UPSC Mentorship
A Unit of Mentorship India

BI-WEEKLY EDITION

THE MIB | MENTORSHIP INDIA BI-WEEKLY

— ELECTION SYSTEM IN INDIA —

THE MIB | MENTORSHIP INDIA BI-WEEKLY

A Current Affairs Magazine from Mentorship India

Dear Students

The Mentorship India Bi-weekly is our half-monthly publication for staying updated on the latest developments shaping India and the World. Crafted with precision by our mentors, it serves as a comprehensive resource for students preparing for competitive exams. Offering insightful analysis, in-depth coverage, and strategic insights aligned with the exam syllabus, it empowers aspirants to navigate through contemporary issues with confidence. From breaking news to nuanced perspectives, our magazine transforms complex topics into easily digestible notes, ensuring every reader gains a holistic understanding of current affairs. Join us on a journey of knowledge enrichment and exam preparation excellence with our Bi-weekly Current Affairs.

FEATURES

- **MIB THEME BI-WEEKLY**
  - A comprehensive coverage of the most important bi-weekly topic.
- **MAINS IN-DETAIL BI-WEEKLY**
  - The in-depth coverage of issue that carry most probability to be asked in the Exam.
- **PRELIMS IN-BRIEF BI-WEEKLY**
  - Subject-wise reading notes of most expectable themes from Prelims point-of-view.
- **INFO IN-NEWS BI-WEEKLY**
  - A separate section for Places in News, Persons in News and Schemes in News.
- **SELF EVALUATION BI-WEEKLY**
  - An assignment containing 25 Prelims Questions and 5 Mains Questions for your self-evaluation
- **SOLVED ESSAY BI-WEEKLY**
  - A Previous Year Solved Philosophical Essay to give student an extra edge on others.

FROM THE EDITORS

Why did you start?

Starting the journey towards cracking the UPSC exam is like setting off on a grand adventure, all pumped up and ready to make a difference. At first, it's all about drinking NCERTs, cooking notes, tasting classes, and digesting mocks with a big dream in your heart.

But then, there comes a time when things start feeling a bit tough. You might start wondering if you're on the right path or if all this hard work is worth it. Doubts start creeping in, and suddenly, you're feeling lost in the whole process.
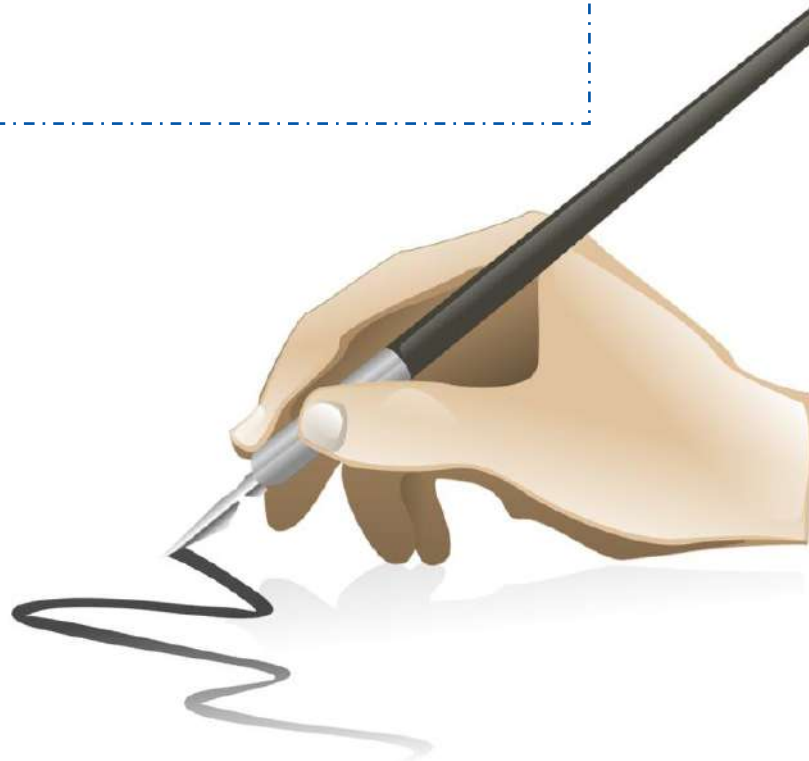
Guess what? Feeling this way is totally normal! Human psychology operates in cycles. Motivation peaks, plateaus, and dips. Social connections take a backseat, and the world outside seems to be moving on without you. This existential crisis is a test, not a failure. You see, our brains are funny things. They love routines and predictability, but they also get bored easily. So, when things start feeling too routine or tough, our brains can sometimes play tricks on us, making us doubt ourselves or our goals.

At Mentorship India, we understand these struggles. We offer a supportive network of mentors who have walked the same path, and who can guide you through the rough patches and celebrate your victories. We stand as a beacon of support, offering guidance, mentorship, and unwavering encouragement.

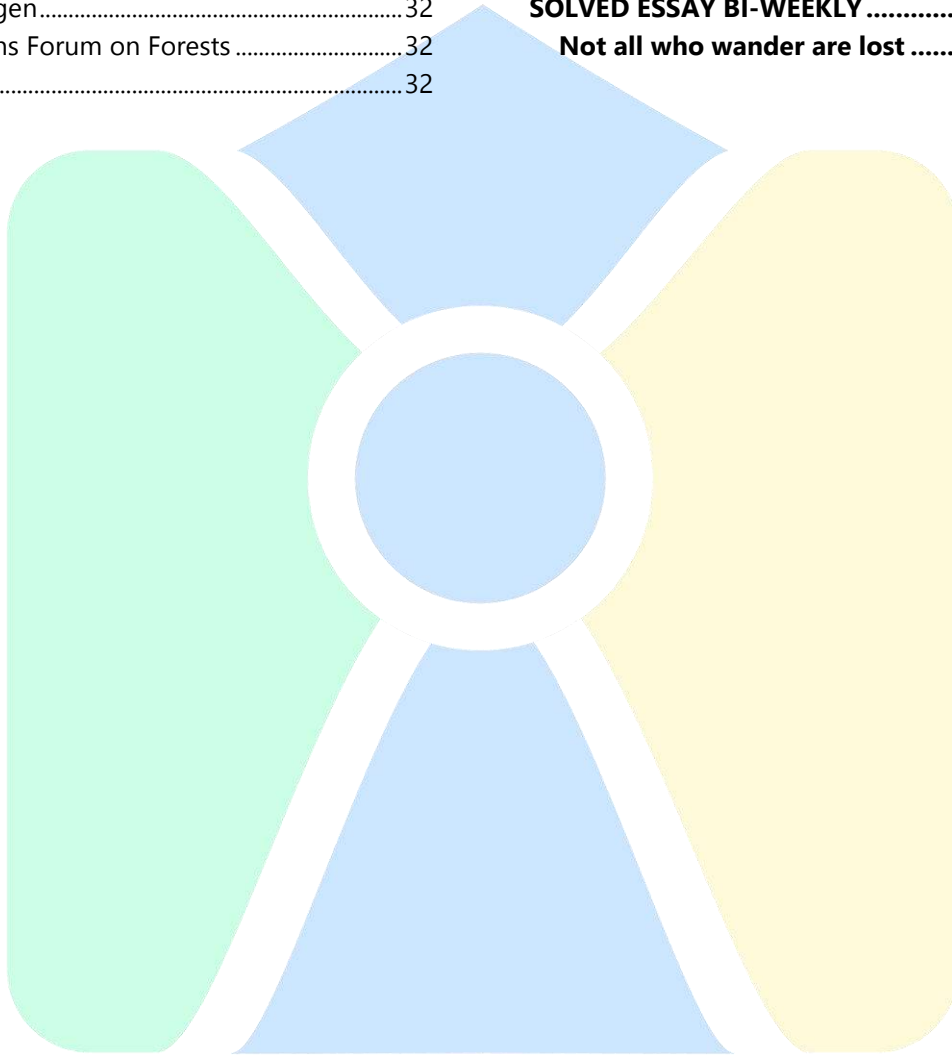Remember, whenever you feel adrift in the sea of preparation - pause and reflect: "Why did you start?"

Team
UPSC Mentorship

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ELECTION SYSTEM IN INDIA

As the vibrant democracy of India gears up for the Lok Sabha Elections in 2024, the spotlight once again falls on the intricate tapestry of its election system. From the sprawling metropolises to the remote villages, every corner of the nation becomes a stage for the grand spectacle of democracy in action. Let's delve into the intricacies of India's election system that pulses through the heart of the world's largest democracy.

The election is a mechanism by which people can choose their representatives at regular intervals and change them whenever they want. It forms an important topic from you General Studies Paper II. Broad Topics covered are listed on right side.

- Constitutional Provisions
- Election Laws in India
- Political Party System In India
- Election Process in India
- Electoral Reforms

Constitutional Provisions related to Elections

Part XV (Article 324-329) deals with elections and establishes a commission for these matters.

- **Article 324:** Superintendence, direction and control of elections to be vested in an Election Commission.
- **Article 325:** No person to be ineligible for inclusion in, or to claim to be included in a special, electoral roll-on grounds of religion, race, caste or sex.
- **Article 326:** Elections to the House of the People and to the Legislative Assemblies of States to be based on adult suffrage.
- **Article 327:** Power of Parliament to make provision with respect to elections to Legislatures.
- **Article 328:** Power of state Legislature to make provision with respect to elections to such Legislature.

- **Article 329:** Bar to interference by courts in electoral matters.

☞ **Types of Elections in India**

01 Executive	02 Union Legislature	03 State Legislature	04 Local Bodies
President	Lok Sabha	State Assemblies	Municipal Corporation
Vice-President	Rajya Sabha	Legislative Council	Gram Panchayat
			Block Panchayat
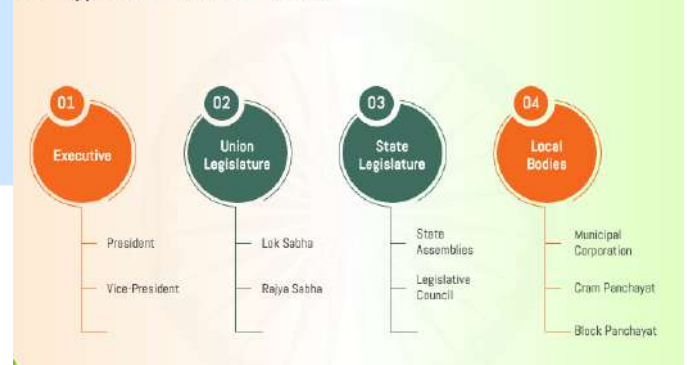
ELECTION COMMISSION OF INDIA (ECI)

- Election Commission of India (ECI) is an independent constitutional body tasked with running the Union and State electoral systems.

- It was founded on January 25, 1950, in compliance with the Constitution.
- Elections to the State Legislative Assemblies, Lok Sabha, Rajya Sabha, and Indian presidential and vice-presidential posts are managed by this body.
- Presently, it consists of the CEC and two Election Commissioners (ECs).
- The President appoints CEC and Election Commissioners as per the CEC and Other ECs (Appointment, Conditions of Service and Term of Office) Act, 2023. The qualifications of the Election Commission members are not specified by the Constitution.
- They have a fixed tenure of six years, or up to the age of 65 years, whichever is earlier.
- The salary and conditions of service of the CEC and ECs will be equivalent to that of a Supreme Court Judge.
- While ECs can only be removed on the CEC's recommendation, CECs can only be removed from office following a procedure by Parliament akin to that of a SC judge.
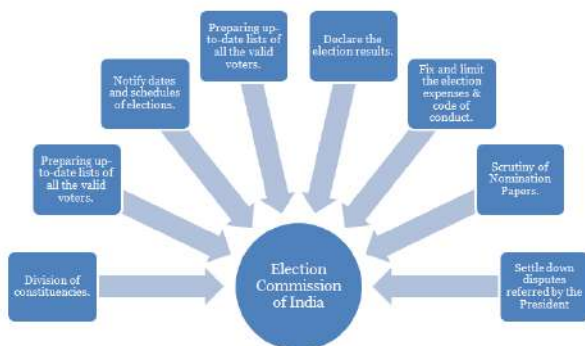
Issues with Election Commission of India
o **Political Interference:** Pressure from parties and interest groups undermines ECI's autonomy, risking election credibility.
o **Limited Powers:** ECI struggles to enforce decisions and punish offenders, hindering effective regulation implementation.
o **Electoral Fraud:** Challenges include voter intimidation, misuse of power, compromising election integrity.
o **Electoral Violence:** Persistent concern includes clashes between parties, polling booth attacks.

o **Technological Challenges:** Ensuring EVM security and integrity amidst technological advancements poses hurdles.
o **Disinformation:** Combatting fake news, hate speech on social media hampers fair election efforts.

Way Forward
o **Intensify voter education:** Use various channels like social media, educational programs, and community outreach to educate voters about their rights and the importance of participation.
o **Advocate for electoral reforms:** Push for reforms addressing campaign financing transparency, electronic voting integrity, and stricter enforcement against malpractices.
o **Modernize electoral infrastructure:** Invest in updating EVMs, voter registration systems, and polling facilities.
o **Enhance security measures:** Collaborate with law enforcement to deploy adequate personnel, implement strict protocols, and prosecute offenders to combat violence and fraud.
o **Promote transparency and accountability:** Ensure fair conduct, disclose funding information, and establish robust monitoring mechanisms to address violations.
o **Engage in knowledge-sharing:** Collaborate with international counterparts and monitoring organizations to exchange best practices and enhance technical expertise.

