor Day'

- The United Nations General Assembly declared 24 May as International Markhor Day.
- The Markhor (Capra falconeri) is the largest wild goat in the world.

- This species is found in the mountainous regions of Central and South Asia, including Afghanistan, India, Pakistan, Tajikistan, Turkmenistan and Uzbekistan.
- In India, this subspecies is found only in the Union Territory of Jammu and Kashmir.
- It is also the national animal of Pakistan.
- The Markhor is classified as Near Threatened in the 2014 IUCN Red List of Threatened Species.

## United Nations declares 25 May as World Football Day

- The United Nations General Assembly has declared 25 May as World Football Day at the 80th session of the General Assembly in New York.
- This year marks the 100th anniversary of the first international football tournament played in history.
- The match was held on 25 May 1924 at the 1924 Summer Olympics in Paris.
- To commemorate this, it has been decided to celebrate World Football Day on 25 May every year.
- Taher M.T. El-Sonni, Libya's Permanent Representative to the United Nations, introduced the resolution.

# 13. Yojana - Kurukshetra [Gist]

## YOJANA

### Vibrant World of Weaves: Regional Diversity in Indian Weaving

India's textile tapestry is a breathtaking display of regional diversity, each thread whispering tales of the land it comes from. From the immaculate white fabrics of Kerala symbolizing purity to the vibrant colors and intricate designs of Gujarat's Patola sarees, Indian weaving is where artistic flair meets mathematical precision.

**A Loom of Contrasts:**

- **Southern Elegance:** Kerala's handlooms specialize in pristine white Mundu veshtis, Kasavu saris, and dhotis, often adorned with shimmering gold borders and unique ribbed ends. Their home linens are renowned for their compact weave, perfect for towels and sheets.

- **A Tapestry of Techniques:** Moving north, Karnataka boasts a treasure trove of cotton and silk weaves, including the coveted Molakalmuru and Ilkal saris, while neighboring Goa whispers stories of its unique checkered weaves, a legacy of its fascinating textile history. Maharashtra takes pride in its regal Paithani silks, alongside the earthy comfort of Wardha cottons and the shimmering opulence of Vidarbha silks.

- **Gujarat: The Merchant Spirit:** Gujarat's iconic Patola sarees, double ikats famed for their vibrant hues and bold geometric patterns, embody the state's entrepreneurial spirit. Surat, a powerhouse of the textile industry, flourishes with power looms, a testament to India's post-independence growth in mechanized textiles.

**A Kaleidoscope of Colors:**

- **Rajasthan: A Royal Palette:** Rajasthan's textile heritage lies in its hand-spun fabrics, vibrantly colored durries (floor coverings), and traditionally woven plain fabrics. The state has witnessed a modern surge in printed fabrics and men's formal wear, catering to the mill sector.

- **Shifting Sands in the North:** Punjab and Haryana's traditional weaves focused on sturdy fabrics for everyday wear and home linens. Post-independence, these regions have seen a shift towards machine-made knitwear and woolen textiles.

- **Himachal Pradesh & Jammu & Kashmir: Wrapping Up in Warmth:** Nestled in the Himalayas, Himachal Pradesh is famed for its Kullu and Kinnaur shawls, blankets, and headwear, crafted from the finest wool. Jammu & Kashmir takes pride in its luxurious Pashmina shawls, exquisitely embroidered woollens, and classic tweeds.

**Central Hubs and Cultural Capitals:**

- **Madhya Pradesh & Chhattisgarh: A Textile Powerhouse:** Madhya Pradesh boasts the exquisite Maheshwari and Chanderi sarees, while Chhattisgarh is renowned for its Tussar silk and cotton weaves, with significant support from NGOs working towards their preservation.

- **Varanasi: Where Silk Meets Spirituality:** Uttar Pradesh's cultural capital, Varanasi, is synonymous with the timeless beauty of Banarasi silk sarees, intricate in design and woven with delicate finesse.

- **Eastern Elegance:** Weaving in Bihar finds new life with the revival of Tussar silk and Bhagalpur weaves. Bengal seamlessly blends tradition with modern advancements, continuing its legacy of cotton and silk weaves. Odisha's ikat saris and unique Tussar patterns never fail to impress.

- **The Rich Tapestry of the Northeast:** Assam's Mekhela Chador and Muga silk represent the region's distinct cultural identity. Manipur, Meghalaya, and Nagaland boast a vibrant tapestry of weaves reflecting their tribal traditions and regional aesthetics.

- **A Meeting Point of North and South:** Andhra Pradesh's Venkatgiri and Gadwal sarees showcase the perfect blend of north and south Indian design sensibilities. Telangana's Pochampally ikat sarees, with their captivating geometric patterns, are a must-have for any saree connoisseur.

- **Weaving Wonders of Tamil Nadu:** Famed Kanchipuram Silks are known for their grand borders and designs influenced

by temples. Timeless Techniques include traditional Korvai and Chelnetha weaving methods.

## The Weaver's Challenge:

- Despite its rich legacy, traditional weaving faces challenges. The rise of mechanized looms and cheaper fabrics threatens the survival of handlooms. Weavers grapple with economic hardships due to lower demand and higher production costs. Preserving these age-old weaving techniques and passing them down to future generations is crucial.

## Weaving the Future:

- The changing landscape of fashion, with a growing preference for western wear and stitched garments, presents another challenge. However, weaving remains an integral part of India's regional and cultural identity.

## A Celebration of Threads:

- **Cultural Legacy:** Every thread woven tells a story, reflecting the cultural heritage and traditions of a region.
- **Artistic Expression:** Weaving provides a platform for artistic and cultural expression, allowing weavers to translate their creativity into stunning textiles.
- **Economic Lifeline:** The handloom industry is a significant source of employment in rural and semi-urban areas.
- **Global Recognition:** Indian textiles contribute significantly to the country's export potential and enhance its global cultural footprint.

## Preserving the Legacy:

- **Supporting the Weavers:** Government initiatives and NGO involvement are crucial for supporting weavers and promoting handlooms.
- **Expanding the Market:** Encouraging the use of traditional weaves in contemporary fashion can reignite interest among domestic consumers. International markets can be tapped into through participation in fairs and exhibitions, showcasing the unique craftsmanship of Indian textiles to a global audience.
- **Innovation and Adaptation:** Collaborations between designers and weavers can lead to the creation of innovative and modern interpretations of traditional weaves, ensuring their continued relevance in the ever-evolving fashion world. Additionally, integrating technology into the weaving process can improve efficiency and productivity while preserving the essence of traditional methods.

## Conclusion:

- India's vibrant world of weaves is a testament to its rich cultural heritage and artistic legacy. By acknowledging the challenges faced by traditional weaving and implementing solutions like promoting handlooms, fostering innovation, and supporting weavers, India can ensure the survival of this age-old art form. This will not only preserve a vital part of the country's cultural identity but also empower weavers and contribute to India's economic growth on both domestic and international fronts. The future of Indian textiles lies in embracing the past while weaving a path towards a sustainable and vibrant future.

## Weaving the Tapestry of India: A Legacy Woven in Threads

- Weaving in India transcends mere craft; it serves as a historical and cultural chronicle, intricately woven into the very fabric of the nation. Evidence from the Indus Valley Civilization (3300-1300 BCE) attests to the antiquity of this tradition, with cotton cultivation and textile production documented. The Rigveda further underscores the significance of weaving in ancient Indian society, with references to textiles used in religious and ceremonial settings.

## Mythology and History: Intertwined Threads

- Indian folklore entwines weaving with the divine. The legend of Vishwakarma, the celestial architect, exemplifies the sacred nature of this craft. Throughout history, cross-cultural exchanges have significantly influenced weaving techniques and motifs. The Achaemenid Empire of Persia introduced Persian designs and methods, while the Mughal era witnessed a flourishing of luxurious textiles like brocades, muslin, and velvets, fostered by royal patronage. The colonial period brought mechanized looms and synthetic dyes, alongside the expansion of textile manufacturing centers and the establishment of European trade networks.

## Regional Expressions: A Symphony of Styles

India boasts a rich tapestry of regional weaving

styles and techniques.

- **Banarasi** silks embody the concept of "Shringar" (adornment), characterized by opulent elegance and intricate patterns drawing inspiration from Mughal motifs and embellished with metallic threads.
- **Kanchipuram** silks, representing "Dharma" (righteousness), possess a rich texture, vibrant colors, and distinctive zari borders woven with precious metals.
- **Paithani** weaving, symbolizing "Lakshya" (aspiration), employs an intricate technique to create vibrant colors and peacock motifs using the tapestry weaving method.
- **Patola** craft, exemplifying "Vasudhaiva Kutumbakam" (the world is one family), utilizes the double ikat technique to produce intricate geometric patterns and motifs that symbolize harmony and balance.

## Modern Interpretations: A Sustainable Future

- Contemporary Indian fashion designers like Sabyasachi Mukherjee, Anita Dongre, Rahul Mishra, Himanshu Shani, and Aneeth Arora are actively collaborating with traditional weavers. This synergy infuses traditional techniques with modern design sensibilities, fostering global appeal and ensuring the preservation of this rich craft heritage. Ethical practices and sustainability are gaining traction, with fair trade initiatives ensuring fair wages and ethical working conditions for artisans. Furthermore, a growing focus on organic farming, natural dyes, and eco-friendly materials aims to minimize the environmental impact of the weaving industry.

## Significance and Challenges: A Delicate Balance

- Weaving empowers countless artisans and their families, providing a vital source of income and economic security. Collaborations with designers open new domestic and international markets for traditional handloom products. This not only fosters economic empowerment but also serves to preserve cultural identity by ensuring the transmission of weaving techniques and heritage to future generations. Global recognition further strengthens cultural pride and identity within weaving communities.
- However, the industry faces challenges. Adapting to changing market demands and competition from mass-produced textiles is crucial. A decline in the number of skilled weavers necessitates urgent action. Additionally, minimizing the environmental impact through sustainable practices requires addressing reliance on harmful chemicals and waste generation.

## Securing the Future: A Collaborative Approach

- Building capacity and fostering skill development through workshops and training programs is essential to enhance technical skills and facilitate knowledge exchange. Equipping artisans with entrepreneurial skills will allow them to adapt to evolving market trends and seize business opportunities. Supportive government policies promoting traditional crafts, coupled with financial aid to weaving communities, are crucial for long-term sustainability. Furthermore, creating collaborative platforms that connect traditional artisans with contemporary designers fosters innovation and ensures the continued relevance of this ancient art form.

## Conclusion: A Legacy Woven in Time

- Weaving in India transcends mere production; it serves as a living testament to the nation's traditions, history, and values. Through centuries of cultural exchange and contemporary collaborations, Indian textiles continue to evolve, preserving the timeless beauty and craftsmanship of this rich heritage. By addressing current challenges and fostering innovation, India can ensure the future of its vibrant weaving tradition, guaranteeing its legacy for generations to come.

## Indian Weaves Promoting Sustainability

- In the face of a growing global focus on sustainability, Indian handloom textiles have emerged as a compelling alternative within the fashion industry. Characterized by their unique craftsmanship and deep cultural heritage, these weaves play a pivotal role in promoting sustainable practices.

## A Legacy Woven in Time: Historical Context

- The art of weaving in India boasts a rich and ancient legacy, with distinct traditions flourishing across diverse regions for millennia. Examples include the intricate brocades of Varanasi and the vibrant

ikats of Telangana. **Cotton**, a crucial commercial crop, has not only served economic purposes but also emerged as a symbol of India's enduring textile heritage. Traditional craftsmanship associated with Indian weaves has sustained livelihoods for generations and continues to promote artistic expression.

## Sustainable by Design: Eco-Friendly Practices

- Indian weaves are inherently sustainable due to their reliance on natural fibers like cotton, silk, jute, and wool, all sourced locally. These natural materials are biodegradable, renewable, and contribute to sustaining biodiversity. Traditional weaving techniques, passed down through generations, have minimal environmental impact compared to modern methods employed in mass production. Moreover, the use of natural fibers offers a significant advantage over synthetic alternatives that contribute to pollution and resource depletion.

## Championing Sustainability: The Role of the Cotton Corporation of India (CCI)

The Cotton Corporation of India (CCI) plays a crucial role in safeguarding the economic well-being of cotton farmers and promoting sustainable practices in cotton cultivation and weaving.

- '**Kasturi Cotton Bharat**' brand leverages blockchain technology to ensure end-to-end traceability. This not only enhances transparency but also fosters trust within the supply chain.
- The CCI collaborates strategically with the **Khadi and Village Industries Commission (KVIC)** to ensure the sustainable procurement of raw cotton for national flag manufacturing.
- Through **Minimum Support Price (MSP)** operations, the CCI acts as an economic safeguard for cotton farmers, protecting them from market volatility and ensuring fair prices.

## Challenges and Opportunities: A Collaborative Approach

- Despite their inherent sustainability, Indian handloom textiles face challenges from mass-produced textiles that dominate the market. Moreover, a lack of infrastructure and declining interest among younger generations pose a threat to the survival of traditional weaving communities.

To navigate these challenges, leveraging technology offers promising solutions.

- Blockchain technology, as exemplified by the 'Kasturi Cotton Bharat' brand, can enhance transparency and traceability within the supply chain.
- Investing in skill development programs is crucial to equip traditional weavers with the necessary skills to adapt and thrive in the evolving market.
- Fostering partnerships between stakeholders such as designers, corporations, and government bodies presents another significant opportunity. By collaborating, these entities can promote traditional weaves through targeted marketing campaigns and innovative product development. Additionally, encouraging consumers to make conscious choices and support local handloom products is essential for ensuring the continued success of traditional weaving communities.

## Ethical Practices and Sustainability: A Symbiotic Relationship

- Ethical considerations are interwoven with the promotion of sustainable practices. Fair trade initiatives that guarantee fair wages and ethical working conditions for weavers are essential. Furthermore, promoting organic farming practices and the use of natural dyes can significantly reduce the environmental impact of the textile industry.

## Significance: Beyond Sustainability

- The promotion of Indian handloom textiles extends far beyond mere sustainability considerations. This approach fosters economic empowerment by providing vital livelihoods for millions of artisans, particularly in rural areas. Supporting weavers contributes to local market development and economic growth. Furthermore, it acts as a powerful tool for cultural preservation by ensuring the continuation of traditional weaving techniques and safeguarding India's rich heritage. Initiatives like 'Kasturi Cotton Bharat' enhance the global valuation and appreciation of Indian textiles, fostering cultural pride and recognition on the international stage.

## Conclusion: Weaving a Sustainable Future

- The promotion of Indian handloom textiles through sustainable practices presents a unique opportunity to preserve cultural heritage, empower local communities, and contribute to a more sustainable fashion industry. The innovative initiatives undertaken by the CCI, such as blockchain-enabled traceability and collaborations with organizations like KVIC, serve as a model for the future. By addressing existing challenges through technology, partnerships, and ethical practices, Indian handloom textiles can continue to thrive in a sustainable future, ensuring their enduring legacy for generations to come.

## The Icon of Indian Khadi Independence

- Khadi, a handspun and handwoven fabric, transcends mere material; it embodies the spirit of India's independence struggle. Popularized by Mahatma Gandhi during the Champaran Satyagraha (1917), khadi became a potent symbol of self-reliance and resistance against colonial exploitation.

## Historical Roots: A Nation Exploited

- The Champaran Satyagraha exposed the plight of Indian farmers forced to cultivate indigo by British authorities. This system not only impoverished farmers but also denied them access to affordable finished cloth. British policies exacerbated the situation. Raw cotton, India's strength, was exported to England, only to return as expensive finished products. These policies crippled India's once-thriving textile industry, evident from archaeological finds at Mohenjo-daro and historical accounts. Each region of India boasted unique weaving, dyeing, and printing techniques, but the rise of power looms in England during the Industrial Revolution crushed these industries, leaving millions of Indian spinners and weavers unemployed.

## Gandhi's Vision: A Spinning Revolution

- Gandhi's discovery of the spinning wheel (charkha) in 1908 was pivotal. He recognized its potential as a tool for Swaraj (self-rule) and economic empowerment. Revival of spinning aimed to provide supplementary income for farmers and reduce dependence on British textiles. Key figures like Gangabehn Majumdar played a crucial role in rediscovering the charkha. Gandhi's ashrams fostered weaving with support from local mill owners.

## Philosophical Underpinnings: Swadeshi and Beyond

- Khadi became the central symbol of the Swadeshi movement, emphasizing self-reliance and national pride. Beyond symbolism, khadi offered a sustainable economic model. Decentralized production empowered rural areas and fostered equitable income distribution. However, British colonial policies, including trade restrictions and price manipulation, posed significant challenges.

## Modern Relevance: Challenges and Opportunities

- In the contemporary era, khadi faces stiff competition from mass-produced textiles. Modernizing techniques while preserving authenticity remains a challenge. Despite these hurdles, khadi offers significant advantages. It provides employment opportunities, particularly for women in rural areas, with minimal investment requirements. Moreover, khadi production promotes equitable income distribution.

## Cultural Significance and the Path Forward

Khadi serves as a potent symbol of India's cultural heritage and struggle for independence. It preserves traditional textile knowledge and skills, fostering a connection to the past.

- To ensure its future, leveraging technology like modern tools for enhanced productivity is crucial.
- Skill development programs can improve efficiency and quality.
- Government policies and subsidies, along with initiatives by the Khadi and Village Industries Commission (KVIC), are essential for promoting khadi production.
- Positioning khadi as a sustainable and eco-friendly fabric in global markets offers new opportunities. Consumer awareness campaigns highlighting its benefits and heritage are also important.

## Conclusion: A Legacy Woven in Threads

- Khadi's legacy, nurtured by Gandhi, transcends mere fabric. It serves as a model for sustainable and inclusive economic development. By promoting khadi, India can achieve sustainable development goals, preserve traditional crafts, empower rural communities, and honor its rich cultural heritage. Supporting khadi is an investment not just in the past but also in a sustainable and equitable future.

# Kurukshetra

## Green Technologies: Current Status, Challenges, and Way Ahead

Green technologies, encompassing innovations designed to enhance environmental quality and resource efficiency, are paramount to achieving a sustainable future. They offer a critical tool to address the twin challenges of climate change and resource scarcity. India, through its evolving policies and reforms, is actively pursuing the adoption of green technologies, recognizing their potential to drive both sustainability and economic growth.

### Current Landscape: Embracing Green Solutions

- The **Indian energy sector** is witnessing a shift towards renewable energy sources like solar, wind, and bioenergy. Initiatives such as the National Solar Mission and National Green Hydrogen Mission exemplify this commitment.
- The **building sector** is adopting green building designs that prioritize energy efficiency and utilize sustainable materials.
- The **transportation sector** is experiencing growth in electric vehicles (EVs) alongside the development of sustainable public transit systems.
- Advancements in **waste management** technologies and the adoption of sustainable water usage practices further highlight India's progress in the realm of green solutions.

### Challenges to Overcome: Hurdles on the Green Path

- Despite significant progress, challenges persist. The initial investment required for green technology adoption can be substantial, posing a hurdle for some stakeholders. Complex regulatory frameworks can impede the development and implementation of these technologies. Furthermore, fostering greater public awareness and acceptance is crucial for wider adoption. Existing infrastructure may not be readily compatible with new green technologies, necessitating adaptation. Efficient management of renewable resources remains an ongoing concern.

### The Green Dividend: A Multifaceted Benefit

Green technologies offer a multitude of benefits.

- They hold the potential to stimulate economic growth through the creation of new markets and job opportunities in sectors like renewable energy and sustainable infrastructure.
- Environmental benefits include reduced carbon emissions and mitigated environmental degradation.
- The adoption of green technologies can lead to social improvements, such as improved air and water quality, enhancing the overall quality of life for citizens.
- Furthermore, green technologies act as a catalyst for business innovation, fostering the development of sustainable products and services.

### Charting the Course: A Collaborative Approach

To overcome the existing challenges and fully harness the potential of green technologies, a multi-pronged approach is necessary.

- Supportive government policies, including financial incentives and streamlined regulations, can significantly influence adoption rates.
- Public awareness campaigns are essential to educate the public about the benefits of green technologies and encourage participation.
- Increased investment in research and development (R&D) is crucial to foster innovation and advance green technologies.
- Upgrading and adapting existing infrastructure to accommodate new technologies is essential.
- International collaboration with leading global entities allows for the sharing of knowledge and resources, accelerating progress.