☞ **Eligibility Criteria for voter Registration**

Age: At least 18 years old on the qualifying date for the electoral roll

Address Proof: Proof of residence, such as a utility bill, bank statement, or rental agreement

Residential Status: Permanent residential address in the constituency where they wish to register

Voter Eligibility

Identity Proof: Possess a valid identity document such as a passport, driving license, voter ID card, PAN card, or Aadhaar card

Citizenship: Indian citizen by birth or naturalization

Election Laws in India

To regulate elections in India certain laws in India have been passed. They are the following:

✓ **Representation of the People Act, 1950**
✓ **Representation of the People Act, 1951**
✓ **Delimitation Act, 2002**

REPRESENTATION OF THE PEOPLE ACT, 1950

It contains provisions related to the following electoral matters:

- Allocation of seats in the House of the People, State legislative Assemblies and the State Legislative Councils.
- Delimitation of Parliamentary, Assembly and Council Constituencies
- Election officers like chief electoral officers, district election officers, electoral registration officers and so on.
- Electoral rolls for Parliamentary, Assembly and Council constituencies
- Manner of filling seats in the Council of States to be filled by the representatives of union territories.
- Local authorities for purpose of elections to the State Legislative Councils
- Barring jurisdiction of civil courts.

REPRESENTATION OF THE PEOPLE ACT, 1951

Broadly speaking, this Act contains provisions relating to the following electoral matters:

- Qualifications and disqualification for membership of Parliament and State Legislatures
- Notification of general elections
- Administrative machinery for conducting elections
- Registration of political parties
- Conduct of elections
- Free supply of certain material to candidates of recognised political parties
- Disputes regarding elections
- Corrupt practices and election offenses
- Powers of Election Commission in connection with inquiries as to disqualification of members
- Re-elections and time limit for filling vacancies

DELIMITATION ACT, 2002

- The Delimitation Act, 2002 was enacted to provide for the delimitation of parliamentary and assembly constituencies.
- It aims to ensure fair representation by adjusting constituency boundaries based on population changes.
- The Act mandates the establishment of Delimitation Commissions at the national and state levels.
- These commissions are tasked with redrawing constituency boundaries based on the latest census data.
- The Act specifies the criteria for delimitation, including population equality and geographical considerations.
- It provides for public consultation and notification of draft proposals before finalizing constituency boundaries.
- The Delimitation Commission's decisions are binding and cannot be challenged in court.
- The Act also lays down provisions for the reservation of seats for Scheduled Castes and Scheduled Tribes.

Historical Timeline- Delimitation Commissions

1. First delimitation commission based on census 1951 data headed by Justice N Chandrasekhara Aiyar.
2. Fixed the Lok Sabha Seats at **494**.

1. Third Delimitation commission based on 1971 census headed by Justice J L Kapur
2. Increased the seats of the Lok Sabha from **522** to **543** and assembly seats from **3771** to **3997**.
3. **42nd amendment Act 1976** froze any further delimitation of constituencies for elections to Lok Sabha and State Legislative Assemblies until the 2001 Census of India. This was to encourage population control measures of states.

1953 ----- 1963 ------ 1973 --------- 2002

1. Second Delimitation commission based on 1961 census.
2. Increased the Lok Sabha seats from **494** to **522**.

1. There were **no delimitation exercises** after 1981 and 1991 census.
2. **Fourth Delimitation commission** was based on the 2001 census data headed by Justice Kuldeep Singh.
3. There was **only readjustment of boundaries and no increase in seats** of Lok Sabha and state legislative assemblies.
4. **84th amendment 2002 froze** any increase in seats till 2026.

Political Party System in India

India's "Political Party System" indicates to a multi-party system in which different political parties vie for control through democratic means. They are voluntary societies and organized groups of people who share a political philosophy and want to use constitutional methods to seize power and govern the nation in order to further national goals.

CHARACTERISTICS OF PARTY SYSTEM IN INDIA

- **Multi-Party System:** India's vast size and diverse society foster a multitude of political parties, resulting in frequent hung Parliaments and coalition governments.
- **One-Dominant Party Systems:** Historically, Congress dominated Indian politics, but its hegemony has waned since 1967, with the rise of regional and national parties like Janata Dal and BJP.
- **Lack of Clear Ideology:** Apart from BJP, CPI, and CPM, most parties lack distinct ideologies, prioritizing power over principles, advocating democracy, secularism, and socialism.
- **Personality Cult:** Parties often centre around charismatic leaders like Nehru, Indira Gandhi, and Rajiv Gandhi, with leaders overshadowing party ideology, as seen in Congress, AIADMK, and TDP.
- **Based on Traditional Factors:** Unlike Western parties based on socio-economic programs, many Indian parties form around religion, caste, language, undermining general public interest.
- **Emergence of Regional Parties:** Regional parties like BJD, DMK, and Akali Dal hold sway in states and increasingly impact national politics through coalition governments.

RECOGNITION OF POLITICAL PARTIES

As per the latest statistics, the total number of registered political parties in India is 2858. Based on their performance in polls, the Election Commission recognizes political parties as either national or state parties after registering them for the purpose of holding elections. All other parties are declared to be registered but not recognized.

National Political Parties in India

In India, a political party is recognized as a national party if it fulfils the following criteria-

- A party must have secured a minimum of 6% of the valid vote in a Lok Sabha or an Assembly general election in four or more states. Out of these 6, it must have won a minimum of 4 seats in an election of the Lok Sabha from a state or states.
- If a party has won 2% of seats in the Lok Sabha and candidates for the party are elected from three or more states.
- If a party is recognized as a state party in more than three states.

Six National Parties: BJP (Bharatiya Janata Party), INC (Indian National Congress), CPI(M) (Communist Party of India (Marxist)), BSP (Bahujan Samaj Party), NPP (National People's Party) and AAP (Aam Aadmi Party).

State Political Parties in India

The following 5 conditions must be fulfilled by recognized political parties in India to be recognized as a state political party:

- In an election to the state legislative Assembly, the said party must gain at least six per cent of the valid votes. Also, the result must be that the particular political party must win at least 2 seats in the assembly.
- At least 6% of the valid votes must be secured by the party in the Lok Sabha election. It must win 1 seat in the Lok Sabha elections.
- A minimum of three seats or at least 3% of the total seats must be won by the Legislative Assembly (the condition depends upon whichever is higher).

o For every 25 seats in the Lok Sabha, the party must win a minimum of 1 seat. The fraction depends upon the number of seats allotted to that state.

o The party should secure 8% or more of the total votes polled in the state.

Election Process in India

The term "election process" describes the set of procedures used in democratic systems to hold elections and select representatives from among voters.

INDIAN ELECTIONS 2024
How big are India's elections?
With 969 million registered voters, India has the largest electorate in the world. Here is how it compares with other large countries voting this year:

INDIA ~969m registered voters

SOUTH AFRICA ~27m
MEXICO ~98m
RUSSIA ~114m
BANGLADESH ~119m
PAKISTAN ~128m
US ~168m
INDONESIA ~204m

The election process includes various stages as listed below:

Announcement of Election Schedule by the ECI
- The Election Commission of India (ECI) announces the schedule for elections, including the dates for polling and counting.
- The announcement typically takes into account factors like administrative preparedness, security considerations, and the need for adequate campaigning time.

MODEL CODE OF CONDUCT
RULES FOR POLITICAL PARTIES AND CANDIDATES

General Conduct
- Avoid activities causing communal tension
- Criticism of other parties confined to policies, past work
- Respect for every citizen's home life

Meetings
Inform local police about venue & time of meeting

Procession
Notify local police about details in advance

Polling Day
Collaborate with authorities for peaceful polling

Polling booth
Access is limited to authorised individuals

Observers
Appointed by ECI to address complaints

Party in power
No misuse of official position for campaigning

Election manifesto
Must not contravene ideals and principles

- The Model Code of Conduct (MCC) for the guidance of candidates and political parties comes immediately into effect after such an announcement.

Issue of Notification by the ECI
- After announcing the election schedule, the ECI issues formal notifications specifying the dates for various stages of the election process.
- These notifications are published in official gazettes and widely circulated to inform stakeholders, including political parties, candidates, and voters.

Filing of Nominations by the Candidates
- Candidates interested in contesting elections must file their nominations within the stipulated timeframe mentioned in the election schedule.
- They need to submit required documents and fulfill eligibility criteria such as age, citizenship, and criminal record checks.

Oath or Affirmations of Candidates
- Once nominations are filed, candidates are required to take oaths or make affirmations, pledging to uphold the Constitution and abide by electoral laws.
- These oaths symbolize their commitment to ethical conduct and democratic principles throughout the election process.

Election Campaigns by the Candidates
- Following nomination, candidates engage in election campaigns to communicate their agendas, policies, and promises to voters.
- Campaign activities include rallies, public meetings, door-to-door canvassing, media advertisements, and social media outreach.

Polling of Votes
- On the designated polling day(s), registered voters cast their votes at polling stations established across constituencies.

- The polling process is supervised by election officials to ensure fairness, transparency, and security.

Counting of Votes

- After the polling concludes, the votes cast are counted in the presence of candidates, their representatives, and election observers.
- The counting process follows strict protocols to prevent tampering or fraud, with results tabulated and recorded meticulously.

Constitution of House

- Once the votes are counted, the Election Commission officially declares the election results, determining the winning candidates in each constituency.
- The elected representatives then take their oaths of office, and the respective legislative bodies, such as the Lok Sabha or state assemblies, are constituted.

These stages collectively constitute the comprehensive election process in India, reflecting the democratic ethos and procedural integrity upheld by the Election Commission of India.

Electoral Reforms

Electoral reforms in India are imperative to ensure the integrity, fairness, and transparency of the democratic process. Despite significant progress, various issues continue to plague electoral politics, undermining the foundational principles of democracy.

ISSUES IN ELECTORAL POLITICS IN INDIA

- **Money Power:** Candidates often exceed permissible expenditure limits, highlighting the influence of wealth in elections.
- **Muscle Power:** Instances of violence, intimidation, and booth capturing tarnish the electoral process in certain regions.
- **Criminalisation of Politics and Politicization of Criminals:** Criminals enter politics to evade prosecution and gain political patronage, compromising the integrity of governance.
- **Misuse of Government Machinery:** The ruling party may misuse government resources and funds to gain an unfair advantage in elections.
- **Non-serious independent candidates:** Serious candidates manipulate elections by fielding non-serious independent candidates to divide votes.
- **Casteism:** Political parties exploit caste divisions, leading to voting along caste lines and undermining the principles of democracy and equality.

- **Communalism:** Communal polarization threatens India's secular and pluralistic fabric, jeopardizing democratic values.
- **Lack of Moral Values in Politics:** Political corruption and self-interest overshadow principles of service and sacrifice, eroding public trust in democratic institutions.

ELECTORAL REFORMS UNDERTAKEN

- **Introduction of Universal Adult Suffrage:** India adopted universal adult suffrage in 1950, granting voting rights to all citizens aged 21 and above regardless of gender, caste, religion, or wealth.
- **Establishment of the Election Commission of India (ECI):** The ECI was formed in 1950 to ensure the conduct of free and fair elections, independent of political interference.
- **Delimitation Commission:** The Delimitation Commission was established to redraw electoral boundaries periodically, ensuring fair representation based on population changes.
- **Introduction of Electronic Voting Machines (EVMs):** EVMs were introduced in the 1990s to streamline the voting process, enhance accuracy, and minimize electoral malpractices.
- **Voter ID Cards:** The issuance of voter identification cards began in the 1990s, providing a standardized form of identification for voters and reducing identity fraud.

- **Voter Verifiable Paper Audit Trail (VVPAT):** VVPAT machines were introduced in 2013 to enhance transparency and accountability by providing voters with a physical verification of their votes.
- **Ceiling on Election Expenditure:** Election expenditure limits were imposed on candidates and political parties to curb the influence of money power in elections.
- **Introduction of NOTA (None of the Above) Option:** The NOTA option was introduced in 2013, allowing voters to reject all candidates if they find them unsuitable, promoting electoral accountability.
- **Online Voter Registration:** The ECI introduced online voter registration facilities, making it easier for citizens to enroll and update their voter details.
- **Electoral Bonds:** Electoral bonds were introduced in 2018 to make political funding more transparent, allowing donors to contribute to political parties through banking channels.

WAY FORWARD

- **Strengthening Oversight Mechanisms:** Implement stringent monitoring of campaign expenditures and adherence to electoral codes of conduct.
- **Enhancing Electoral Integrity:** Utilize advanced technology for voter registration, polling, and counting to minimize fraud and irregularities.
- **Promoting Political Accountability:** Ensure disclosure of political party finances, transparent candidate selection processes, and stringent penalties for electoral misconduct.
- **Addressing Electoral Malpractices:** Take proactive measures to address voter intimidation, booth capturing, and the use of money and muscle power through enhanced law enforcement and voter education initiatives.
- **Encouraging Electoral Participation:** Implement initiatives to encourage greater electoral participation among marginalized and underrepresented groups through voter education campaigns, outreach programs, and affirmative action measures.
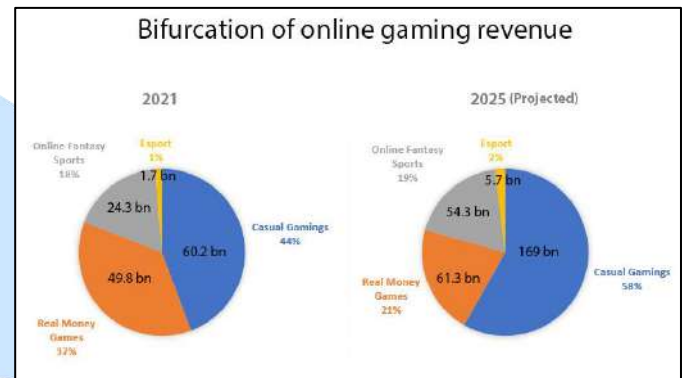
India's Online Gaming Sector

Relevance: The Prime Minister's vision to establish India as a prominent global gaming hub has received renewed attention as he engaged with seven of the top gamers in the country.