### Conclusion: A Green Imperative

- Green technologies are not merely an option; they are an imperative for a sustainable future. By addressing environmental, economic, and social challenges, they offer a path towards a more sustainable and prosperous world. India's commitment to green technology, as evidenced by its policies and initiatives, positions the nation as a potential leader in global sustainability efforts. Overcoming existing challenges through strategic investments, supportive policies, and public engagement is crucial to unlocking the full potential of green technologies and securing a greener future for all.

## Empowering Rural Communities: Embracing Green Waste Tech in India

- Rural India faces a significant challenge in waste management. Ineffective practices like open dumping, burning, and improper disposal contribute to environmental degradation, impacting public health and livelihoods. Embracing green waste technologies offers a promising solution to empower rural communities, mitigate environmental threats, and bridge the urban-rural divide. This approach aligns with India's vision of achieving a circular economy and Net Zero emissions by 2070.

## Current Scenario: A Waste Management Crisis

- Rural waste management systems in India are largely underdeveloped, leading to severe environmental consequences. Common practices like open dumping, burning of e-waste and agricultural residues, and river pollution contribute significantly to environmental degradation. This lack of formal waste management infrastructure is further exacerbated by the expanding urbanization and agribusiness sectors, threatening organic farming practices and biodiversity. Climate-induced hazards like floods and droughts, coupled with socio-economic challenges like poverty and migration, further complicate the situation.

## Waste Streams: A Spectrum of Challenges

- Rural waste generation encompasses a diverse range of materials, including solid waste (agricultural residues and wet waste), plastic waste, hazardous biomedical waste, and construction and demolition (C&D) waste.

## Green Solutions: Transforming Waste into Opportunity

- Green waste technologies present an opportunity to transform waste into valuable resources. Implementing these technologies can facilitate energy recovery and resource recycling, generating economic benefits for rural communities while mitigating environmental impact.

## Impact Analysis: Green Technologies Empowering Rural India

- **Renewable Energy Generation:** Micro-Hydro Power (MHP) and similar technologies can power rural development initiatives and alleviate poverty by creating local employment opportunities.

- **Waste Conversion Processes:**
  - **Thermal Conversions** (incineration, pyrolysis, gasification) offer efficient waste disposal solutions with potential for energy generation.
  - **Bio-chemical Conversions** (composting, anaerobic digestion) promote a circular economy by converting organic waste into compost and biogas, enhancing soil fertility and reducing reliance on chemical fertilizers.
  - **Chemical Conversions** (trans-esterification for biodiesel production) create opportunities for rural biofuel production.

**Global Success Stories:**

- **Waste Gasification:** Implementation in developed countries like Japan, USA, and Europe demonstrates the effectiveness of gasification in reducing waste volumes and greenhouse gas emissions.

- **Waste-to-Energy Solutions:** These technologies offer a sustainable alternative to fossil fuels, promoting energy independence for rural communities.

## Green Technologies: A Catalyst for Rural Development

- **Environmental Sustainability:** Composting and biogas generation contribute to a cleaner environment by reducing greenhouse gas emissions and promoting soil health.

- **Economic Opportunities:** Green waste technologies empower rural communities by creating new business opportunities through the sale of compost, biogas, and potentially biofuels.

- **Climate Resilience:** Effective waste management practices contribute to climate change mitigation and adaptation by reducing dependence on landfills and associated methane emissions.

- **Community Engagement and Awareness:** Implementing green waste technologies fosters community ownership and responsibility by promoting knowledge and skill development related to waste management.

## Barriers to Adoption: Challenges on the Road to Sustainability

- **Pollution from Improper Disposal:** Open burning of agricultural residues, e-waste,

and plastics poses a significant threat to air quality and contributes to climate change.

- **Infrastructure Constraints:** Limited infrastructure and resource availability in rural areas hinder the implementation of effective waste management systems.
- **Lack of Awareness:** Inadequate knowledge about proper waste disposal practices leads to environmental contamination and associated health risks.

## Sustainable Solutions: Bridging the Gap

- **Smart Waste Management Systems (SWM):** Leveraging Internet of Things (IoT) technology with features like smart bins equipped with ultrasonic sensors for real-time data collection, GPS-guided waste collection vehicles for optimized logistics, and solar-powered sensors to ensure continuous operation.
- **Best Practices for Successful Implementation:**
  o **National Programs:** Initiatives like the National Biogas and Manure Management Program (NBMMP) and Swachh Bharat Mission provide a framework for rural waste management.
  o **Community-Driven Initiatives:** Self-help groups promoting composting and organic farming practices at the local level can significantly contribute to waste reduction and resource recovery.

## Case Studies: Exemplary Models

- **Hasiru Mane Project, Karnataka:** This project empowers marginalized communities through the production and sale of compost.
- **Punsari Village, Gujarat:** Waste-to-energy plants in this village generate electricity from locally collected waste.
- **Pind Cycle Program, Punjab:** This program incentivizes farmers to collect agricultural waste for biomass energy production.

## Scaling Up Green Technologies: Strategies for Overcoming Barriers

- **Social Inclusion of Waste Pickers:** Recognizing the crucial role of waste pickers in the waste management chain and integrating them into the formal economy through skill development and livelihood opportunities.

- **Digital Monitoring:** Utilizing IoT, mobile applications, and data analytics can streamline waste collection and disposal processes. Real-time data on waste volumes and composition allows for optimized route planning and resource allocation, improving collection efficiency and reducing costs.
- **Community Education:** Building a foundation for responsible waste management.

## Policy and the Road Ahead

- **Replication of Best Practices:** Encouraging the dissemination and replication of successful local models like those mentioned above across different rural regions.
- **Fostering Rural Entrepreneurship:** Developing policies and initiatives that promote rural entrepreneurship aligned with the Sustainable Development Goals (SDGs), specifically focusing on green waste management solutions.
- **Addressing Environmental Injustice:** Implementing policies that address environmental injustice faced by marginalized and remote communities disproportionately affected by improper waste disposal practices.
- **Urban-Rural Cohesion:** Promoting cohesion policies between urban and peri-urban areas to facilitate knowledge sharing, technology transfer, and resource exchange related to waste management.
- **Sustainable Rural Municipalities:** Supporting the concept of sustainable "green" rural municipalities that prioritize waste reduction, resource recovery, and environmental conservation.

## Conclusion: A Green and Inclusive Future

- The adoption and scaling up of green waste technologies in rural India hinge on supportive policy frameworks, including financial incentives and technical assistance. Public-private partnerships can play a crucial role in facilitating technology transfer, fostering innovation, and promoting rural entrepreneurship in the green waste management sector. By embracing these solutions, India can pave the way for a greener and more inclusive future for its rural population, fostering environmental sustainability, economic empowerment, and climate resilience.

## Biodiversity Conservation using Remote Sensing and GIS Tools

- Biodiversity conservation is a global challenge, demanding effective strategies to address the threats posed by human activity and climate change. Remote sensing and Geographic Information Systems (GIS) unlock detailed biodiversity mapping and analysis, even in hard-to-reach areas.

- India, recognized as one of the twelve megadiverse countries, harbors a rich tapestry of life. With over 45,000 plant species and 91,000 animal species concentrated within 2.4% of the world's landmass, India is further distinguished by four biodiversity hotspots: the Himalaya, Indo-Burma, Western Ghats, and Sundaland. Encompassing ten biogeographic zones, each characterized by unique ecosystems and species, India's biodiversity faces significant pressures. Habitat loss due to fragmentation, overexploitation of resources, pollution, invasive species, and climate change threaten the ecological balance and associated ecosystem services.

- The conservation of biodiversity is not merely an environmental imperative; it underpins sustainable development. Biodiversity ensures ecosystem stability and productivity, providing essential services like oxygen production, water purification, and pollination, all critical for sustaining life. Beyond ecological benefits, biodiversity offers economic and social value. Direct utilization provides timber, food, fuelwood, and fodder, while indirect benefits encompass tourism, cultural significance, and scientific research.

- International efforts such as the Convention on Biological Diversity (CBD) promote conservation, sustainable use, and equitable benefit sharing of biodiversity. The IUCN Red List serves as a crucial tool, assessing extinction risk and highlighting species in need of urgent conservation action.

### Remote Sensing and GIS: Empowering Conservation Efforts

- Geospatial technologies, particularly remote sensing and Geographic Information Systems (GIS), offer significant potential for biodiversity conservation. Remote sensing provides data on biodiversity at landscape, regional, and global scales. This data facilitates the monitoring of changes in land use patterns, forest cover, and vegetation health. GIS acts as a powerful analytical tool, enabling the management, analysis, and visualization of spatial data. By integrating location data with descriptive information, GIS allows for comprehensive analysis of biodiversity patterns and trends.

These geospatial tools offer a multitude of applications in conservation efforts:

- **Mapping and monitoring protected areas:** Accurate delineation and monitoring of protected areas is crucial for effective conservation management.

- **Habitat fragmentation and land use change analysis:** Remote sensing data facilitates the identification and analysis of habitat fragmentation and land use changes, allowing for targeted conservation interventions.

- **Assessing climate change impacts:** Monitoring changes in species distribution patterns in response to climate change is essential for informed decision-making.

- **Data-driven conservation planning:** The integration of spatial data with ecological information allows for data-driven planning and prioritization of conservation efforts.

### Challenges and Opportunities: Bridging the Gap

Despite their potential, the adoption of remote sensing and GIS in biodiversity conservation faces challenges:

- **Technical barriers:** The high cost and complexity of the technology, coupled with the need for specialized training for data interpretation, can hinder wider implementation.

- **Implementation barriers:** Limited infrastructure and inadequate access to high-resolution data, particularly in remote areas, pose logistical challenges.

- **Policy and governance:** Supportive policies, funding mechanisms, and effective coordination among stakeholders are essential for successful implementation.

### Overcoming Challenges: A Collaborative Approach

- **Capacity building:** Training programs for conservationists and local communities, along with establishing centers of excellence in geospatial technologies, can address the technical skill gap.

- **Policy support:** Incentivizing the use of geospatial tools in conservation planning and integrating them into national biodiversity strategies are crucial policy interventions.
- **Technological advancements:** Developing cost-effective and user-friendly geospatial tools, promoting the use of drones and advanced satellite imaging for real-time monitoring, can enhance accessibility and efficiency.
- **Community involvement:** Engaging local communities in conservation efforts using geospatial tools fosters a sense of ownership and empowers them to participate actively in protecting their natural heritage.