Gaming expected to reach $7billion+ by 2028

	India	US	China
CAGR FY 20-23	28%	9%	7%
Gaming market size in the country as % of global gaming market (FY23)	1.1%	24%	25%
Mobile gaming as % share of gaming market (2023)	90%	37%	62%

ABOUT ONLINE GAMING INDUSTRY IN INDIA

- The online gaming industry in India expanded 28% CAGR between FY20 and FY23.
- Projections indicate further growth to ₹33,243 crore by FY28, with a sustained 15% CAGR.
- This sector attracts significant foreign and domestic investments
- It also generates substantial direct and indirect employment.
- The size of the global gaming industry crossed $300 billion in 2021 — more than the combined markets for the movie and music industry.
- However, the online gaming segment in India constitutes 1.1% of the global online gaming revenue. Thus, the potential for growth is enormous.

OPPORTUNITY FOR INDIAN START-UPS

- A multi-billion opportunity for Indian start-ups.
- Can also form an important part of 'India Techade' and the goal of a $1 trillion digital economy.
- Increase in smartphone penetration along with better internet connectivity, rising disposable income of Indians, large youth population, and easily available online payment methods are some of the factors that fuelled the fast expansion of the online gaming industry.

Bifurcation of online gaming revenue

SUPPORT BY GOVERNMENT

- Establishment of the Animation, Visual Effects, Gaming, Comic and Extended Reality taskforce by the Ministry of Information and Broadcasting.
- The identification of the Ministry of Electronics and Information Technology as the nodal ministry.
- The introduction of a series of regulations through the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- Clarification around the ambiguity concerning tax deduction at source on winnings.

CHALLENGES IN ONLINE GAMING INDUSTRY

- The effective implementation of IT Rules of 2021 intended to regulate the industry is pending, thus nullifying their intended impact.
- Further, recent revisions in taxation have placed the industry, particularly start-ups, in a precarious position.
- Lack of a comprehensive regulatory framework has created ambiguity and uncertainty.
- Different states have different laws, leading to a fragmented policy landscape.
- Reliable and high-speed internet connectivity remains a challenge, especially in rural areas.
- Concerns about gaming addiction, especially among younger populations, are growing.

- Prevalence of internet gaming disorder is a significant concern.
- Inadvertent sharing of personal information has been leading to cases of cheating, privacy violations, abuse, and bullying.

Budget wishlist: online gaming firms

STATE OF AFFAIRS

India had 507 million gamers in 2021-22, a Lumikai report said

There were 900 gaming companies in India in 2022

Majority of $2.8B invested in sector came in last 2.5 years

Govt in process of regulating online gaming companies

Firms are seeing increased scrutiny from tax authorities

DEMANDS

Clear tax structure with treatment of gross gaming revenue as value of supply

Tax incentives to boost local IP creation and research and development

Rs 10,000

Continuation of current TDS threshold of Rs 10,000

MEASURES TO BE ADOPTED

- Regulatory Clarity: Enhancing regulatory clarity is critical in the gaming sector, especially regarding the effective implementation of self-regulatory bodies mandated by the IT Rules of 2021.

- Dedicated Gaming Hubs and Incubators: Set up specialized gaming hubs and incubators in major cities to foster innovation, collaboration, and talent development.
- Promote Game Development based on Indian Culture and Mythology: Encourage and incentivize game developers to create games based on India's rich cultural heritage, mythology, and folklore.
- Innovative Funding and Investment Models: Encourage alternative funding models like crowdfunding, venture capital investments, and public-private partnerships to support game development and start-ups. Example: Global gaming companies like Ubisoft have experimented with blockchain-based assets and in-game economies.
- Women- Trailblazers of India's Gaming Revolution: By empowering and supporting women in the gaming industry, India can unlock a wealth of talent, diverse perspectives, and innovative ideas that can drive the sector's growth and success.
- Promote Cross-Industry Collaborations: Foster collaborations between the gaming industry and other sectors like tourism, education, and hospitality to explore the potential of gamification and serious games.

Marriage Laws in India

Relevance: The Supreme Court ruled that simply registering a marriage without a proper ceremony isn't valid under the Hindu Marriage Act. The court emphasized that marriage holds a sacred significance under the Hindu Marriage Act, representing a lifelong, dignified, equal, consensual, and healthy union between two individuals.

ABOUT MARRIAGE

Marriage is an important social institution. It's a partnership that's accepted by society, legal, and custom. Additionally, there are a number of cultural practices that guarantee the survival of the family. In India, it is essentially a universal social institution.

STRUCTURAL AND FUNCTIONAL CHANGES IN THE MARRIAGE SYSTEM

Structural changes	Functional changes
Nowadays, personal preferences have a greater influence on partner selection than do familial obligations.	Nowadays, marriage is viewed as a partnership of equals rather than a partnership in which one person is dominant over the other.
The custom of planned marriages is being challenged by the rise in popularity of love marriages.	Today's couples view marriage as a collaboration and a friendship in addition to a way to have children.
Caste and religious barriers are being	From being the subservient homemaker to being an

broken down by an increase in intercaste and interreligious marriages.	equal spouse who shares in household income and decision-making, women's roles have changed over time.
The average age at which people marry has gone up as more people choose to start their jobs and finish their schooling before getting hitched.	The number of divorces has gone up, which suggests a trend toward personal autonomy and acceptance of the freedom to leave an abusive or unpleasant marriage.
Nuclear families are growing increasingly widespread, and joint families are becoming less popular.	With people choosing to marry from different religions, the institution of marriage has become increasingly secular.

Personal laws in force in India

The colonial laws:

■ The Converts' Marriage Dissolution Act, 1866

■ The Indian Divorce Act, 1869

■ The Indian Christian Marriage Act, 1872

■ The Kazis Act, 1880

■ The Anand Marriage Act, 1909

■ The Child Marriage Restraint Act, 1929

■ The Parsi Marriage and Divorce Act, 1936

■ The Dissolution of Muslim Marriage Act, 1939

Some of the most commonly referred personal laws:

■ The Special Marriage Act, 1954

■ The Hindu Marriage Act, 1955

■ The Hindu Succession Act, 1956

■ The Indian Succession Act, 1925

■ The Shariat (Application) Act, 1937

■ Dissolution of the Muslim Marriage Act, 1939

■ The Muslim Women (Protection of Rights on Divorce) Act, 1986 (post-Shah Bano case)

■ The Foreign Marriage Act, 1969

MARRIAGE LAWS

Marriage in India is governed by diverse legal frameworks rather than a single unified law. This approach is adopted to respect religious freedom and protect the fundamental practices of different faiths and beliefs. Basically there are four marriage laws in India; Hindu Marriage Law, Christian Marriage Law, Muslim Marriage Law, Parsi Marriage Laws and Special Marriage Law.

Muslim Marriage Laws

- There isn't a codified law specifically governing Muslim marriages.
- Unlike Hindu marriages, which are regulated by the Hindu Marriage Act, Muslim marriages are guided by Islamic principles and practices.
- A significant distinction between Hindu and Islamic perspectives on marriage is that Hindus consider it a sacrament, while Muslims view it as a civil contract known as "nikahnama" between a Muslim man and woman.

Christian Marriage Law

- Regulated by the Indian Christian Marriage Act, 1872.
- Christians, the second-largest religious minority community in India, adhere to this law for their matrimonial unions.
- Under the Act, a key requirement for the solemnization of a Christian marriage is the presence of a priest from the Church or minister.
- Similar to other marriage laws, the Act sets the legal age for marriage at 18 for brides and 21 for grooms.

Parsi Marriage Law

- Parsis, who follow the teachings of Zoroastrianism, belong to a religious minority community in India.
- The regulations governing their marriages are outlined in the Parsi Marriage and Divorce Act of 1936.

Special Marriage Act 1954

- The Special Marriage Act, 1954 is distinct from the communal marriage laws discussed earlier as it applies to Hindus, Muslims, Sikhs, Christians, Jains, Buddhists, and Parsis.
- This Act serves as a regulatory framework for inter-caste and inter-religious marriages in India.
- Additionally, the Special Marriage Act, 1954 is applicable in cases where an Indian citizen marries a foreigner within India.
- It's important to note that same-sex marriage is not legally recognized in India under this or any other marriage laws.

HINDU MARRIAGE ACT 1955

The Hindu Marriage Act (HMA) of 1955 is a legal framework that governs Hindu marriages and divorce by consolidating laws related to these aspects within the Hindu community.

5 CONDITIONS OF A VALID MARRIAGE UNDER THE HINDU LAW

- ONLY ONE SPOUSE AT A TIME
- MENTALLY SOUND AND CAPABLE OF GIVING CONSENT
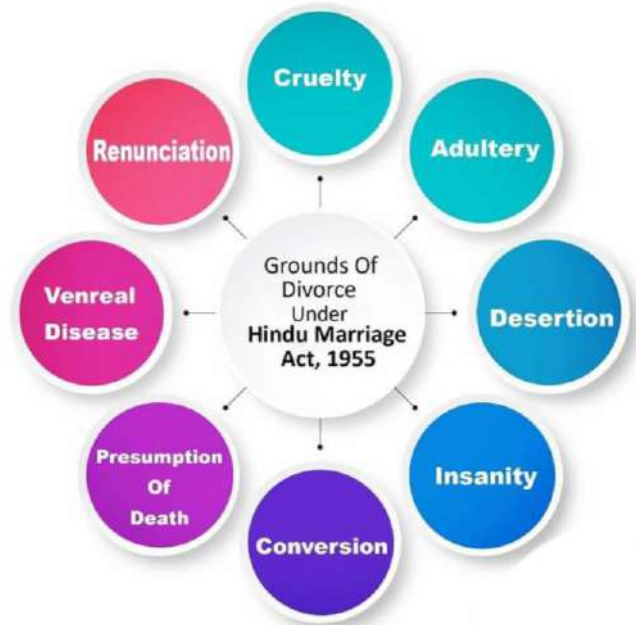- GROWN UP ENOUGH TO GET MARRIED 18 YEARS (GIRLS) 21 YEARS (BOYS)
- CAN'T MARRY WITHIN PROHIBITED RELATIONSHIPS
- CAN'T MARRY WITHIN SAPINDA RELATIONSHIPS

Features

- **Applicability:** Individuals who are Hindu by birth or through conversion. It also extends to Buddhists, Jains, and Sikhs.
- **Marriageable Age:** Minimum age for marriage at 21 for the bridegroom and 18 for the bride. Marrying minors is punishable by imprisonment or fines.
- **Recognition of Customs and Ceremonies:** The HMA acknowledges customary practices, including the important ritual of Saptapadi.
- **Prohibition of Bigamy and Polygamy:** Bigamy, polygamy, or polyandry are prohibited. Having two living spouses simultaneously is illegal and punishable.
- **Mental Health Criterion for Void Marriage:** Marriages are considered void if one or both parties are mentally unfit. Legal consent is necessary in such cases.
- **Registration Provision**: While registration is subject to state laws, lack of an official certificate doesn't invalidate a marriage.
- **Divorce Provision:** Divorce can be obtained through mutual consent or judicial separation. Special circumstances may allow divorce before one year of marriage. Various grounds for divorce are specified, including those enabling wives to seek divorce.

- **Restitution of Conjugal Rights:** The Act includes provisions for restitution of conjugal rights, allowing a spouse to seek legal intervention if the other unjustifiably leaves.
- **Legal Procedures:** Family courts handle matters concerning Hindu marriages and divorce. Cases are heard in courts of territorial jurisdiction based on the place of marriage, residence, or last cohabitation.

Grounds Of Divorce Under Hindu Marriage Act, 1955: Cruelty, Adultery, Desertion, Insanity, Conversion, Presumption Of Death, Venreal Disease, Renunciation

WHAT IF A MARRIAGE IS NOT REGISTERED?

- Not registering a marriage cannot be the sole ground to declare it invalid since registering a marriage itself does not make it valid.
- Section 114 of the Indian Evidence Act states that "the Court may presume the existence of any fact which it thinks likely to have happened, regarding the common course of natural events, human conduct and public and private business, in relation to the facts of the particular case."
- A marriage as per rituals (through photos, witnesses etc) and proof of long cohabitation as spouses through acceptance by family, friends or even children can be a proof of a valid marriage.

Registered Marriage		Unregistered Marriage	
✓	Prevents Child Marriage	✗	Increases fraudulent/ forceful/ unlawful marriage practices
✓	Prevents Polygamy	✗	Existence of Polygamy
✓	Ensures women to claim shelter and maintenance	✗	Women safety is not Guaranteed
✓	Marriage is legally authorised under the court of law	✗	Marriage is not documented and recorded legally

- In summary, a certificate can support the evidence but cannot be evidence in itself.

Spice Industry in India

Relevance: In recent times, protests against the exclusivity of Indian spices have been growing in many countries. Even Singapore and Hong Kong have banned many products of MDH and Everest. At the same time, agencies of America and Australia have also said to investigate the spices of these companies.
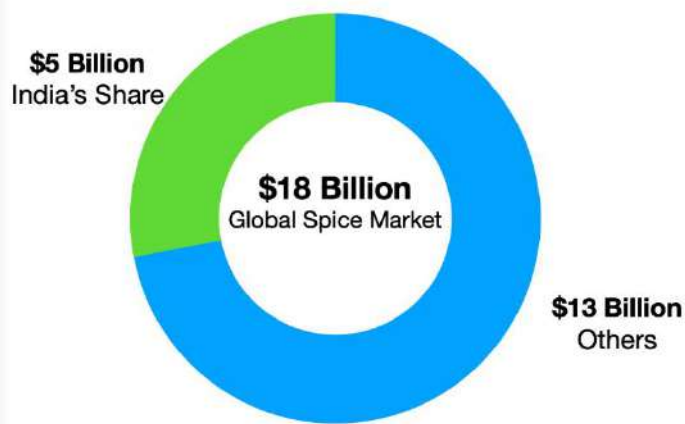

The market is projected to witness moderate growth during the next five years

HISTORY OF INDIAN SPICES

- Evidence of the use of spices in India can be found from ancient times, evidence of which is also found in the Indus Valley Civilization.
- India's strategic location on ancient trade routes also facilitated the exchange of spices with other civilizations.
- During the Middle Ages, Arab and Persian traders played an important role in the spread of Indian spices to the West.
- The British East India Company played an important role in establishing a monopoly on the spice trade during the colonial period.
- After gaining independence in 1947, India remained a leader in the global spice market. Government policies supported the cultivation of spices and India remained an important exporter of various spices.
- Today, India is known for the production of a variety of spices due to its diverse climate and geography. Spices like black pepper, cardamom, cinnamon, cloves, turmeric, cumin and coriander are cultivated in different regions of the country.

INDIAN SPICES INDUSTRY OUTLOOK

- India is the world's largest producer of spices and is also the largest consumer and exporter of spices.
- Production in the year 2021-22 stood at 10.87 million tonnes. During the year 2022-23, spices exports from India increased to US$ 3.73 billion from US$ 3.46 billion in the year 2021-22.
- The country exported spices worth US$ 3.73 billion during the year 2022-23. India exported 1.53 million tonnes of spices.
- India produces about 75 of the 109 spice varieties listed by the International Organization for Standardization (ISO).
- The top spice producing states in India are Madhya Pradesh, Rajasthan, Gujarat, Andhra Pradesh, Telangana, Karnataka, Maharashtra, Assam, Orissa, Uttar Pradesh, West Bengal, Tamil Nadu and Kerala.

$5 Billion
India's Share

$18 Billion
Global Spice Market

$13 Billion
Others

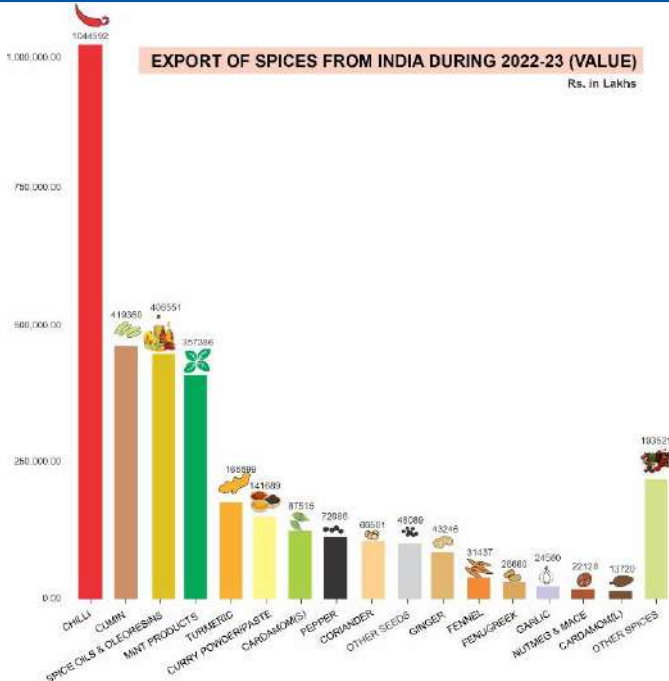## IMPORTANCE OF INDIAN SPICE INDUSTRY

- **Financial Contribution:** Spice exports contribute significantly to India's foreign exchange earnings, which helps improve the country's trade balance and strengthen its economy. For example- recently India earned US$ 4.25 billion through spice export.
- **Diversification of Agriculture**: Spice cultivation provides an alternative source of income to farmers and helps in diversifying agricultural production. For the former – spices contribute 41% to India's horticulture export earnings.
- **Cultural Heritage Promotion:** Spices are an integral part of India's rich cultural heritage and culinary traditions. Export of spices helps in promoting Indian culture globally and enhances the soft power of the country.
- **Employment Generation:** Spice industry being a labour-intensive sector, provides employment opportunities in rural areas. It contributes to poverty alleviation and rural development.

RECENT CHALLENGES/PROBLEMS WITH INDIAN SPICE SECTOR

- **Detection of Carcinogenic Chemicals:** Popular spice brands like MDH and Everest have been banned from selling their products in Hong Kong and Singapore after the carcinogenic chemical ethylene oxide was reportedly found in their products.
- **Inadequate Infrastructure and Logistics:** Inadequate infrastructure and logistics create challenges in transportation of spices from production centres to ports for export.

- **Rejection on Quality Issues:** There have been continuous rejections over quality issues of Indian spices. The European Union has consistently rejected Indian spices in the past due to failure to meet quality requirements.
- **Climate Change:** Unpredictable rainfall patterns and rising temperatures due to climate change disrupt crop yields and quality. This is especially concerning for regions like Kerala, a major producer of cardamom, pepper, and ginger.
- **Lack of Branding and Value Addition:** Indian spices are often exported as raw materials, with foreign companies capturing the value addition through processing and branding.

STEPS TAKEN BY THE GOVERNMENT

- **Research and Development:** The government supports research and development efforts in spice cultivation, processing and value addition technologies through institutions such as the Indian Council of Agricultural Research (ICAR) and the Spices Board.
- **Quality Certification and Assurance:** Certification schemes such as the Spice House Certification Scheme ensure adherence to quality standards and promote the export of safe and high-quality spices.
- **Export Promotion Schemes:** The government has launched export promotion schemes such as Merchandise Exports from India Scheme (MEIS) and Export Promotion Capital Goods (EPCG) Scheme to encourage spice exporters.
- **Advertising Campaigns:** Branding initiatives like 'Brand India' and 'Flavourit-Indian Spices' position Indian spices as premium products with unique taste and health benefits.

EXPORT OF SPICES FROM INDIA DURING 2022-23 (VALUE)
Rs. in Lakhs

of safe water, proper soil management, and approved pesticides. Organic cultivation enhances brand value and fetches premium prices. Invest in Quality Infrastructure: Upgrading storage facilities, transportation networks, and testing labs is crucial. This minimizes spoilage, ensures consistent quality, and facilitates efficient exports.

- **Market Diversification:** Indian spice exports should be diversified into emerging markets to reduce dependence on traditional markets such as the US, EU and the Middle East.
- **Quick Quality Check:** Publication of rapid investigation findings to re-establish global confidence in Indian spices is necessary.
- **Skilling the Workforce and Addressing Labor Shortages:** Investing in training programs for farmers, processors, and sorters can improve efficiency and address labor shortages.

WAY FORWARD

- **Focus on Good Agricultural Practices (GAP) and Organic Cultivation:** Promoting GAP ensures use

Indo-Nepal Relations

Relevance: Nepal's cabinet recently decided to feature a map on its Rs 100 currency note, claiming areas currently administered by India in Uttarakhand. This move has sparked a reaction from India's External Affairs Minister, who termed these "unilateral measures" by Kathmandu as ineffective in changing the ground reality.

TERRITORIAL DISPUTE OVERVIEW

- The dispute involves a 372-sq-km area comprising Limpiadhura, Lipulekh, and Kalapani, located at the trijunction of India, Nepal, and China in Uttarakhand's Pithoragarh district. Nepal claims these areas based on historical and evidential grounds.

- The territorial dispute is about a 372-sq-km area that includes Limpiadhura, Lipulekh, and Kalapani at the India-Nepal-China trijunction in Uttarakhand's Pithoragarh district. Nepal has claimed for long that these areas belong to it both historically and evidently.
- The map was adopted by consensus in Nepal's Parliament four years ago. Unlike 2020, when the new map was adopted by Parliament, there is no visible consensus on putting the map on the currency note.
  - o The UML and Prachanda's CPN (Maoist Centre) are together in the ruling coalition, but the Nepali Congress, the main opposition and largest party in Parliament, is yet to make a statement on this issue.

DIPLOMATIC DEVELOPMENTS

Both India and Nepal agreed to resolve the boundary issue through diplomatic channels. However, recent actions by Nepal's cabinet indicate dissatisfaction with the pace of these discussions.

India-Nepal Talks Timeline

2000 — PM Atal Bihari Vajpayee assured Nepal that India had no territorial interest.

2020 — Nepal adopted a new map in Parliament including the disputed areas.

1997-98 — PM I.K. Gujral promised to consider Nepal's evidence.

2014 — PM Narendra Modi's visit renewed hopes for resolving contentious issues.

2023 — Nepal's cabinet decides to print the map on currency notes.

GENESIS OF THE ISSUE

Treaty of Sugauli (1815-16):
- Concluded between British India and the Kingdom of Nepal, maps the Makhali River as the western boundary with India.
- However different British maps showed the source of the tributary at different places which was mainly due to underdeveloped and less-defined surveying techniques used at that time.
- The discrepancy in locating the source of the river led to boundary disputes between India and Nepal, with each country producing maps supporting their own claims.

The Susta territorial dispute:
- A result of the shifting of the course of the Gandak River.
- The Treaty of Sagauli defined Gandak as the international boundary between India and Nepal.
- When the treaty was signed, Susta was on the right bank of the river Gandak which falls in Nepal territorial control.
- But, in due course of time, the river has changed its course and Susta now falls on the left bank of the Gandak, which is controlled by India.

Legal Dimension of Issue
According to International Laws, the principles of **avulsion** and **accretion** are applicable in determining the borders when a boundary river changes course.
- **Avulsion:** It is the pushing back of the shoreline by sudden, violent action of the elements, perceptible while in progress. Also it can be defined as the sudden and perceptible change in the land brought about by water, which may result in the addition or removal of land from a bank or shoreline.
- **Accretion:** It is the process of growth or enlargement by a gradual buildup. It is the natural, slow and gradual deposit of soil by the water.

If the change of the river course is rapid – by avulsion – the boundary does not change. But if the river changes course gradually – that is, by accretion – the boundary changes accordingly.

Significant Claims:
- Buddhi Narayan Shrestha: British maps support Nepal's claim.
- Former Officials: King Mahendra allegedly allowed India's military use of Kalapani during Nehru's tenure.
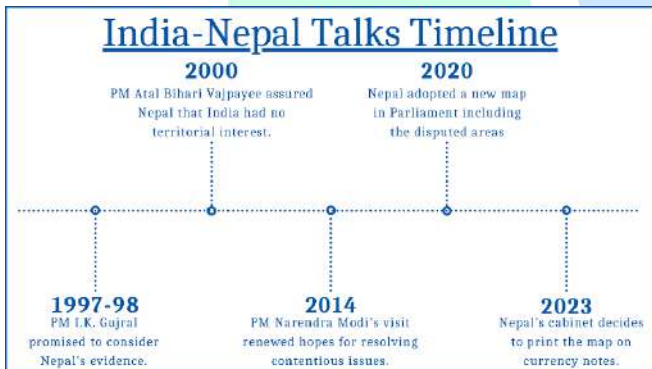
EVOLUTION OF TERRITORIAL CLAIMS

Year	Event	Outcome
1815-16	Treaty of Sugauli	Nepal ceded territory east of the Kali River to the East India Company.
1819-1856	British maps published	Identified Kali River originating in Limpiadhura.
1879-1920	New maps published	Showed differing origins of Kali River.
1962	India-China war	Changed territorial administration in disputed areas.
2014	Modi's visit to Nepal	Agreement to set up a boundary working group.
2020	Nepal's Parliament adopts new map	Included disputed areas.

2023	Nepal's cabinet decides to print new map on currency	Lacks broad political consensus.

FRICTIONS AND RESOLUTIONS

Post-2015 blockade, bilateral relations soured, leading Nepal to seek alternatives with China. The 2018 election brought K.P. Sharma Oli's government, which endorsed the disputed map.

Key Points
- Economic Concerns: Former officials criticized the decision as "provocative," suggesting dialogue-based resolutions.
- China-Nepal Boundary: Early 1960s resolution through bilateral meetings set a precedent.

Current Scenario
- In contrast to 2020, when the new map was widely supported, the decision to include it on currency notes faces skepticism in Nepal. The ruling coalition lacks unanimous support, and the main opposition has not yet commented.
- Differing Perspectives
- Economic Advisors: Warn against provocative actions, urging diplomatic dialogue.
- Government Stance: Hopeful of mitigating potential hardships through improved road connectivity with China.

Key initiatives and agreements
- To resolve the vexed boundary dispute (over Limpiyadhura, Kalapani and Lipulekh).
- First trilateral power trade from Nepal to Bangladesh through India (for ~40 megawatts)
- Hydropower cooperation: Lower Arun Hydroelectric Project; Pacheshwar multipurpose project on Mahakali River.

INDIA AND NEPAL RELATIONS: KEY FACTS

Diplomatic relations: Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations.

Trade:
- India is the largest trading partner and has a trade surplus with Nepal.
- India is the highest source of FDI in Nepal.

Defence:
- Recruitment of Nepalese soldiers in Gorkha regiments of the Indian Army;
- Joint military exercises (e.g., Surya Kiran) etc.

Energy:
- Power Exchange Agreement since 1971;
- South Asia's first cross-border petroleum products pipeline, connecting Motihari (India) to Amlekhgunj (Nepal).

Hydropower cooperation:
- MoU to develop the West Seti and Seti River (SR6) projects (1,200 MW);
- Agreement to take forward the Sapta Kosi high dam project on Kosi river.