## Case Studies

- **Hasiru Mane Project, Karnataka**: Using geospatial tools for waste management and community-led composting.
- **Punsari Village, Gujarat:** Generating electricity from village waste, demonstrating waste-to-energy initiatives.
- **Pind Cycle Program, Punjab:** Remunerating agricultural waste collection for biomass energy production.

## Looking Ahead: A Sustainable Future

- The conservation of biodiversity is critical for ensuring ecological balance and a sustainable future. Remote sensing and GIS tools offer powerful means for mapping, monitoring, and managing biodiversity. By addressing technical, implementation, and policy challenges, and fostering collaboration between government, technology developers, and local communities, India can harness the full potential of geospatial technologies for effective biodiversity conservation.

## Usage of Green Technologies in Sustainable Water Management

- Water scarcity is a growing global concern, demanding innovative solutions for sustainable water management. Green technologies, encompassing environmentally friendly and cost-effective approaches, offer significant potential in this domain. Cities like Bengaluru, facing acute water shortages, can benefit greatly from the responsible management of water resources through the adoption of these technologies.

## Sustainable Water Management: An Integrated Approach

- Sustainable water management views water as an interconnected system, encompassing drinking water, wastewater, rainwater, and stormwater drainage. India's per capita water availability is declining, necessitating a shift towards sustainable practices to bridge the growing gap between demand and supply. Efficient water management offers both economic and social benefits. Water scarcity can lead to a 6% GDP loss by 2030, according to NITI Aayog estimates, while access to clean water is fundamental for public health and well-being.

## Current Water Management Challenges

Several challenges impede sustainable water management in India:

- **Limited Supply Augmentation:** Traditional methods of increasing water supply are reaching their limits.
- **Falling Water Tables:** Over-extraction of groundwater resources is leading to declining water tables.
- **Water Quality Issues:** Pollution from various sources is compromising water quality.
- **Climate Change Impact:** Changing rainfall patterns and extreme weather events threaten water security.

## Green Technologies: A Promising Path Forward

Green technologies offer a unique advantage: they are designed to be both environmentally and economically efficient. These technologies minimize environmental impact while providing cost-effective solutions for water management. Here are some key innovations:

- **Rainwater Harvesting:** Collecting and storing rainwater for later use, particularly beneficial in urban areas.
- **Stormwater Management:** Treating stormwater runoff to remove pollutants before it enters water bodies.
- **Advanced Wastewater Treatment:** Utilizing bioreactors and biofilters powered by microorganisms for effective wastewater treatment.

## Global Success Stories:

- **Singapore's Deep Tunnel Sewerage System (DTSS):** This comprehensive system utilizes energy-efficient pumps, advanced membrane bioreactors, and cogeneration

plants for used water management. The DTSS not only reduces energy consumption and carbon emissions but also promotes resource recovery through wastewater treatment.

- **Werribee Treatment Plant, Melbourne:** This plant leverages advanced tertiary treatment processes to produce high-quality recycled water for irrigation, reducing dependence on freshwater resources.

## Challenges and Opportunities

Despite their potential, green technologies face certain hurdles:

- **Technical Challenges:** Implementing these technologies can be expensive and complex, requiring specialized training and expertise.

- **Implementation Challenges:** Limited infrastructure in rural areas and lack of access to advanced technologies pose logistical challenges.

- **Policy and Governance Issues:** Supportive policies and adequate funding mechanisms are essential for wider adoption. Effective stakeholder coordination is also crucial.

## Moving Towards Sustainable Water Management

- **Capacity Building:** Training programs for stakeholders, including local communities, coupled with the establishment of centers of excellence in relevant technologies, can address the skill gap.

- **Policy Support:** Financial incentives, regulatory frameworks, and integration of green technology initiatives into national water management policies are essential for fostering adoption.

- **Technological Advancements:** Developing cost-effective and user-friendly green technologies, along with promoting renewable energy integration in water management processes, can enhance accessibility and sustainability.

- **Community Involvement:** Engaging local communities in water management initiatives and raising awareness about the benefits of green technologies are crucial for promoting behavioral change and ensuring long-term sustainability.

## Conclusion

- The adoption of green technologies is critical for ensuring the sustainable management of water resources. By addressing technical, implementation, and policy challenges, and fostering collaboration between government, technology developers, and local communities, India can navigate towards a water-secure future. Green technologies offer a path towards efficient water management, promoting environmental health, economic growth, and social well-being.

# 14. EDITORIALS

## 1. India's Multi-Pronged Approach to Disaster Management

- India's vast landscape exposes it to numerous natural disasters. From cyclones and floods to earthquakes and droughts, the country has borne the brunt of nature's fury. While the National Disaster Management Authority (NDMA) was established, the evolving nature of disasters, including climate change-induced extreme weather events and multi-hazard scenarios, demands a proactive strategy.

- The Disaster Management Act of 2005 provides the legal framework for a multi-tiered institutional response across national, state, and district levels. The NDMA formulates policies and coordinates response, while state and district authorities implement plans and integrate mitigation measures into development. Local bodies play a crucial role in capacity building and relief efforts. Supporting institutions include the National Institute of Disaster Management (NIDM) for training and research, and the National Disaster Response Force (NDRF) for emergency response.

- India is a signatory to international frameworks like the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Hyogo Framework for Action (HFA), emphasizing systematic and sustainable risk reduction efforts.

### Major Disaster Threats:

- Floods (e.g., Bihar 2023, Assam 2022) plague over 40 million hectares.
- Cyclones and storms (e.g., Cyclone Biparjoy 2023, Cyclone Fani 2019) threaten India's extensive coastline.
- Earthquakes (e.g., Mizoram 2022, Sikkim 2011) pose a risk due to India's seismic activity.
- Droughts (e.g., Maharashtra 2024) affect 68% of cultivable land due to erratic rainfall.
- Landslides (e.g., Himachal Pradesh 2023, Manipur 2022) are common in hilly regions.
- Heat waves pose a growing threat, with 280 heat wave days reported in 2022.
- Forest fires (e.g., Himachal Pradesh 2024, Goa 2023) endanger forests and air quality.
- Industrial accidents (e.g., Surat chemical spill 2023, Mumbai industrial fire 2024) highlight the risk from hazardous materials.

### Exacerbating Factors:

- Rapid urbanization and unplanned development increase vulnerability, as seen in the 2023 Chennai floods.
- Climate change intensifies extreme weather events, like Cyclone Amphan in 2020.
- Aging infrastructure with inadequate maintenance raises disaster risk.
- Environmental degradation through deforestation, mining, and unsustainable land use practices increases landslide and soil erosion risks.
- Industrialization and reliance on hazardous materials raise the risk of accidents.

### Recommendations:

- Develop dedicated disaster response corridors with robust infrastructure.
- Promote disaster-resilient infrastructure using earthquake, fire, and wind-resistant materials.
- Encourage drought-resistant crops, precision farming, and soil conservation practices in agriculture.
- Integrate ecosystem conservation and sustainable management (Eco-DRR) into disaster risk reduction strategies.
- Strengthen multi-hazard early warning systems using advanced technologies.
- Implement localized, renewable-powered microgrids for critical infrastructure.
- Include mental health professionals in disaster response for survivor support.
- Build a permanent disaster management workforce and allocate substantial Disaster Readiness Reserves to local bodies.

By adopting a multi-pronged approach that prioritizes preparedness, strengthens institutions, and leverages technology, India can build resilience to these ever-present threats.

## 2. Enhancing India's Defence Strategy: The Role and Challenges of the Chief of Defence Staff (CDS)

India faces enduring and significant challenges to its national security and sovereignty. The creation of the Chief of Defence Staff (CDS) in 2019 aimed to enhance combat efficiency and prepare for new techno-strategic challenges, but the results have been mixed.

### Rationale Behind Appointing the CDS:

1. **Promoting Jointmanship:** The CDS addresses the long-standing issue of lack of integrated planning and resource optimization among the Army, Navy, and Air Force. For example, the 1999 Kargil War highlighted the need for better coordination.

2. **Single Military Adviser:** The CDS provides unified military advice to the government, bridging the civil-military gap. Previously, the government received conflicting advice from the three service chiefs.

3. **Operational Synergy:** The CDS fosters greater synergy and interoperability among the services during operations. Improved coordination could have enhanced the effectiveness of the 2004 tsunami relief efforts.

4. **Resource Allocation:** By promoting jointmanship, the CDS aims to rationalize defense expenditure and ensure optimal resource utilization.

5. **Strategic Force Management:** The CDS oversees long-term defense planning, force structuring, and capability development to align military preparedness with evolving threats.

### Timeline for Creation of the CDS Post:

- **1999:** The Kargil Review Committee recommended a review of the national security framework.
- **2001:** A Group of Ministers recommended creating the CDS post.
- **2001-2019:** Despite recommendations, the post was not created due to lack of political will and consensus.
- **2019:** On December 24, the Cabinet Committee on Security approved the creation of the CDS. General Bipin Rawat was appointed as the first CDS on December 31. The Department of Military Affairs was also created.
- **2022:** Lt General Anil Chauhan (retired) was appointed as CDS on September 28.

### Factors Contributing to the Mixed Trajectory of the CDS Office:

1. **Tragic Interruption:** General Bipin Rawat's death in December 2021 disrupted continuity and effectiveness.

2. **Overload of Responsibilities:** The wide array of roles assigned to the CDS may detract from focusing on fostering joint operational synergy.

3. **Lack of Consensus:** Divergent priorities and perspectives among the Army, Navy, and Air Force hinder the functionality of the CDS.

### Emerging Defense Challenges:

1. **Two-Front Threat Scenario:** Ongoing border tensions with China and Pakistan necessitate coordinated military preparedness.

2. **Hybrid Warfare and Cross-Border Terrorism:** The challenge of hybrid warfare requires a comprehensive and multi-dimensional response.

3. **Maritime Security:** India's maritime ambitions demand a strong, integrated maritime strategy.

4. **Force Modernization:** Effective force modernization requires avoiding duplication and ensuring interoperability.

5. **Space Security:** Coordinated efforts are crucial to ensure space security and develop counter-space capabilities.