Culture: Vivekananda Centre to showcase Indian Culture (in Kathmandu).

Multilateral Co-operation:
- At BBIN, BIMSTEC, Non-Aligned Movement, and SAARC;
- Nepal signed a framework to join the India-led International Solar Alliance.

While Nepal aims to assert its territorial claims through symbolic measures, the complex historical and diplomatic context necessitates a careful, dialogue-driven approach to resolve the longstanding boundary dispute with India.

Critical Minerals Exploration in India

The Ministry of Mines, in partnership with the International Institute for Sustainable Development (IISD), Council on Energy, Environment and Water (CEEW), and Shakti Sustainable Energy Foundation (Shakti), recently organized the Critical Minerals Summit.

ABOUT CRITICAL MINERALS

- Critical minerals are those that are necessary for both national security and economic growth.

- The scarcity of these minerals or their concentration in a small number of geographic areas for processing or extraction could create vulnerabilities in the supply chain or potentially cause a supply interruption.
- The Indian government has published a list of the 30 essential minerals. Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium are among these minerals.
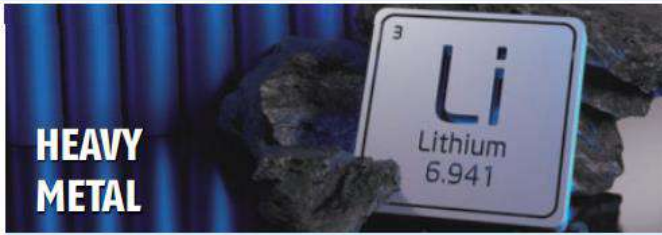

IMPORTANCE OF CRITICAL MINERALS

- Critical minerals are essential for modern technologies like renewable energy, electric vehicles, and defense applications.
- They are irreplaceable in these technologies, and a secure supply is vital for India's economic and technological development.
- Global demand for critical minerals is rising due to the green energy transition, making them a strategic resource.
- Uneven geographic distribution of these minerals can create supply chain vulnerabilities, highlighting the need for domestic exploration.
- Responsible exploration of critical minerals can create new economic opportunities and generate revenue for local communities.

CHALLENGES

- **Limited Domestic Reserves:** India possesses limited reserves of many critical minerals like lithium, cobalt, and rare earth elements, forcing dependence on imports. Others—like antimony, titanium and copper—are found in India but known reserves are less than the volumes needed.
- **Geopolitical Vulnerability:** Geopolitical tensions and conflicts in major producer countries can disrupt supply chains, impacting Indian industries.
- **Price Volatility:** The global market for critical minerals experiences price fluctuations due to high demand and limited supply, affecting Indian manufacturers.
- **Stringent Environmental Regulations:** Stringent environmental regulations in India can slow down exploration and mining processes, hindering domestic production.
- **Lack of Infrastructure:** Inadequate infrastructure for exploration, processing, and extraction of critical minerals creates logistical bottlenecks.
- **Technological Expertise:** India needs to develop expertise in extracting and processing critical minerals efficiently to compete with global players.
- **Skilled Workforce:** A skilled workforce trained in critical mineral exploration and mining is crucial for long-term domestic production.
- **Policy and Regulatory Framework:** A streamlined policy and regulatory framework is needed to incentivize exploration, ensure environmental sustainability, and attract investment.

HEAVY METAL

Critical minerals for which India is 100% import-dependent

Mineral	Major application
Lithium	Rechargeable batteries, ceramics
Cobalt	Rechargeable batteries and superalloy
Nickel	Stainless steel, superalloys, rechargeable batteries
Vanadium	Alloying agent for iron and steel, batteries
Niobium	Steel and superalloys, construction, transportation
Germanium	Fiber optics and night vision applications
Rhenium	Superalloys, aerospace and machinery use
Beryllium	Alloying agent in aerospace and defense industries
Tantalum	Electronic components, mostly capacitors and in superalloys
Stronium	Aluminium pigments and fillers, glass, magnets

Source: A report on *Unlocking Australia–India Critical Minerals Partnership Potential* by Australian Trade and Investment Commission, July 2021/ Critical Minerals of India report

STEPS TAKEN

- The Khanij Bidesh India Ltd. (KABIL) was established to ensure a consistent supply of critical minerals by acquiring mineral assets overseas.
- The Mines and Minerals Development and Regulation Act (MMDR Act) was amended to empower the Central Government to auction critical and strategic mineral blocks.
- India became the 14th member of the Mineral Security Partnership (MSP) in June 2023. India actively participates in Mineral Security Partnership

(MSP) and other multilateral/bilateral partnerships to secure critical mineral supply.

- Grants for the Promotion of Research and Innovation in Start-ups and MSMEs in the Mining, Mineral Processing, Metallurgy, and Recycling Sector (S&T-PRISM) are available from the Ministry of Mines under its "Science and Technology Programme."
- Measures are being taken to attract private companies through exploration licenses and fiscal incentives to boost domestic critical mineral production.

WAY FORWARD

- India should actively participate in bilateral and plurilateral arrangements to establish assured and resilient critical mineral supply chains.
- To foster competitive value chains domestically, it is essential to leverage advanced technologies for mineral exploration and discovery by employing cutting-edge technologies.
- The country must focus on securing supply chains for critical minerals and acquiring foreign mineral assets to ensure their continuous supply
- By incentivizing exploration efforts, India can uncover hidden mineral reserves and reduce dependency on imports, thus bolstering its self-reliance in critical minerals.

PRELIMS IN-BRIEF BI-WEEKLY

History

SARNA CODE OF RELIGION

In the ongoing election campaign, some leaders promised to bring back the 'Sarna' religious code for tribal communities.

Sarna Religion

- It is a nature-worshipping faith that is also known as "Sarna Dharma" or "Religion of the Holy Woods".
- The holy goblet of the Sarna faith is "Jal (water), Jungle (forest), Zameen (land)."
- Individuals who follow the Sarna faith do not believe in heaven, hell, the Varna system, or idol worship.
- In India, these are concentrated in the tribal belt states of Odisha, Jharkhand, Bihar, West Bengal, and Assam.
- In the 2011 census, about 50 lakh tribal people nationwide identified as "Sarna."
- As part of the Sarna religion, the tribal society celebrates the Sarhul celebration, which is the New Year event.
- Among the prominent tribes practising Sarna are Santal (30.48%), Oraon (21.35%), Ho (17.87%), Munda (12.48%), Bhumij (1.72%), Lohar (1.70%), Mahali (1.07%), Kharia (0.87%), and Bedia (0.64%).

KUTCH AJRAKH

Traditional artisans of 'Kutch Ajrakh', were bestowed the Geographical Indication (GI) certificate.

About Kutch Ajrakh

- Kutch Ajrakh is a traditional block-printing craft practiced by artisans in the Kutch region of Gujarat, India.
- Artisans use natural dyes derived from plants and minerals to create intricate patterns on fabric, typically cotton, silk, or wool.
- The designs on Kutch Ajrakh textiles often feature intricate geometric patterns inspired by nature, such as stars, flowers, and animals.

KARSHA COINS

As written in Shukraniti by Shukracharya, Gold (Karsha) Coins were used in Ancient India to grade how powerful a kingdom was.

Hierarchy	Annual Revenue (Karsha Coins)
Samanta	1 lakh to 3 lakhs
Mandalika	3 lakhs to 1 million
Rajan	1 million to 2 millions
Maharajan	2 million to 5 millions
Swarat	5 million to 10 millions
Samrat	10 million to 100 millions
Virat	100 million to 500 millions
Sarvabhouma	>500 millions

UNESCO'S MEMORY OF THE WORLD ASIA-PACIFIC REGIONAL REGISTER

Few Indian Literatures have been included in 'UNESCO's Memory of the World Asia-Pacific Regional Register'.

About

- 'Sahṛdayaloka-Locana', 'Panchatantra', and 'Ramcharitmanas' were authored by Acharya Anandvardhan, Pt. Vishnu Sharma, and Goswami Tulsidas, respectively.
- The Indira Gandhi National Centre for the Arts (IGNCA), played a vital role in securing a historic moment. This marks the first time IGNCA has submitted nominations to the Regional Register since its inception in 2008.

Geography

PALM OIL

India's palm-oil imports jumped by 41% in April from the previous month to reach the highest level in three months.

About

- An edible vegetable oil from the mesocarp of the fruit of the oil palms.
- Originated in West Africa.
- Major Oil palm-growing States are Andhra Pradesh, Telangana, and Kerala
- Indonesia produces the largest quantity of Palm Oil.

Mission Palm Oil

- Centrally Sponsored Scheme
- Launched in 2021
- Aimed to substantially increase oil palm cultivation and crude palm oil production.
- Objective is to increase oil palm acreage by an additional 6.5 lakh hectares by 2025-26.

INCOIS

INCOIS alerted the coastal States of Goa, Maharashtra, West Bengal, Odisha, Tamil Nadu, etc of the possibility of high-energy swell waves over the weekend.

Swell Waves

- A swell refers to the development of elongated waves on the surface of the ocean, characterized by long wavelengths and composed of a sequence of surface gravity waves.
- Swell waves are not generated by local winds but rather by distant weather phenomena such as hurricanes or prolonged periods of intense gale-force winds.

Indian National Centre for Ocean Information Services

- Established as an autonomous body in 1999 under the Ministry of Earth Sciences (MoES).
- Operates as a part of the Earth System Science Organization (ESSO).

GUAIBA RIVER

The Guaiba River surged to an unprecedented height of 5.3 meters, surpassing the historical peak of 4.76 meters recorded during the devastating floods of 1941.

About

- Guaíba, known as both a "river" (Rio Guaíba) and a "lake" (Lago Guaía) - significant water body in Rio Grande do Sul, Brazil's southernmost state.
- Guaíba ultimately flows into the Lagoa dos Patos, South America's largest lagoon.
- Encompassing a total area of 496 square kilometers (192 sq mi), Guaíba holds strategic importance for the region.

- Located on its eastern shore are Porto Alegre, the state capital and most populous city, and Viamão.
- Guaíba is navigable and serves as a vital transportation route, connecting to the Atlantic Ocean via the Lagoa dos Patos and its outlet channel near the city of Rio Grande to the south.

OKAVANGO PLATEAU

A drought across southern African Okavango Delta has been driven mostly by the El Nino weather pattern, not climate change, scientists have said.

Okavango Delta

- Situated in northwest Botswana, comprises permanent marshlands and seasonally flooded plains.
- It is formed by the Okavango River, originating in the highlands of Angola.
- Designated as a UNESCO World Heritage Site in Southern Africa
- It has been named one of the Seven Natural Wonders of Africa.
- Fauna & Flora: savanna elephants, Cape buffaloes, rhinos, lions, leopards, giraffes, zebras, antelopes, pangolins, over 400 bird species, and more than 1,000 plant species.
- Natives: The delta is also the ancestral homeland of indigenous people like the San.

CATATUMBO

In the heart of Venezuela, above the Catatumbo River, Catatumbo lightning, where bolts of lightning illuminate the sky almost incessantly.

Catatumbo Lightening

- The genesis of Catatumbo lightning is a convergence of various atmospheric elements.
- Warm, moisture-laden air from the Caribbean Sea clashes with cooler air descending from the towering Andes mountains, creating a meteorological symphony.
- The unique topography of the region accelerates the upward movement of warm air, leading to rapid cooling and condensation, resulting in the formation of towering cumulonimbus clouds.
- The interplay of robust winds and temperature differentials generates electrical charges within the cumulonimbus clouds.
- These towering clouds, sometimes exceeding 5 km in height, become reservoirs of static electricity.

- When the electrical potential within these clouds reaches a critical point, it manifests in the form of lightning discharges.

MULLAPERIYAR DAM

Tamil Nadu contended that Kerala has managed to delay even routine annual maintenance works in Mullaperiyar Dam.

About Dam

- It is a masonry gravity dam built over the Periyar River in Thekkady, Idukki district, in Kerala.
- The dam is built at the confluence of the Mullayar and Periyar rivers.
- The dam is owned, operated, and maintained by Tamil Nadu.
- The Periyar National Park is located around the dam's reservoir.

COOK ISLAND

The Cook Island is blessed with vast reserves of marine polymetallic nodules.

About

- The Cook Islands is an island country in Polynesia, part of Oceania in the South Pacific Ocean.
- It consists of 15 islands. Avarua is its capital.
- It was once a colony of New Zealand but has been self-governing since 1965.
- After independence, international research vessels began exploring the country's territorial waters, of about 756,000 square miles, roughly comparable to Mexico's landmass.

CARDAMOM

Unusually hot weather, coupled with the absence of summer showers, has left cardamom crops yellow and farmers in panic in Kerala's hill district.

About Cardamom

- Cardamom is a spice native to southern India and is part of the ginger family.
- It is cultivated mainly in the Southern states, viz., Kerala, Karnataka, and Tamil Nadu.
- It is grown in forest loamy soils, which are usually acidic in nature with a pH range of 5.0–6.5.
- This crop can be grown at an elevation from 600 to 1500 m. Cardamom typically flourishes in conditions with 60% shade.

- Temperature should be between 10- 35 degree Celsius. Rainfall should be between 1500-4000 mm.
- The growth of cardamom is enhanced when planted in humus rich soils with low to medium available phosphorus and medium to high available potassium.

MOUNT IBU

A volcano in eastern Indonesia erupted recently, spewing a huge ash tower more than five kilometres (three miles) into the sky.

About

- Mount Ibu is a stratovolcano at the north-west coast of Halmahera Island, Indonesia.