6. **Arctic and Antarctic Operations:** Climate change necessitates developing joint defense capabilities for operations in these regions.

### Measures to Enhance Integration of Armed Forces:

1. **Role Clarity:** Streamlining roles between the CDS and the service chiefs ensures clear command and control.

2. **Integrated Theatre Commands:** Prioritizing the implementation of integrated theatre commands promotes jointmanship and resource optimization.

3. **Cross-Service Rotational Assignments:** Rotational assignments foster mutual understanding and collaboration among services.

4. **Quantum-Secure Communications:** Developing a quantum-secure network ensures highly secure communication channels for joint military operations.

India's defense strategy must evolve to address these emerging challenges and enhance the integration and effectiveness of its armed forces.

## 3. Tackling Forest Fires in India: Challenges and Initiatives

- The devastating forest fires in Uttarakhand have highlighted the extensive destruction they cause. Forest fires in India predominantly occur during the dry season between April and May, but their frequency has increased in recent years, making them a major environmental concern.

### What is Forest Fire? What is the Status of Forest Fires in India?

- A forest fire is an uncontrolled blaze that destroys large parts of forests. In India, the forest fire season spans from November to June, with the peak season starting in late February and lasting about 12 weeks. According to the India State Forest Report (ISFR) 2019, 21.67% of India's geographical area is forested. Forests in Assam, Mizoram, and Tripura are identified as 'extremely fire-prone,' especially the dry deciduous forests.

### Major Reasons for Forest Fires in India:

- Forest fires in India arise from both natural and anthropogenic causes:

### Natural Causes:

- **Lightning:** Sparks from lightning strikes can trigger forest fires.
- **Volcanic Eruption:** Hot lava from eruptions can flow into forests, causing fires.
- **Heat Patterns:** Increased temperatures due to global warming make forests more vulnerable.
- **Lack of Soil Moisture:** Dry soil conditions, as seen in Uttarakhand, can spark fires.
- **Natural Materials:** The abundance of dry wood, leaves, and grass fuels fires.

### Anthropogenic Factors:

- **Smoking:** Discarded cigarette butts can ignite wildfires.
- **Campfires:** Unattended fires during outdoor activities can start blazes.
- **Burning Debris:** Burning waste can lead to forest fires, as in the recent Simlipal Forest fire.
- **Slash and Burn Cultivation:** This practice is a major cause in India's Northeastern region.

### What is the reason for the occurrence of major Forest Fires during the spring?

Spring, occurring between March and April, sees peak forest fires in India due to:

- **Less Rainfall During Winter:** Reduced soil moisture makes forests more flammable, exemplified by recent fires in Uttarakhand.
- **Availability of Combustible Materials:** Dry wood and leaves increase fire intensity, aided by strong winds.

### Impact of Forest Fires in India:

- **Loss of Ecosystems and Biodiversity:** Fires destroy habitats, leading to biodiversity loss.
- **Forest Degradation:** Fires reduce soil fertility and ecosystem quality.
- **Impact on Livelihood:** Forests support the livelihoods of many; fires disrupt this.
- **Air Pollution:** Fires reduce carbon sequestration and create massive smoke clouds.
- **Soil Degradation:** Fires kill beneficial soil microorganisms and lead to erosion.
- **Destruction of Watersheds:** Fires damage wetland areas within forests.

### Government Initiatives for Forest Fires in India:

The government has implemented several initiatives:

- **Forest Fire Alert System (FFAS):** Developed by the Forest Survey of India (FSI) to monitor wildfires in real-time.
- **MODIS Sensors:** These sensors provide real-time forest fire information, which is disseminated through various levels to local communities via SMS alerts.
- **National Master Plan for Forest Fire Control:** Aims to introduce a coordinated and integrated fire-management programme.

### Way Forward to Reduce Forest Fires:

To mitigate forest fires, the following steps are recommended:

- **Capacity Development:** Training forest department officials at all levels.
- **Forest Control Manuals:** Creating manuals for early detection and control.
- **Comprehensive Forest Fire Policy:** Formulating a policy that incorporates climate change aspects.
- **Indigenous Knowledge:** Utilizing local and tribal knowledge in fire management.
- **Infrastructure Creation:** Improving firefighter staffing, building watchtowers, and hiring fire watchers.
- **Development of Technology:** Adopting modern firefighting techniques and developing systems like the National Fire Danger Rating System (NFDRS) and Fire Forecasting System.

By implementing these measures, India can better manage and reduce the incidence and impact of forest fires.

## 4. Deepfakes in Elections: Implications and Solutions

- The rise of deepfakes in electoral processes poses significant concerns. Unlike traditional misinformation, deepfakes blur the line between reality and fabrication, undermining our ability to trust our analyses and technological solutions for verifying information.

### What are Deepfakes?

- Deepfakes are synthetic media created using AI technology to manipulate or generate visual and audio content to deceive individuals.
- **Origin:** The term "deepfake" was coined in 2017 by an anonymous Reddit user who used Google's deep-learning technology to produce and share pornographic videos.
- **Creation:** Deepfakes are created using generative adversarial networks (GANs), consisting of a generator (producing fake images or videos) and a discriminator (differentiating between real and fake content). This process requires substantial data, often sourced without consent.

### Advantages of Deepfakes in Elections

- **Segmentation and Targeting:** Deep learning algorithms help political parties analyze extensive voter data, including demographics and social media engagement. NLP algorithms enable campaigns to interpret vast amounts of textual data to target voters effectively.
- **Real-time Monitoring and Adaptation:** AI-powered predictive analytics, such as AI cloud, allow parties to forecast election outcomes by analyzing polling data, economic indicators, and social media sentiment. AI algorithms continuously scan data sources to gauge public sentiment and identify trends.
- **Security and Integrity:** AI-driven deepfake tools detect and prevent electoral fraud, including voter suppression and manipulation of voting systems. They analyze data patterns to uphold election integrity.

### Challenges of Deepfakes in Elections

- **Electoral Behavior Manipulation:** Deepfakes can create highly personalized propaganda, leading to voter manipulation and confusion. AI-generated deepfake videos can tarnish opponents' images, influencing voter perceptions.
- **Spreading Misinformation:** Deepfake models can manipulate democratic processes by spreading disinformation, as seen in the 2024 Lok Sabha election, where a cloned voice of Mahatma Gandhi campaigned for a political party.
- **Inaccuracies and Unreliability:** Deepfake AI models are prone to inaccuracies, raising concerns about their reliability. Instances of AI models misrepresenting individuals highlight the dangers of unchecked AI.
- **Ethical Concerns:** Deepfakes raise ethical issues regarding privacy, transparency, and fairness. AI algorithms may perpetuate biases, leading to unfair treatment of voter groups. Lack of transparency in AI decision-making can erode public trust.
- **Regulatory Challenges:** Rapid technological advancements and the global nature of online platforms make regulating deepfakes difficult. Existing laws address fake news but lack specific provisions for AI and deepfake technology.

### Government Initiatives

- **IT Act, 2000 and IT Rules, 2021:** These laws require social media platforms to remove deepfake content promptly, with penalties for non-compliance.
- **Section 66D of IT Act:** Impersonation using communication devices can result in imprisonment and fines.
- **Rule 3(1)(b)(vii) and Rule 3(2)(b):** These rules mandate the removal of impersonating content within 24 hours of a complaint.
- **Fact Check Unit:** Established under IT rules 2021, this unit deters the creation and dissemination of fake news and provides a platform to report questionable information.

### Combating the Misuse of Deepfakes

- **Regulatory Measures:** Implement strict laws addressing the creation and use of deepfake content for electoral manipulation.
- **Election Commission Guidelines:** Require transparency in AI algorithm use for political purposes, including funding disclosure and algorithm transparency.

- **Technology-Based Solutions:** Develop advanced AI tools to detect deepfake content in real-time.
- **Awareness and Education Campaigns:** Educate voters about deepfakes and their impact on elections.
- **Enhanced Fact-Checking:** Establish rapid response teams to address fake news and deepfakes quickly.
- **Collaborative Efforts:** Governments, tech companies, and civil society should develop coordinated responses to deepfake threats.
- **Promoting Ethical AI:** Advance AI technologies with ethical principles, focusing on mitigating bias, safeguarding privacy, and ensuring transparency.

By addressing these challenges and implementing robust measures, the integrity of the electoral process can be preserved amidst the rising threat of deepfakes.

## 5. Women Empowerment: The Path to India's Socio-economic Development

As India aims to become a 'developed' nation by 2047, empowering women is crucial. Development alone cannot address gender inequalities, as highlighted by Amartya Sen's concept of "missing women." With women lagging on various well-being parameters, India must adopt key policies to achieve gender parity in socio-economic outcomes.

### *Key Provisions for Women's Socio-economic Empowerment*

**Constitutional Measures:**

- **Article 14:** Guarantees equality before the law and prohibits discrimination on the basis of sex.
- **Article 15(3):** Allows the State to make special provisions for women and children.
- **Article 16:** Provides equal opportunities in public employment.
- **Article 39(d):** Calls for equal pay for equal work for both men and women.
- **Article 42:** Directs the State to ensure humane working conditions and maternity relief.

**Government Initiatives:**

- **Pradhan Mantri Mudra Yojana:** Provides affordable credit for women entrepreneurs and self-help groups.
- **Beti Bachao Beti Padhao:** Focuses on improving women's welfare through education.

- **Mahila E-Haat:** An online platform supporting women entrepreneurs.
- **Mahila Shakti Kendra:** Facilitates empowerment programs and resources for skill development and entrepreneurship.
- **Working Women Hostel:** Supports safe accommodation for working women in urban areas.
- **Pradhan Mantri Awas Yojana:** Ensures housing in women's names.
- **Maternity Benefit (Amendment) Act 2017:** Increased paid maternity leave to 26 weeks and mandated crèche facilities.

**International Conventions/Agreements:**

- **CEDAW (1979):** Calls for ending discrimination against women.
- **Beijing Declaration and Platform for Action (1995):** Lays out agenda areas for women's empowerment.
- **UN SDGs Goal 5:** Aims to achieve gender equality and empower all women and girls by 2030.

### *Key Factors Hindering Women's Socio-economic Growth*

**Social Norms and Patriarchal Mindsets:**

- Entrenched norms restrict women's mobility, education, and economic opportunities.
- Gender-biased sex selection leads to skewed sex ratios.