Other active volcanoes in Indonesia:

- Mount Merapi, located in Central Java, is one of the most active volcanoes in Indonesia.
- Mount Sinabung, situated in North Sumatra, has been erupting frequently since 2010.
- Mount Agung, located in Bali

Science and Technology

FUJIAN

Recently, China's Fujian aircraft carrier held maiden sea trials.

About

- Fujian is named after China's eastern coastal province, facing Taiwan.
- It's China's third carrier, following the Shandong (Type 001) and the Liaoning (Type 002).
- The Type 003 carrier is more technologically advanced.
- The Fujian weighs 80,000 tonnes, larger than China's current carriers, similar to the U.S. Navy carriers.
- It uses the Electromagnetic Aircraft Launch System (EMALS), developed by the U.S. Navy.
- The Fujian is China's third aircraft carrier after the Liaoning and the Shandong vessels and is the Chinese Navy's largest-ever ship.

ANTARES

Indian Institute of Astrophysics (IIA) has filmed the passing of the moon in front of Antares, a bright red star.

About

- Antares is also known as Alpha Scorpii.
- It is one of the brightest stars visible in the night sky, located in the constellation of Scorpius.
- It holds significance due to its status as a red supergiant star nearing the end of its life cycle.
- Red supergiants are massive stars that have exhausted their nuclear fuel and are in the late stages of stellar evolution.

NEUTRON STAR

Scientists have reported that the insides of most massive neutron stars is most likely made of an unusual state of matter called quark matter.

About

- A neutron star forms when a huge supergiant star collapses.
- It's dense and small, except for black holes, it's the smallest and densest star type.
- They're created when a massive star explodes in a supernova, and their core collapses to the density of atomic nuclei.
- After forming, neutron stars cool down but can still change over time through things like collisions or gathering matter.

LIQUID NITROGEN

The Tamil Nadu government issued an advisory banning the use of liquid nitrogen in food and warned of stringent action against violators.

About

- Very cold liquid that doesn't react with other things.
- Doesn't have any color or smell.
- Can't catch fire or corrode objects.
- Type of super cold liquid called cryogenic liquid - as it boils at a temperature below −130°F (−90°C).
- Boils at an even colder temperature, −320°F (−196°C).
- Can cause damage similar to frostbite, harming the lips, tongue, throat, lungs, and stomach. I
- Might create sores or burns on the skin, and if swallowed, it could even poke a hole in the stomach.

BOEING STARLINER

An Atlas V rocket is set to lift off with a team of two veteran astronauts sitting inside a crew capsule called Starliner, built by Boeing.

About

- Starliner is a spacecraft that transports astronauts into space after being launched there by a rocket.
- It consists of a crew capsule (houses the astronauts) and a service module (consists of the equipment and systems).
- The service module won't be reusable.
- Starliner is fitted atop an Atlas V rocket, operated by United Launch Alliance, a joint venture between Boeing and Lockheed Martin.
- If the Starliner mission succeeds, the U.S. will, for the first time in its history, have two spacecraft to launch astronauts to space (Other one being SpaceX Dragon crew capsule).

H5N1 BIRD FLU

Many bird deaths have been reported from Ambalappuzha in Alappuzha, suspecting of avian influenza (H5N1).

About

- Avian influenza A(H5N1) or H5B1 Bird Flu is a highly pathogenic virus that primarily circulates among birds but can infect mammals.
- First virus outbreak in China in 1996, India experienced the first H5N1 outbreak in the State of Maharashtra and Gujarat in 2015.
- While rare, humans can contract bird flu, primarily through contact with infected birds.
- Human-to-human transmission remains rare.

WEST NILE FEVER

Recently, a death is reported in Kerala due to West Nile Fever.

About West Nile fever

- It is a member of the family Flaviviridae - a single-stranded RNA virus, which is related to the flavivirus genus and the Japanese encephalitis antigenic complex.
- It is transmitted by infected mosquitoes between and among humans and animals, including birds, which are the reservoir host of the virus.
- It is frequently found in West Asia, North America, Europe, the Middle East, and Africa.

- Impact: It can cause neurological disease and death in people.
- History: It was identified in birds (crows, doves, and pigeons) in the Nile Delta region in 1953.
- Treatment: No specific treatment or vaccine is available. Only supportive treatments are given to neuroinvasive WNV patients.

MTBVAC

Recently, TB vaccine MTBVAC gets approval for Phase 2 trials.

About MTBVAC

- The MTBVAC vaccine is a live-attenuated strain of M. tuberculosis.
- Unlike the BCG vaccination, the MTBVAC TB vaccine is based on a genetically engineered strain of Mycobacterium tuberculosis that has all antigens seen in strains that infect humans.
- With assistance from Dr. Brigitte Gicquel of the Pasteur Institute in Paris, it is being developed in the laboratory of the University of Zaragoza.
- Compared to the BCG vaccination, MTBVAC is intended to provide better and possibly longer-lasting protection, especially for newborns and to prevent TB in adults and adolescents.

FLIRT

There are new COVID-19 variations in circulation-named FLiRT Variants.

About FLiRT

- Two new variants - KP.2 and KP1.1 are dubbed 'FLiRT' variants, and are descendants of the Omicron JN.1 which spread globally in 2023.
- The Indian SARS-CoV-2 Genomics Consortium (INSACOG) has detected 238 cases of KP.2 and 30 cases of KP1.1 circulating in India.

ALPHAFOLD

Recently, DeepMind launched AlphaFold 3, which can reportedly predict the protein shapes with nearly 80% accuracy as well as model DNA, RNA, ligands, and modifications to them.

About AlphaFold 3

- It is an AI model developed by Google DeepMind and Isomorphic Labs.
- It can predict the structure and interactions of all life's molecules with unprecedented accuracy and

can map the behaviour for all of life's molecules, including human DNA.
- It can generate molecules' joint 3D structure.
- It models large biomolecules such as proteins, DNA and RNA, as well as ligands - smaller molecules.
- Currently, there are over 200 million known proteins, with many more found every year. Each one has a unique 3D shape determining how it works and what it does.

ASW SWC

Keel laying ceremony of the 8th ASW SWC (ex-GRSE) ships was held at M/s GRSE, Kolkata on 10 May 24.

About ASW SWC

- The Anti-Submarine Warfare Shallow Water Craft (ASW-SWC) corvettes, are a class of anti-submarine warfare (ASW) vessels currently being built for the Indian Navy, by Cochin Shipyard (CSL) and Garden Reach Shipbuilders & Engineers (GRSE).
- They were conceived as a replacement to the ageing Abhay-class corvettes of the Indian Navy.
- The contract for building eight ASW SWC ships was signed between MoD and Garden Reach Shipbuilders & Engineers (GRSE), Kolkata on 29 Apr 2019.

DIGILOCKER

Students from the State Board of Tamil Nadu can get their 2024 results from DigiLocker, this facility is coming soon to the students of the CBSE board.

About DigiLocker

- DigiLocker is a flagship initiative launched in 2015 of the Ministry of Electronics & IT (MeitY) under Digital India programme. DigiLocker aims at 'Digital Empowerment' of citizens by providing access to authentic digital documents to citizen's digital document wallet.
- According to Information Technology (Preservation and Retention of Information by Intermediaries providing Digital Locker facilities) Rules 2016, issued documents in the DigiLocker system are deemed to be at par with original physical documents.
- DigiLocker has standard security measures in place including 2048 Bit RSA SSL encryption, multi-factor authentication (OTP verification), consent systems, timed log outs, and security audits.

P. VRANOVENSIS

Researchers from Princeton University in the U.S. reported that after C. elegans worms ate a disease-causing strain of bacteria, its offsprings inherited the 'knowledge' to avoid making the same mistake.

About Bateria P. vranovensis

- Pseudomonas vranovensis is a disease-causing bacterium found in C. elegans's natural environment.
- P. vranovensis makes a small RNA molecule called sRNA. When the worms ingest this strain, they also take in the sRNA. The sRNA then alters the worm's feeding behaviour such that, from that point on, the worms 'know' to avoid feeding on this bacterium.

XENOTRANSPLANTATION

The first person to receive a pig kidney has died two months after his surgery.

About Xenotransplantation

- Xenotransplantation is the transplantation of living cells, tissues, or organs from one species to another.
- It aims to overcome the shortage of human organs available for transplantation by utilising organs from other species, typically pigs due to their anatomical and physiological similarities to humans.
- While pigs are considered the most suitable donors, genetic modifications are often necessary to reduce the risk of rejection by the recipient's immune system.

POTENTIAL USES FOR XENOTRANSPLANTATION PRODUCTS

DONOR PIG — PIG SKIN FOR BURNS — PIG KIDNEY FOR KIDNEY FAILURE — PIG PANCREATIC ISLETS FOR DIABETES — HUMAN RECIPIENT

Polity

ARTICLE 39(B)

A nine-judge Constitution bench of the Supreme Court, which is examining the question of whether private property would constitute material resources of the community as appearing in Article 39(b), said that the provision should not be interpreted in such a wide sense that there is no protection for private rights at all.

About Article 39(b)

Article 39(b) of the Constitution of India falls under the Directive Principles of State Policy, which instructs the State to ensure that the ownership and control of the community's material resources are distributed to best serve the common good.

Case Laws Interpreting Article 39(b)

State of Karnataka v. Shri Ranganatha Reddy (1977)

- Court: Supreme Court of India, Seven Judge Constitution Bench
- Outcome: The majority held that privately owned resources do not fall under this category, a view opposed by Justice Krishna Iyer in his minority opinion.

Sanjeev Coke Manufacturing Company v. Bharat Coking Coal Ltd. (1983)

- Court: Supreme Court of India, Five-Judge Bench
- Outcome: The court endorsed Justice Iyer's minority view from Ranganatha Reddy, expanding the definition to include private resources as part of the community's material resources.

Mafatlal Industries Ltd. v. Union of India (1997)

- Court: Supreme Court of India, Nine Judge Constitution Bench
- Outcome: The court upheld the view from Sanjeev Coke Manufacturing Company, affirming that private resources are included under this definition.

FINANCE COMMISSION

The Sixteenth Finance Commission (XVIFC) invites suggestions/views from the general public, interested organisations and individuals on the terms of reference.

About Finance Commission

- The Finance Commission in India is a quasi-judicial body constituted by the President of India.

- The President of India constitutes the Finance Commission every fifth year or at such earlier times as he/she considers necessary under Article 280.
- The primary function of the Finance Commission revolves around making recommendations on the distribution of financial resources between the Union Government and the State Governments.
- The Finance Commission consists of a Chairman and four other members to be appointed by the President.
- The Chairman and other members of the Commission hold office for such a period as specified by the President in his/her order.
- The Chairman and other members of the Commission are eligible for reappointment.
- The Constitution authorises the Parliament to determine the qualifications of members of the Commission.
- The Finance Commission submits its report to the President of India.

Social Justice

POCSO

The Supreme Court said the objective of POCSO Act could not be ignored merely because child marriages continue, or worse still, abusers marry their minor victims to escape conviction.

About Protection of Children From Sexual Offence Act

- Stands as a pioneering legislation in India, formulated in 2012
- Functions under Ministry of Women and Child Development.
- Addresses the scourge of child sexual abuse comprehensively.
- Aims to shield children from various forms of sexual misconduct, including assault, harassment, and exposure to pornography
- Establishes Special Courts dedicated to adjudicating such cases.
- In 2019, amendments were made to increase the penalties for specified offences.
- Provides gender-neutral definition of a child as "any person" below the age of 18.

WORLD PRESS FREEDOM INDEX

World Press Freedom Index released by Reporters Without Borders.

About World Press Freedom Index

- The annual report was published by Reporters Without Borders (RSF), a global media watchdog.
- Serves the purpose of comparing the level of freedom experienced by journalists and media across 180 countries and territories.

Highlights of the report

- Norway and Denmark claimed the top spots, while Eritrea ranked at the bottom.
- India's standing declined over the past year, dropping from 36.62 to 31.28.
- Although India's ranking improved marginally from 161 in 2023 to 159 in 2024.

Reporters Without Borders (RSF)

- An international non-governmental organization (NGO) headquartered in Paris, France.
- Its mission is to defend and promote media freedom worldwide.

International Relations

AUKUS

South Korea is eyeing to get a membership of the AUKUS Platform.

AUKUS:

- Establishment: 2021.
- Members: Australia, the United Kingdom (UK), and the United States.
- Aim: Bolstering their collective deterrence and defence capabilities in the Indo-Pacific region.

Key pillars

- The first pillar focuses on the acquisition and development of conventionally armed nuclear-powered submarines for the Royal Australian Navy.
- The second pillar of AUKUS involves collaboration on advanced capabilities, including technology and information sharing.

INTERPOL

The International Criminal Police Organisation, commonly known as Interpol, has issued a blue corner notice against the absconding politician.

About InterPol

- Interpol, formally known as the International Criminal Police Organization, is an intergovernmental organisation with 194 member countries.
- It was founded in 1923 and is headquartered at Lyon, France.
- Its primary objective is to facilitate international cooperation between national police forces in combating transnational crimes.
- India joined Interpol in 1949. The Central Bureau of Investigation (CBI) serves as the National Central Bureau (NCB) for Interpol in India.
- Since its personnel are unable to apprehend criminals, it is not a police force in the conventional sense.
- It functions more as a network for exchanging information, giving national police forces an efficient means of collaborating.

EFTA

Recently, Free Trade Agreement (FTA) was signed between the India and European Free Trade Association (EFTA).

About EFTA
- The EFTA is the intergovernmental organisation of Iceland, Liechtenstein, Norway and Switzerland.
- It was set up in 1960 (by the Stockholm Convention in 1960) by its then seven Member States for the promotion of free trade and economic integration between its members.

European Free Trade Association (EFTA)

Economy

EXCHANGE TRADED FUNDS

Gold Exchange Traded Funds (ETF) witnessed a net outflow of Rs 396 crore last month, making it the first with- drawal after March 2023.

About Exchange Traded Funds (ETFs)
A collection of securities that trades on an exchange similar to stocks is known as an exchange-traded fund (ETF).

The first ETF was the SPDR S&P 500 ETF (SPY), which tracks the S&P 500 Index.

PURCHASING MANAGERS INDEX (PMI)

India's PMI for April eased, signalling the second-best improvement in three-and-a-half years.

About PMI
- An economic indicator, based on monthly surveys of different companies.
- Measures activity at the purchasing or input stage.
- Calculated separately for the manufacturing and services sectors and then a composite index is also constructed.
- Types of PMI — Manufacturing PMI and Services PMI.
- S&P Global releases PMI data for India.
- Does not capture informal sector activity.
- PMI is a number from 0 to 100.
- Above 50 means expansion,
- Score below 50 that denotes contraction.
- Reading at 50 indicates no change.

NATIONAL PAYMENT CORPORATION OF INDIA (NPCI)

NPCI International Payments Ltd. (NIPL) has signed an agreement with Bank of Namibia to support the institution in developing an instant payment system like the Unified Payment Interface.

About
- Umbrella organisation for operating retail payments and settlement systems in India.
- Initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA)
- Formed under the provisions of the Payment and Settlement Systems Act, 2007.
- Incorporated as a "Not for Profit" Company under the provisions of Section 25 of Companies Act

1956 (now Section 8 of Companies Act 2013) in 2008.

- Ten core promoter banks are State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda, Union Bank of India, Bank of India, ICICI Bank Limited, HDFC Bank Limited, Citibank N. A. and HSBC.

PARTICIPATORY NOTES

- Investments through participatory notes in the capital markets reached Rs 1.5 lakh crore at the end of February.
- About Participatory Notes
- Participatory Notes or P-notes are Offshore Derivative Instruments (ODIs) issued by registered Foreign Portfolio Investors (FPIs) to overseas investors who wish to be a part of the Indian stock markets without registering themselves directly.
- While the FIIs have to report all such investments each quarter to SEBI, they need not disclose the identity of the actual investors.

Advantages of Participatory Notes in India:
- Foreign Investment: Facilitates foreign investment in the Indian securities market without direct registration.
- Flexibility: Offers flexibility to investors, allowing them to invest in Indian markets through registered foreign institutional investors (FIIs).
- Enhanced Liquidity: Contributes to enhanced liquidity and depth in the Indian capital markets.
- Portfolio Diversification: Provides opportunities for portfolio diversification for foreign investors.
- Cost-Efficiency: Reduces transaction costs and administrative burdens associated with direct investment.

GST APPELLATE TRIBUNAL (GSTAT)

Finance Minister administered the oath of integrity and sincerity to the tribunal's first President, Justice (Retd.) Sanjaya Kumar Mishra.

About GST Appellate Tribunal (GSTAT)
- The Union Government is authorised to establish a GSTAT and its Benches under Section 109) of the Goods and Service Tax Act, 2017 (CGST Act).
- It is a specialised authority to resolve disputes related to GST laws at the appellate level.
- Its president is selected by a Search-cum-Selection Committee headed by the Hon'ble Chief Justice of India.

- It consists of a Principal Bench and various State Benches. As per the approval of the GST Council, the Government has notified the Principal Bench at New Delhi, and 31 State Benches at various locations across the country.
- The Tribunal will ensure swift, fair, judicious and effective resolution to GST disputes, besides significantly reducing the burden on higher courts.

HUMAN DEVELOPMENT REPORT 2023-24

HDR Report was released recently by UNDP.
About
- The Human Development Report (HDR) is an annual Human Development Index report published by the United Nations Development Programme (UNDP).
- India ranked 134 out of 193 countries in the UN Human Development Index (HDI) in 2022, which was an improvement compared to 2021, when it ranked 135 out of 192 countries.
- There is a marginal increase in HDI value to 0.644 in 2022 from 0.633 in 2021.
- However, India still fell behind Bhutan, Bangladesh, Sri Lanka, and China.
- When adjusted for inequality, India's loss in HDI is 31.1%, which is higher than that of Sri Lanka, Bangladesh, Nepal and Pakistan.

AGRICULTURE EXPORT AND IMPORT

India's Agricultural exports fell 8.2% in the fiscal year ended March 31, 2024.

India's TOP Agri Export Items (in $millions)			
	2021-22	2022-23	2023-24
Marine products	7,772.36	8,077.98	7,372.00
Basmati rice	3,537.49	4,787.65	5,843.30
Non-basmati rice	6,133.63	6,356.71	4,573.40
Spices	3,896.03	3,785.36	4,249.36
Buffalo meat	3,303.78	3,193.69	3,743.26

India's TOP Agri Import Items (in $millions)			
	2021-22	2022-23	2023-24
Vegetable oils	18,991.62	20,837.70	14,871.66
Fresh fruits	2,460.33	2,483.95	2,734.97
Pulses	2,228.95	1,943.89	3,746.78
Spices	1,299.38	1,336.65	1,455.57
Cashew	1,255.46	1,805.67	1,431.39

INTERNATIONAL BULLION EXCHANGE IFSC LIMITED (IIBX)

Recently, State Bank of India (SBI) became the first trading-cum-clearing (TCM) member at India International Bullion Exchange (IIBX).

About IIBX

- India International Bullion Exchange IFSC Limited (IIBX) was launched on 29th of July 2022.
- IIBX is promoted by India's leading market infrastructure institutions like NSE, INDIA INX (subsidiary of BSE), NSDL, CDSL and MCX.
- IIBX is established at GIFT IFSC, Gandhinagar, Gujarat, India.
- IIBX is regulated by International Financial Services Centres Authority (IFSCA)
- For the first time, an Indian resident Jeweller (Qualified Jeweller - QJ) can import bullion directly into India through IIBX by being a Client or a Limited Purpose Trading Member of IIBX.

Ecology and Environment

GLOBAL PLASTIC TREATY

The Global Plastics Pollution Treaty recently concluded its fourth round of negotiations.

Global Plastic Pollution Treaty:

- Background: In 2022, UN Member States agreed to start negotiating a new global plastic pollution treaty to end plastic pollution.
- About the treaty: This global plastic pollution treaty will be a legally binding, international agreement to end plastic pollution defining what measures to take, how and when to implement them.
- UNEA Resolution 5/14: Under this, the Intergovernmental Negotiating Committee (INC) was established to deliver a global plastics treaty by 2025.
- Working of INC: The INC began its work during the second half of 2022, aiming to finalise a legal document by the end of 2024 with timelines by when countries must agree to curb plastic production, eliminate its uses that create wastage, ban certain chemicals used in its production and set targets for recycling.

ARAVALLI RANGE

Recently, The Supreme Court stopped the grant of fresh mining leases and renewals in Aravalli Range.

About Aravali Range

- It is among the world's oldest folded mountains.
- It begins close to Delhi, travels 670 km (430 mi) in a southwesterly direction across southern Haryana and Rajasthan, and ends in Gujarat.
- At 1,722 metres (5,650 feet), Guru Shikhar is the tallest summit. Guru is a summit in Rajasthan's Arbuda Mountains.
- The Aravalli is the source of three main rivers and their tributaries: the Luni River empties into the Rann of Kutch, while the Banas and Sahibi rivers are Yamuna's tributaries.
- It is separated into two parts: the taller Sambhar-Sirohi ranges, which include Guru Shikhar; and the Sambhar-Khetri ranges, which are made up of three discontinuous ridges.
- Mineral resources such as marble, copper, zinc, and lead are abundant throughout the range.

CARBON FARMING

Carbon farming is often in news due to its ecological significance. It is a sustainable agricultural approach that involves implementing regenerative practices aimed at enhancing carbon storage in agricultural landscapes, reducing greenhouse gas emissions, and improving soil health while maintaining or increasing agricultural productivity.

Includes:

- Rotational Grazing: Rotating livestock across different pasture areas to prevent overgrazing and enhance soil health.
- Agroforestry: Integrating trees and shrubs into agricultural landscapes to sequester carbon and diversify farm income.
- Conservation Agriculture: Implementing techniques like zero tillage, crop rotation, cover cropping, and crop residue management to minimise soil disturbance and enhance organic content.
- Integrated Nutrient Management: Using organic fertilisers and compost to promote soil fertility and reduce emissions.
- Agro-ecology: Employing practices such as crop diversification and intercropping to enhance ecosystem resilience.

- Livestock Management: Utilising strategies like rotational grazing, optimising feed quality, and managing animal waste to reduce methane emissions and enhance carbon storage.

INDIA – 3RD LARGEST SOLAR PRODUCER

According to international energy analytics agency Ember, India overtook Japan to become the world's third-highest producer of solar power in 2023.

About:

- India generated 113 billion units (BU) of solar power in 2023 compared to Japan's 110 BU.
- In terms of installed power capacity, which includes both renewable and non-renewable energy, India at 73 gigawatt ranks fifth in the world.
- According to NITI Aayog, solar power made up 18% of India's total installed electricity of 442 GW until March 2024, which is only 6.66% of the power actually produced – reflecting the gap between potential and actuals.
- The United States of America is at second spot while the leading producer of solar power in the world is China. It produced 584 BU of solar power in 2024, more than the next four countries combined - the United States, Japan, Germany and India.

GREEN STEEL

The government is toying with a proposal to make it mandatory for automobile companies, including luxury car manufacturers to procure green steel for premium or ultra-high-end models.

About Green Steel

- Green Steel is the manufacturing of steel using renewable or low-carbon energy sources such as hydrogen, coal gasification, or electricity instead of the traditional carbon-intensive manufacturing route of coal-fired plants.
- It eventually lowers greenhouse gas emissions, cuts cost and improves the quality of steel.

ORANGUTAN DIPLOMACY

Malaysia intends to gift orangutans to palm oil purchasing countries as part of an initiative similar to China's panda diplomacy.

About Orangutan:

- Orangutans are great ape's native to the rainforests of Indonesia and Malaysia.
- These are arboreal which means they live among the trees of tropical rainforests.
- According to the World Wide Fund for Nature (WWF), there are three species of orangutans: Bornean, Sumatran and Tapanuli.
- The Bornean orangutan is estimated as Endangered as per IUCN status.
- The Sumatran are categorised as Critically Endangered as per IUCN status.
- The Tapanuli orangutan are also Critically Endangered.
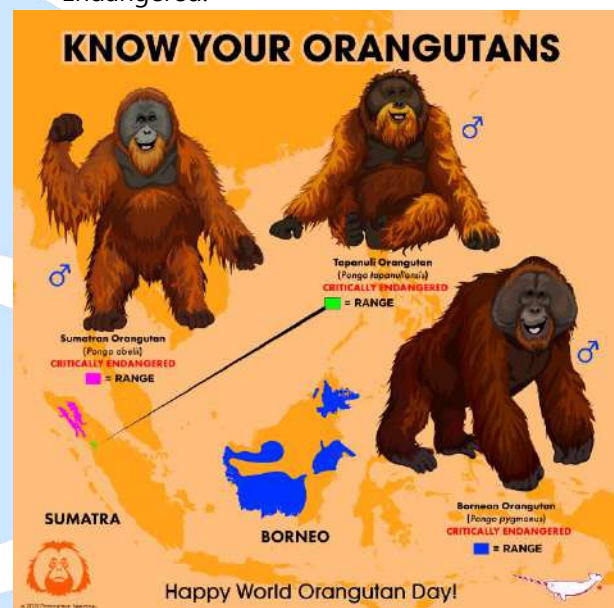
OLEANDER

The Travancore Devaswom Board (TDB) and the Malabar Devaswom Board (MDB) announced their discontinuation of the use of Arali flowers (oleander) in most rituals conducted at temples due to its toxic nature.

About Arali (Oleander) Flowers

- The Arali, or oleander, flower is renowned for its striking beauty and resilience.
- Arali flowers come in a variety of colours, including pink, red, white, and yellow.
- It thrives in diverse climatic conditions, from arid regions to tropical climates, making it a versatile and adaptable ornamental plant.
- In India, the Arali flower is widely cultivated and cherished for its aesthetic value.
- However, it's essential to note that the Arali flower and its foliage contain toxic compounds, including

cardiac glycosides, which can be harmful if ingested.

GREEN HYDROGEN

The government held a day-long workshop on "Quality Control in Green Hydrogen: Standards & Testing Infrastructure" at Sushma Swaraj Bhawan, New Delhi.

About Green Hydrogen

- Green hydrogen is the name given to hydrogen gas that has been produced using renewable energy, such as wind or solar power, which create no GHG emissions.
- In comparison, Grey hydrogen is traditionally produced from methane (CH4) releasing CO_2, a greenhouse gas. Blue hydrogen is similar to Grey Hydrogen with the additional technologies necessary to capture the CO_2.
- To obtain Green Hydrogen, we use an electrical current to separate the hydrogen from the oxygen in water. If this electricity is obtained from renewable sources, then energy is produced without emitting carbon dioxide into the atmosphere.
- In January 2023, the Union Cabinet approved the National Green Hydrogen Mission.
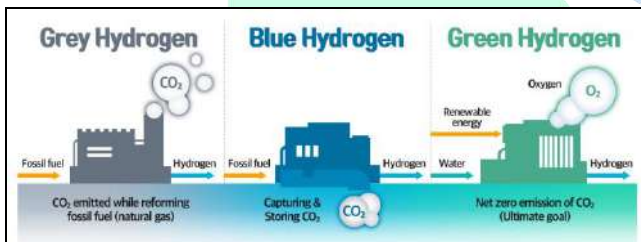
UNITED NATIONS FORUM ON FORESTS

India participated in the 19th Session of the United Nations Forum on Forests (UNFF), held at the UN Headquarters in New York from May 6th to 10th May 2024.