**Low Labor Force Participation:**

- Female labor force participation is around 37%, below the global average of 47%.
- Many women are employed in the informal sector with lower proportions in salaried work.

**Disproportionate Share of Unpaid Care Work:**

- Women spend nearly three times more time on unpaid care work than men.

**Gender Pay Gaps:**

- Significant pay gaps exist across sectors.
- India ranks 127th out of 146 countries in the Global Gender Gap Index 2023, achieving only 36.7% parity in economic participation.

**Lack of Property Ownership and Financial Inclusion:**

- Only about 20% of women own land or property.
- National Family Health Survey 2019-21 shows a higher percentage of men owning property compared to women.

**Exposure to Violence:**

- High prevalence of violence against women, including domestic violence and sexual harassment.

**Limited Education:**

- Female literacy rate is 71.5%, lower than the male literacy rate of 84.7%.
- Gender parity in enrollment declines at higher education levels.

**Limited Political Participation:**

- Women's representation in Parliament is low, with 14.4% in the Lok Sabha and 13% in the Rajya Sabha.

***Measures to Promote Socio-economic Empowerment Among Women***

**Increasing Women's Labor Force Participation:**

- Raising women's LFP rate to 50% could boost GDP growth to 8%.
- Focus on expanding manufacturing capacity in labor-intensive sectors.

**Improving Access to Skilling:**

- Increase training institutes for women.
- Enhance career counseling, job placement cells, and mentorship programs.

**Enabling Women's Mobility in Urban Areas:**

- Plan cities with a gender lens to improve women's mobility.
- Develop high-quality, subsidized urban care infrastructure.

**Clean Energy Initiatives:**

- Provide cash rebates for clean technology to reduce women's time burden on household activities.

**Developing Micro-credentialing Platforms:**

- Offer flexible, stackable micro-credentials focused on in-demand skills.

**Women-led Supply Chain Networks:**

- Connect women-led self-help groups directly to large corporations and government procurement programs.
- Encourage women-led startups, following examples like Falguni Nayar's Nykaa.

By implementing these measures, India can move towards achieving gender parity and socio-economic development, fulfilling its goal of becoming a developed nation by 2047.

# 15. TERMS IN NEWS

## Bank Run

- A bank run is a situation when a large number of customers withdraw their money from a bank at the same time because they fear the bank is going bust. This fear can become a self-fulfilling prophecy as the bank may not have enough cash on hand to meet all the withdrawals, causing the bank to fail. In the past, bank runs were more common due to people physically lining up to withdraw cash, but today they can also happen electronically.

## Circular Economy

- The circular economy proposes a dramatic shift from our current "take-make-dispose" model. It prioritizes keeping resources in use for as long as possible. This means designing products for durability, repair, and easy disassembly. Businesses would focus on offering services like product rentals or refurbishment instead of just selling items. Recycling and composting would become even more crucial, aiming to turn waste back into valuable materials. Ultimately, the circular economy envisions a closed-loop system where resources are continuously circulated, minimizing environmental impact and promoting a more sustainable future.

## Precision farming

- Precision farming employs technology like GPS, sensors, and data analytics to optimize crop production while minimizing inputs. It enables farmers to monitor and manage crop growth, soil conditions, and resource usage with accuracy. Techniques include variable rate application of inputs, remote sensing, and automated machinery. Precision farming aims to maximize yields and profitability while reducing environmental impact. It addresses challenges such as climate change and population growth. Its adoption enhances agricultural productivity, sustainability, and resilience. Precision farming marks a modern, data-driven approach to agriculture, revolutionizing traditional farming practices. It represents a crucial step towards a more efficient and sustainable future for agriculture.

## Shrinkflation

- Shrinkflation is a subtle way for companies to raise prices without you noticing. It happens when the size or quantity of a product shrinks while the price stays the same (or maybe even goes up a little). This means you're essentially paying more per ounce or gram of the product you're buying. It's most common in food and household goods, and can be tough to spot unless you're observing the products carefully.

## J - 1 Visa

- The J-1 visa, formally known as the Exchange Visitor Visa, facilitates participation in enriching cultural exchange programs within the United States. Sponsored by reputable entities like government agencies, universities, and private organizations, these programs provide a valuable opportunity to engage in academic pursuits, share knowledge through teaching, conduct research endeavors, or acquire practical training across diverse fields. Whether you are a distinguished professor, a dedicated researcher, a passionate camp counselor, or a motivated intern, there's a designated J-1 visa category to suit your specific exchange program. It's important to note, however, that a two-year home residency requirement is typically imposed upon J-1 visa holders after program completion (with exceptions available in certain cases). This requirement ensures the exchange of knowledge and fosters cultural understanding upon returning to your home country.

## Dumping

- In international trade, dumping occurs when a company or country exports a good at a price significantly lower than what it sells at in its domestic market. This essentially floods the importing country's market with cheaper goods, potentially

harming local producers who can't compete with the artificially low prices. While it can benefit consumers in the importing country with lower prices, dumping raises concerns about fair competition and can lead to job losses and decreased production in the affected industry. The World Trade Organization (WTO) has regulations to address dumping, allowing countries to impose anti-dumping duties to offset the unfair price advantage and protect their domestic producers.

## Anti-Dumping Duty

In the Indian market, anti-dumping duties act as a safeguard against unfair international trade practices. These duties are levied on imported goods that are considered to be dumped, meaning they're sold at a price significantly lower than their home market value. These cheap imports can harm Indian businesses in that sector. They struggle to compete with artificially low prices. While consumers might enjoy temporary benefits, anti-dumping duties are imposed to ensure a level playing field. Indian authorities investigate claims of dumping and, if proven, add these duties to the import price, neutralizing the unfair advantage and thus protecting domestic producers.

## Non-market economies

Non-market economies stand in contrast to the dominant market-driven systems. Here, the government plays a central role in allocating resources and setting prices, often through state-owned enterprises. This approach can prioritize social goals over pure profit but can also limit efficiency and innovation. In international relations, countries often view non-market economies with suspicion, as it can be difficult to assess the true value of exports and ensure fair trade practices. This can lead to trade disputes and restrictions like anti-dumping duties.

## Arctic Amplification

Arctic amplification denotes the phenomenon wherein the Arctic region experiences warming at a pace significantly exceeding the global average, with temperatures rising two to three times faster over the past four decades. This is mainly due to greenhouse gases like carbon dioxide and methane , which trap heat in the atmosphere, intensifying the greenhouse effect. Melting sea ice is the primary catalyst for this rapid warming, as it reduces the Earth's albedo, leading to further ice melt and increased absorption of sunlight. The consequences of Arctic amplification include the melting of snow, glaciers, and permafrost, the loss of sea ice, disrupting ecosystems and traditional livelihoods of indigenous communities. Moreover, these changes impact weather patterns, sea levels, and ecosystems beyond the Arctic, thus making it more important to address Arctic warming in the broader context of climate change mitigation and adaptation efforts.

## Returning Officer

A returning officer is appointed to supervise and administer elections in a specific constituency, ensuring the smooth conduct of polling, counting, and other related activities while maintaining the integrity of the electoral process. In India, the Election Commission designates an officer of the government or local authority, often the District Magistrate for Lok Sabha elections and the Sub-Divisional Magistrate for state assembly elections, as the returning officer for each assembly and parliamentary constituency. The returning officer holds statutory authority to decide the validity of ballot papers and conduct the polling and counting process. These decisions are not subject to overruling by the Election Commission. Their role is crucial in ensuring fair and transparent elections.

## Internet of Things (IoT)

The Internet of Things (IoT) refers to a massive network of physical devices that are equipped with sensors, software, and internet connectivity. These "smart devices" can collect and exchange data with each other, allowing them to automate tasks and respond to their environment. This can range from simple thermostats that adjust your home temperature to complex industrial machinery that monitors its own performance. With billions of devices already connected and more on the way, the IoT is rapidly transforming the way we live, work, and interact with the world around us.

## Xenotransplantation

Xenotransplantation is the idea of using organs, tissues, or cells from animals to treat humans. This is seen as a potential solution to the critical shortage of donor organs for transplants. Pigs are a particularly promising source due to their size compatibility and availability. However, there are hurdles. Our bodies naturally reject foreign tissue, and scientists are working on ways to genetically modify animals to reduce this risk. Additionally, the potential transmission of animal diseases to humans is a major concern. Xenotransplantation remains an experimental field, but it holds the promise of saving many lives in the future.

## Indian Volatility Index

The India VIX, also known as the Indian Volatility Index, is a measure of the stock market's (NIFTY 50 index) expectation of volatility in the next 30 calendar days. It essentially reflects investor sentiment about how much stock prices are expected to fluctuate. A higher India VIX suggests anticipation of greater price swings, while a lower value indicates expectations of calmer markets. Importantly, the India VIX is non-directional, meaning it doesn't predict whether the market will go up or down, only how much movement is anticipated. Traditionally, a VIX value below 20 suggests a relatively stable market, while readings above 35 indicate heightened volatility.

## Comprehensive Economic Partnership Agreement (CEPA)

A Comprehensive Economic Partnership Agreement (CEPA) is a broad trade deal between countries. It tackles more than just lowering import taxes, like a typical free trade agreement. CEPA aims to create a more business-friendly environment by not only reducing tariffs on goods, but also by simplifying trade in services and investment between the countries. This can include agreements on intellectual property rights, how governments purchase goods and services, and how to settle any trade disputes that may arise. Overall, CEPAs aim to make trade and investment flow more smoothly between partnering countries.

## Sickout

A sickout is a labor protest tactic where a group of employees pretend to be ill and call in sick en masse, meaning all together at the same time. This coordinated absence aims to disrupt the employer's operations and draw attention to worker grievances. It functions as a type of pressure tactic without resorting to a formal strike, which might have stricter legal limitations. Sickouts are often employed in industries where employee presence is critical for daily functions, such as airlines, hospitals, or public transportation. By leaving workplaces understaffed, sickouts can significantly impact productivity and cause inconvenience, forcing employers to acknowledge the workers' demands. For instance, in May 2024, cabin crew at Air India Express in India used a sickout to protest their concerns regarding treatment under new ownership.

## Interim Bail

Interim bail, a provision in India's Code of Criminal Procedure, offers temporary relief to an arrested person. It's a short-term release granted while their application for regular or anticipatory bail is being considered by the court. This can be helpful in situations where the accused has urgent personal needs, like medical emergencies or family crises. Unlike regular bail, interim bail lasts for a limited period and is subject to conditions set by the court. It's essentially a way to prevent unnecessary detention until a final decision is made on the main bail plea.

## Polymetallic Nodules

Polymetallic nodules, or manganese nodules, are potato-like mineral deposits scattered across the deep ocean floor. Over millions of years, they grow layer by layer, accumulating iron and manganese along with valuable metals like nickel, copper, and cobalt. Found at depths exceeding 4 kilometers, these nodules carpet vast regions of the abyssal plains. Their rich metal content makes them potentially valuable for modern industries, but the difficulty of deep-sea mining and the environmental impact raise concerns about their sustainable extraction.

## Environmental, Social, and Governance (ESG)

Environmental, Social, and Governance (ESG) is a framework that considers a company's impact beyond just profits. It looks at how they manage the environment (pollution, emissions), treat their employees and communities (labor practices, social responsibility), and govern themselves (ethics, transparency). This is becoming increasingly important for investors seeking long-term, sustainable growth. Consumers are also making choices based on a company's ESG practices, and regulations are evolving to hold companies accountable for their environmental and social footprint. By embracing ESG principles, companies can not only attract investment and customers, but also build a more responsible and resilient business for the future.

## Turbulence

Turbulence is the bumpy, chaotic motion of air encountered in flight. It's caused by irregular atmospheric conditions, like strong winds pushing air masses in different directions or temperature variations creating areas of rising and sinking air. When a plane flies through these uneven airflows, it gets tossed around, causing the sensation of bumps and drops. While turbulence can be scary, modern airplanes are designed to handle it safely. Pilots are trained to navigate turbulence and minimize passenger discomfort whenever possible.

## Production Linked Incentive (PLI)

Production Linked Incentive (PLI) is a government scheme that offers financial rewards to companies for achieving increased domestic production of specific goods. It is similar to a carrot on a stick - companies get a cash boost for exceeding a set production target within a defined period. This scheme aims to boost domestic manufacturing, attract foreign investment, and make India a global manufacturing hub. It focuses on incentivizing the production of high-value goods across various sectors like electronics, automobiles, and solar panels.

## Wall of Opposition

The term "wall of opposition" was coined at the G7 meeting to describe the United Front formed by market-driven countries against China's state-controlled industrial policies, where the government heavily influences and subsidizes industries. These policies create unfair advantages in global trade. The US, concerned about excess production and lack of competition in China, wants other G7 members to present a unified message that such practices are unsustainable for the global economy. The "wall of opposition" reflects a shared desire of the G7 countries to find solutions that promote fair competition and economic stability.

## AI Agents

AI agents, also known as intelligent agents, are software programs that can act on their own to achieve specific goals. Imagine a digital or physical entity that can sense its surroundings, make decisions, and take actions. These agents use sensors to gather information (like cameras or microphones) and algorithms to analyze it. Some can even learn and improve over time. We see them in robots that navigate factories or chatbots that answer your questions. As AI continues to develop, these agents promise to play an even bigger role in various fields, from customer service to finance.

## Intellectual property (IP) rights

Intellectual property (IP) rights are legal protections granted to creations of the mind. This includes inventions, literary and artistic works, designs, and symbols used in commerce (like trademarks). Think of it as ownership for intangible ideas. IP rights give creators exclusive control over how their creations are used for a certain period, allowing them to benefit from their work. This incentivizes innovation and creativity while ensuring fair competition in the marketplace.

## CubeSats

CubeSats are miniaturized satellites built to a standardized size, about the volume of a Rubik's Cube. These modular marvels can be single units or stacked together for more capability. Due to their low cost and ease of assembly, they are commonly used by universities, research institutions, and startups for scientific experiments, Earth observation, and technology demonstrations. CubeSats are also used for remote sensing, communications, space weather monitoring, interplanetary missions, and testing new technologies in orbit.

## Digital Competition Bill

Digital Competition Bill, proposed by Indian government in February 2024, is an antitrust law designed to curb the dominance of big tech companies in its vast digital market. Inspired by the EU's Digital Markets Act, the bill targets large digital firms with over $30 billion in global revenue and at least 10 million Indian users, including companies like Google, Amazon, and Apple. The bill proposes three key measures: preventing these companies from exploiting users' non-public data, stopping them from favoring their own services over competitors, and enabling open app stores where users can freely download third-party apps. Tech industry lobby groups have opposed this proposal as it could lead to higher user costs. This bill will have a significant impact on India's booming digital economy.

## Big Tech

Big Tech refers to a handful of hugely successful technology companies that dominate their respective fields. These giants, typically including Alphabet (Google), Amazon, Apple, Meta (Facebook), and Microsoft, wield immense power due to their size, wealth, and influence on everything from online advertising and social media to consumer electronics and software. They're often praised for their innovation but also face scrutiny for their market dominance and potential privacy concerns.

## Credit Rating Agency

Credit rating agencies are firms that assess the creditworthiness of borrowers, typically governments and businesses. These agencies analyze a borrower's financial health and assign a credit rating, which is a letter grade that indicates the likelihood of the borrower repaying their debt. Investors use these credit ratings to gauge the riskiness of an investment, with higher ratings signifying a lower risk of default. The credit rating industry is dominated by three major players: Moody's, Standard & Poor's (S&P), and Fitch Ratings, which collectively control roughly 95% of the market.

## MODEL QUESTIONS

1. Consider the following statements with reference to Rajasthan Legislative Assembly-
   1. Shri Harish Chaudhary has been appointed as the Chairman of the Ethics Committee.
   2. Smt. Anita Bhadel has been appointed as the Chairman of the Committee on Welfare of Women and Children.
   3. The current Speaker of the Legislative Assembly is Shri Vasudev Devnani.

   **Choose the correct option-**

   (A) 1 and 2      (B) 2 and 3

   (C) 1, 2 and 3      (D) 1 and 3

2. The Takli Dam Medium Irrigation Project, which was in the news recently, is related to which district?

   (A) Kota      (B) Sikar

   (C) Bharatpur      (D) Jalore

3. How many places in Rajasthan will be developed as eco tourism destinations by the Forest Department?

   (A) 75      (B) 110

   (C) 115      (D) 120

4. Consider the following statements with reference to Dr. Kamla Beniwal-
   1. She was the first woman Deputy Chief Minister and first woman Minister of Rajasthan.
   2. She has been the Governor of Bihar, Tripura and Mizoram.

   **Choose the correct option-**

   (A) Only 1      (B) Only 2

   (C) Both 1 and 2      (D) Neither 1 nor 2

5. Recently, 'Operation Clean Sweep' has been launched in which district to prevent drug trafficking?

   (A) Jaipur      (B) Barmer

   (C) Jaisalmer      (D) Bikaner

6. At which place in Rajasthan will the Forensic Science University be established?

   (A) Ajmer      (B) Jodhpur

   (C) Jaipur      (D) Udaipur

7. Under whose chairmanship was the state level committee constituted for the implementation of 'Inter-operable Criminal Justice System (ICJS) 2.0' in Rajasthan?

   (A) Chief Minister
   (B) Chief Secretary
   (C) Director General of Police
   (D) Secretary to the Government

8. Where will the 'Gems and Jewellery Bourse' be established in Rajasthan on the lines of Mumbai and Surat Gem Bourse?

   (A) Jodhpur      (B) Udaipur

   (C) Alwar      (D) Jaipur

9. Consider the following statements with reference to the Annual Wildlife Waterhole Survey-
   1. Under this, the Great Indian Bustard birds were counted in Rajasthan.
   2. At present, the number of Great Indian Bustard birds in Rajasthan is 180.
   3. The scientific name of Great Indian Bustard is 'Ardeotis nigriceps'.

   **Choose the correct option-**

   (A) 1 and 2      (B) 2 and 3

   (C) 1, 2 and 3      (D) 1 and 3

10. Consider the following statements with reference to tigers in Rajasthan-
    1. At present, the total number of tigers in Rajasthan has become 134.
    2. The highest number of tigers in Rajasthan is in Ranthambore Tiger Reserve.
    3. At present, there are 4 tiger reserves in Rajasthan.

    **Choose the correct option-**

    (A) 1 and 2      (B) 2 and 3

    (C) 1, 2 and 3      (D) 1 and 3

11. In which district of Rajasthan, 2,500 years old Yagya Kund and the statue of Ashwini Kumars have been found?

    (A) Bundi      (B) Hanumangarh

    (C) Barmer      (D) Deeg

12. In which district of Rajasthan will the longest ropeway of Rajasthan be built?

    (A) Kota      (B) Ajmer

    (C) Udaipur      (D) Jaipur

13. Where has the establishment of a Multi-Disciplinary Research Unit been announced in Rajasthan recently?

    (A) Jodhpur      (B) Barmer

    (C) Pali      (D) Ajmer

14. Who from Rajasthan has been recently awarded the President's Police Medal?
    1. Chandrapal Singh
    2. Shaitan Singh
    3. Harikesh Meena

    **Choose the correct option-**

    (A) 1 and 2      (B) 1 and 3

    (C) 1, 2 and 3      (D) 2 and 3

15. Under which scheme will the Rajasthan government distribute 4 crore saplings for plantation in 70,000 hectares of area?

(A) Ghar-Ghar Aushadhi Yojana

(B) Janta Van Yojana

(C) Integrated Afforestation and Environment Development Project

(D) TOFER Yojana

16. Which campaign is being run by the Food Safety Department to take strict action against adulterators in Rajasthan?

(A) Shuddh ke liye Yudh Abhiyan

(B) Shuddh Aahar-Milawat par Vaar Abhiyan

(C) Milawat par Prahar Abhiyan

(D) Shuddh Aahar, Swasth Rajasthan Abhiyan

17. Which campaign has been started by the Animal Husbandry Department of Rajasthan to protect animals and birds from heat stroke and sunstroke?

(A) Dhoop-Rakshan 24 Abhiyan

(B) Taap-Rakshak 24 Abhiyan

(C) Sun-Rakshan 24 Abhiyan

(D) Surya-Rakshan 24 Abhiyan

18. Consider the following statements with reference to Rawatbhata-

1. Rajasthan's second heavy water plant will be established here.

2. India's second nuclear power plant was established here with the cooperation of Russia.

3. Jawahar Sagar Dam is situated here on the Chambal River.

Choose the correct option-

(A) 1 and 2          (B) Only 1

(C) Only 2          (D) 2 and 3

19. Recently, which district police administration has signed an agreement with Meta Company to prevent suicide cases in Rajasthan?

(A) Jaipur          (B) Jodhpur

(C) Sikar          (D) Kota

20. For the first time in India, which national political party has been accused in a money laundering case?

(A) National People's Party

(B) Bahujan Samaj Party

(C) Indian National Congress

(D) Aam Aadmi Party

21. Consider the following statements-

1. China has been India's largest trading partner in the financial year 2023-24.

2. India's imports from China have increased relatively more than exports.

Choose the correct option-

(A) Only 1          (B) Only 2

(C) Both 1 and 2          (D) Neither 1 nor 2

22. In the year 2023, India's remittance (money sent by Indians working abroad) was $ 125 billion. What percentage of the country's GDP is this?

(A) 1.4%          (B) 3.4%

(C) 2.7%          (D) 1.9%

23. Consider the following statements with reference to Chabahar Port-

1. India has signed an agreement with Iraq to operate this port for a period of 10 years.

2. This port is located in the Gulf of Aden and it will connect Gulf countries and European countries to India via the Red Sea.

Choose the correct option-

(A) Only 2          (B) Only 1

(C) Both 1 and 2          (D) Neither 1 nor 2

24. Consider the following statements with reference to International Solar Alliance (ISA)-

1. Recently Spain has become the 99th member of this alliance.

2. Its headquarters is in New Delhi.

Choose the correct option-

(A) Only 1          (B) Only 2

(C) Both 1 and 2          (D) Neither 1 nor 2

25. Recently the Defense Research and Development Organization (DRDO) has successfully tested the indigenously developed air-to-surface anti-radiation missile, what is its name?

(A) Brahmos          (B) Maitri II

(C) Rudram II          (D) Nirbhay II

26. Consider the following statements with reference to Agnibaan Sub Orbital Technology Demonstrator (SOrTeD)-01-

1. It was launched by space start-up Skyroot Aerospace.

2. It is India's first semi-cryogenic engine-powered rocket launch and is equipped with the world's first single piece 3D-printed engine.

3. It was launched from India's first private launchpad 'Dhanush' established by Agnikul Cosmos Private Limited.

Choose the correct option-

(A) 1 and 2     (B) 2 and 3
(C) 1, 2 and 3     (D) 1 and 3

27. **Which country has recently launched a robotic space mission "Chang'e-6" to collect samples from the far side of the Moon by 'Long March-5 Y8 Rocket'?**
(A) Japan     (B) South Korea
(C) China     (D) United Kingdom

28. **Recently, the Indian Air Force successfully tested the landing of an 'indigenous portable hospital', what is its name?**
(A) Arjun     (B) Ajay
(C) Shaurya     (D) Bhishma

29. **Consider the following statements with reference to 'FLOAT Project'-**
1. Its full name is 'Forecast Lunar on a Track'.
2. Under this, the US space agency NASA will develop a 'robotic transport system' to help astronauts on the moon.
**Choose the correct option-**
(A) Only 1     (B) Only 2
(C) Both 1 and 2     (D) Neither 1 nor 2

30. **Consider the following statements with reference to Neeraj Chopra-**
1. India's javelin thrower Neeraj won the gold medal in the Federation Cup held in Bhubaneswar (Odisha).
2. Neeraj is the first Indian player to win a gold medal in athletics in the Olympic Games.
**Choose the correct option-**
(A) Only 1     (B) Only 2
(C) Both 1 and 2     (D) Neither 1 nor 2

31. **Which Indian female player recently won the silver medal in the Archery World Cup?**
(A) Dola Banerjee
(B) Jyothi Surekha Vennam
(C) Deepika Kumari
(D) Muskan Kirar

32. **Which Indian player recently won the gold medal in the compound women's category in Stage 1 of the Archery World Cup 2024?**
(A) Deepika Kumari
(B) Jyothi Surekha Vennam
(C) Komalika Bari
(D) Ankita Bhakat

33. **Which Indian female player recently won the gold medal in the 100 m hurdle race of the Harry Schulting Games?**
(A) Jyothi Yarraji     (B) Dutee Chand
(C) Hima Das     (D) Bhavana Jat

34. **Consider the following statements with reference to Sunil Chhetri-**
1. He is the fifth player in the world to score the most international goals in football.
2. He is the first Indian footballer to be awarded the 'Major Dhyanchand Khel Ratna' award.
**Choose the correct option-**
(A) Only 1     (B) Only 2
(C) Both 1 and 2     (D) Neither 1 nor 2

35. **Who has recently become the first Indian to win a gold medal in the Asian Gymnastics Championship?**
(A) Pranati Nayak     (B) Aruna Reddy
(C) Dipa Karmakar     (D) Deepika Kumari

36. **Consider the following statements with reference to the Para Athletics World Championship 2024-**
1. It was organized in Kobe (Japan).
2. In this, India won a total of 17 medals including 6 gold, 5 silver, 6 bronze medals.
3. India stood fourth in the medal tally.
**Choose the correct option-**
(A) 1 and 2     (B) 1 and 3
(C) 1, 2 and 3     (D) 2 and 3

37. **Consider the following statements with reference to Sachin Sarjerao Khilari-**
1. He is a para athlete of Javelin Throw event from India.
2. Sachin won the gold medal in the F46 category in the World Para Athletics Championship 2024.
3. Sachin also won the gold medal in the World Para Athletics Championship held in Paris in 2023.
**Choose the correct option-**
(A) 1 and 2     (B) 1 and 3
(C) 1, 2 and 3     (D) 2 and 3

38. **Consider the following statements with reference to Satwiksairaj Rankireddy and Chirag Shetty-**
1. The pair won the Thailand Open Super 500 men's doubles title.
2. They have won the Thailand Open title for the first time.
3. This pair is currently ranked first in the BWF world rankings.
**Choose the correct option-**
(A) Only 3     (B) Only 2
(C) 1, 2 and 3     (D) 1 and 3

39. **The Indian women's compound team won the gold medal in the Archery World Cup Stage-2 held in Yecheon (South Korea). Which of the following players was not included in this team?**

(A) Jyothi Surekha Vennam (B) Preneet Kaur

(C) Aditi Swami (D) Aditi Ashok

40. **Which environmentalist of India has been selected for the 'Goldman Environmental Prize 2024', also known as 'Green Nobel'?**

(A) Medha Patkar (B) Sadhguru

(C) Sunita Narayan (D) Alok Shukla

41. **Who was recently awarded the 'Whitley Gold Award' for the year 2024?**

(A) Dr. Purnima Devi Burman

(B) Prabha Verma

(C) Gulzar

(D) Rambhadracharya

42. **Consider the following statements with reference to 'Cannes Film Festival - 2024'-**

1. Anusuya Sengupta is the first Indian to win the Best Actress award in the 'Un Certain Regard' category.

2. Indian director Payal Kapadia has won the "Palme d'Or" award for the film 'All We Imagine as Light'.

**Choose the correct option-**

(A) Only 1 (B) Only 2

(C) Both 1 and 2 (D) Neither 1 nor 2

43. **Consider the following statements regarding Major Radhika Sen-**

1. She will be awarded the 'United Nations Military Gender Advocate of the Year Award 2023'.

2. Major Radhika is the first Indian peacekeeper to receive this award.

**Choose the correct option-**

(A) Only 1 (B) Only 2

(C) Both 1 and 2 (D) Neither 1 nor 2

44. **Consider the following statements regarding the Pulitzer Prize-**

1. It is the most prestigious award in the field of journalism.

2. David E. Hoffman of 'The Washington Post' newspaper was awarded the Pulitzer Prize in the 'Editorial Writing' category.

**Choose the correct option-**

(A) Only 1 (B) Only 2

(C) Both 1 and 2 (D) Neither 1 nor 2

45. **Who has recently become the new Chief of Indian Navy?**

(A) Vivek Ram Chaudhary

(B) Anil Chauhan

(C) Dinesh Kumar Tripathi

(D) R. Hari Kumar

46. **Consider the following statements with reference to Lokpal-**

1. Pinaki Chandra Ghose is the current Lokpal Chairman.

2. Recently Pradeep Kumar Tripathi has been appointed as Lokpal Secretary.

3. Justice Rituraj Awasthi and Sushil Chandra are members of Lokpal.

**Choose the correct option-**

(A) 1 and 2 (B) 1 and 3

(C) 1, 2 and 3 (D) 2 and 3

47. **Consider the following statements-**

1. Idashisha Nongrang has become the Director General of Police of Meghalaya.

2. She is the first woman Director General of Police of India.

**Choose the correct option-**

(A) Only 2 (B) Only 1

(C) Both 1 and 2 (D) Neither 1 nor 2

48. **Recently John Swinney has taken oath as the First Minister of which country?**

(A) Scotland (B) Finland

(C) Ireland (D) Switzerland

49. **Who is the first and only female forest worker of India who has become a "crocodile rescue expert"?**

(A) Prem Kanwar (B) Neeru Yadav

(C) Maya Tandon (D) Salima Tete

50. **Who has recently become the new President of Vietnam?**

(A) Lai Ching-te (B) Mohammad Mokhber

(C) John Swinney (D) To Lam

| Answer Key (May 2024) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | D | 11. | D | 21. | A | 31. | C | 41. | A |
| 2. | A | 12. | D | 22. | B | 32. | B | 42. | A |
| 3. | B | 13. | C | 23. | D | 33. | A | 43. | A |
| 4. | A | 14. | B | 24. | A | 34. | B | 44. | C |
| 5. | A | 15. | D | 25. | C | 35. | C | 45. | C |
| 6. | C | 16. | B | 26. | B | 36. | A | 46. | D |
| 7. | B | 17. | C | 27. | C | 37. | D | 47. | B |
| 8. | D | 18. | B | 28. | D | 38. | D | 48. | A |
| 9. | D | 19. | D | 29. | B | 39. | D | 49. | A |
| 10. | A | 20. | D | 30. | C | 40. | D | 50. | D |