About United Nations Forum on Forests

- The UN Forum on Forests is a functional commission of the UN Economic and Social Council (ECOSOC) with universal membership.
- Since its establishment in 2000, the Forum has set many milestones including the first UN Forest Instrument in 2007, the Global Forest Financing Facilitation Network (GFFFN) in 2015, and adoption of the first UN Strategic Plan for Forests 2030 and its six Global Forest Goals in 2017. 2024 marks the 19th session of the UN Forum on Forests (UNFF19).
- The key outcomes of the session will be a High-Level Segment declaration and an omnibus resolution, which will include the outcome of the midterm review as well as the new Quadrennial Programme of Work of the Forum for 2025-2028.

SEMAL TREES

Large quantities of semal are cut in south Rajasthan and sold in Udaipur.

About Semal Trees

- Semal (Silk Cotton) tree is a type of native cotton tree with large red flowers. It grows rapidly to attain height up to 30 m and a girth of 3-4 m.
- Semal is an integral species that holds the forest ecosystem together.
- Members of tribal communities consume the tree's reddish root for food during the monsoons. Larvae of the moth Bucculatrix crateracma feed on its leaves.
- The golden-crowned sparrow weaves the lining of its nests with white cotton from its seeds. The Dysdercus bugs, the Indian crested porcupine, Hanuman langurs, and some other species feast on the nectar in its flowers.

INFO IN-NEWS BI-WEEKLY

Places in News

SOUTH CHINA SEA	ISRAEL-HEZBOLLAH CONFLICT	WEST DARFUR REGION
Chinese coast guard ships fired water cannons at two Philippine patrol vessels near a disputed Scarborough shoal in the South China Sea.	Hezbollah launched "dozens of Katyusha rockets" at an Israeli base in retaliation for the former's attack on Eastern Lebanon.	There are a series of attacks by Sudanese paramilitary forces in the western region of Darfur (Sudan) raising the possibility of "genocide".

DRONE DIDI YOJANA	Ministry of Skill Development and Entrepreneurship (MSDE) signed a Memorandum of Understanding (MoU) with Mahindra & Mahindra Ltd to conduct two Pilot Projects under the Drone Didi Yojana. **About Drone Didi Yojana** • The NaMo Drone Didi scheme was launched at the Indian Agricultural Research Institute in March 2024. Under this, rural women are trained to become drone pilots for agricultural purposes. • The Namo Drone Didi Scheme targets empowering 15,000 Women Self Help Groups (SHGs) by providing them with drones to offer rental services to farmers in tasks such as crop monitoring, spraying fertilisers and sowing seeds. • The initiative aims to enhance economic empowerment and financial autonomy among women, especially in rural areas.
VIBRANT VILLAGE PROGRAMME	The government is likely to spend over ₹2 crore on each kilometre of road to be constructed along the China border in Uttarakhand and Sikkim under the Vibrant Village Programme (VVP). **Vibrant Village Programme (VVP)** • It is a Centrally sponsored scheme, announced in the Union Budget 2022-23 (to 2025-26) for development of villages on the northern border, thus improving the quality of life of people living in identified border villages. • Cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh. • Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats. • There will not be overlap with the Border Area Development Programme.
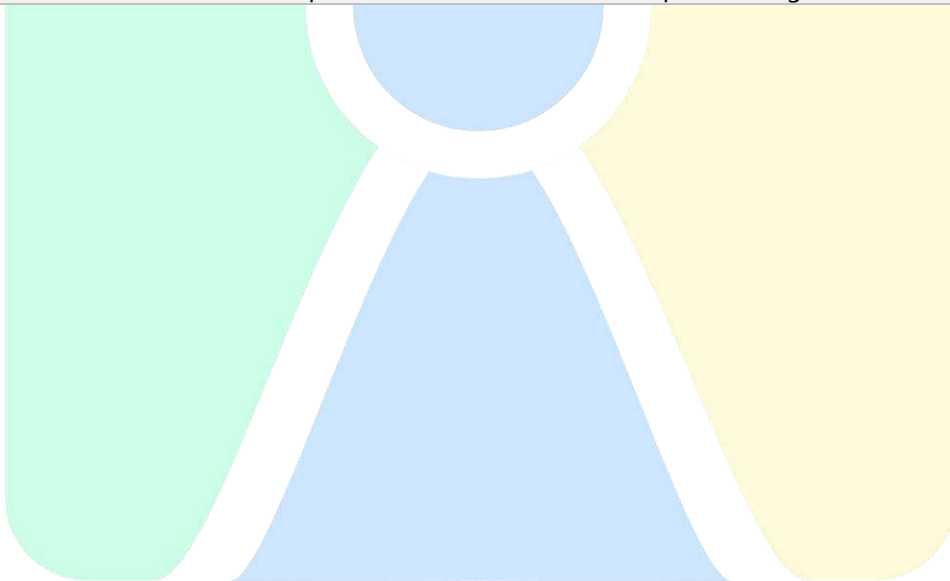
Prelims Assignment

1. Consider the following tribal groups:

1. Santhal
2. Ho
3. Bhil
4. Khasi
5. Munda

Which of the above-given tribes follow the Sarna Religious Code?

A. 1, 2 and 3 only
B. 1, 3 and 4 only
C. 1, 2 and 5 only
D. 3, 4 and 5 only

2. Which of the following banks became the first to become a trading-cum-clearing (TCM) member at India International Bullion Exchange (IIBX)?

A. State Bank of India
B. HDFC Bank
C. Indian Overseas Bank
D. Yes Bank

3. Recently erupted Mount Ibu is located in which of the following countries?

A. Philippines
B. Indonesia
C. Japan
D. Malaysia

4. Recently in the news, the term "Xenotransplantation" is correctly described by

A. Transplantation of organs between individuals of the same species
B. Transplantation of organs from one human to another
C. Transplantation of living cells, tissues, or organs from one species to another
D. Process of growing human organs in a laboratory for transplantation purposes

5. "This tree is a type of native cotton tree with large red flowers. It grows rapidly to attain height up to 30 m and a girth of 3-4 m. It is also called Silk Cotton. Members of tribal communities consume the tree's reddish root for food during the monsoons. Larvae of the moth Bucculatrix crateracma feed on its leaves. Recently, it was in news due to its illegal cutting in Rajasthan region". Identify the tree.

A. Dhokra
B. Babul
C. Semal
D. Salar

6. Consider the following pairs:

1. Sahṛdayaloka Locana - Acharya Anandvardhan
2. Panchatantra - Pt. Vishnu Sharma
3. Ramcharitmanas - Kalidas

How many of the above given pairs are correct?

A. Only 1
B. Only 2
C. All are correctly paired
D. All are incorrectly paired

7. Consider the following with reference to the Okavango delta:

1. It is located in Botswana in South America.
2. It is an endorheic lake.
3. It has been designated as a UNESCO World Heritage Site.

Select the correct answer

A. 1, 2 and 3
B. 2 and 3
C. 1 and 2
D. None of the above

8. "It is an island country in Polynesia. It consists of 15 islands. Avarua is its capital. Once a colony of New Zealand, it has been self-governing since 1965. Recent Researches show that it is blessed with vast reserves of marine polymetallic nodules on their seabed". Identify the island.

A. Tonga
B. Cook
C. Tuvalu
D. Samoa

9. Recently, the Supreme Court stopped the grant of fresh mining leases and renewals in Aravalli Range. In this respect, consider the following statements:

1. Sabarmati River originates on the western slopes of the Aravalli range.
2. Luni River originates from Pushkar valley of the Aravalli Range.
3. Banas river originates in the Khamnor Hills of the Aravalli Range.

Which of the above given statements is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

10. Recently, India's Agricultural exports fell 8.2% in the fiscal year ended March 31, 2024. In this respect, arrange the following agriculture export commodities in descending order (in Million dollars).

- A. Marine products, Basmati rice, Non-basmati rice, Spices, Buffalo meat
- B. Non-basmati rice, Spices, Marine products, Basmati rice, Buffalo meat
- C. Basmati rice, Spices, Non-basmati rice, Buffalo meat, Marine products
- D. Marine products, Basmati rice, Spices, Non-basmati rice, Buffalo meat

11. "This flower comes in a variety of colours, including pink, red, white, and yellow. It thrives in diverse climatic conditions, from arid regions to tropical climates. However, recently, there are reports about its foliage containing toxic compounds which can be harmful if ingested. Many temple boards have announced their discontinuation of the use of these flowers in most rituals." Identify the flower species.

- A. Azalea
- B. Dahlia
- C. Hibiscus
- D. Oleander

12. Consider the following pairs matching various Notices of Interpol with their directives:

1. Red Notice - To apprehend a wanted criminal through extradition.
2. Yellow Notice - To get information of a person facing criminal investigation.
3. Blue Notice - To locate a missing person.

How many of the pairs are correctly matched?

- A. Only 1
- B. Only 2
- C. All are correct.
- D. All are incorrect.

13. Recently in the news, the term "FLiRT" is associated with-

- A. A generative AI Platform
- B. A new Virus Variant
- C. A rocket fuel technology
- D. A digital currency

14. In 2024, prolonged drought and hot conditions have hindered the cardamom farming sector. In this regard, consider the following statements regarding Cardamom:

1. Cardamom is a spice native to Northeastern India.
2. Cardamom belongs to the ginger family.

Which of the above given statements is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

15. Recently in the news, "AlphaFold" will be helpful in which of the following fields?

- A. Understanding the biological processes
- B. Unfolding dark matter mysteries
- C. Unifying nuclear fission and fusion
- D. Unleashing seabed mining

16. The Anti-Submarine Warfare Shallow Water Craft (ASW-SWC) corvettes are currently being built for the Indian Navy. In this regard, which of the following terms correctly defines a 'corvette'?

- A. A large warship designed to carry and deploy aircraft
- B. A heavily armed warship designed for fleet defence and anti-air warfare.
- C. A medium-sized naval warship designed for escort and patrol missions
- D. A small, fast naval warship typically used for coastal defence and escort duties

17. Recently, the government held a workshop on "Quality Control in Green Hydrogen: Standards & Testing Infrastructure". In this respect, consider the following statements:

1. Green hydrogen is the gas that has been produced using renewable energy.
2. Grey hydrogen is the gas that has been produced from methane (CH4).
3. Blue hydrogen is the gas that has been produced using hydropower.

Which of the above given statements is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. 1, 2 and 3

18. Recently, the Free Trade Agreement (FTA) was signed between the India and European Free Trade Association (EFTA). In this regard, choose the correct option that includes the group of countries which are part of the European Free Trade Association (EFTA).

- A. Iceland, Liechtenstein, Germany and Switzerland
- B. Poland, Liechtenstein, Norway and Switzerland
- C. Iceland, United Kingdom, Norway and Switzerland
- D. Iceland, Liechtenstein, Norway and Switzerland

19. Recently, the Government is planning to construct infrastructure along the China border in Uttarakhand and Sikkim under the Vibrant Village Programme (VVP). In this regard, choose the incorrect option:

- A. Vibrant Village Programme is a Centrally sponsored scheme, announced in the Union Budget 2022-23.
- B. Vibrant Village Programme will cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh.
- C. Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats.
- D. Vibrant Village Programme will work in coordination with the Border Area Development Programme.

20. Consider the following statements regarding DigiLocker:

1. It is a flagship initiative launched in 2015 by the Ministry of Electronics & IT (MeitY).
2. Documents issued in the DigiLocker system are deemed to be at par with original physical documents.

Which of the above given statements is/are incorrect?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

21. "It refers to investment funds that are traded on stock exchanges, holding assets like stocks, commodities, or bonds. It allows investors to diversify their portfolios with ease, as they can buy and sell shares throughout the trading day. It's a popular choice for both individual and institutional investors seeking market exposure."

Which of the following correctly describes the above description?

- A. External Commercial Borrowings
- B. Commercial Bills
- C. Exchange Traded Funds
- D. Participatory Notes

22. Recently, the 19th Session of the United Nations Forum on Forests (UNFF) was held at the UN Headquarters in New York. United Nations Forum on Forests (UNFF) acts as a functional commission of which of the following organisations?

- A. United Nations Economic and Social Council
- B. Food and Agriculture Organization (FAO)
- C. United Nations Children's Fund (UNICEF)
- D. United Nations Division for Sustainable Development

23. Which of the following terms correctly defines "P. vranovensis", recently in the news?

- A. A discovered fossil of dinosaur
- B. A newly discovered Beetle species
- C. A disease causing bacteria
- D. A iron digesting stomach enzyme

24. "It was first identified in birds (crows, doves, and pigeons) in the African delta region in 1953. It is a member of the family Flaviviridae - a single-stranded RNA virus, which is related to the flavivirus genus and the Japanese encephalitis antigenic complex. It is transmitted by infected mosquitoes between and among humans and animals, including birds, which are the reservoir host of the virus."

Identify the virus discussed above.

    A. H5N1 Avian Influenza
    B. Circovirus
    C. West Nile Virus
    D. Newcastle Virus

25. Consider the following statements regarding the MTBVAC Vaccine, recently in the news:

    1. **The MTBVAC Vaccine is a live-attenuated strain of M. tuberculosis.**
    2. **Just like the BCG Vaccine, it contains the full set of antigenic targets of the original pathogen.**

Which of the above-given statements is/are correct?

    A. Only 1
    B. Only 2
    C. Both 1 and 2
    D. Neither 1 nor 2

Mains Assignment

1. "The government's regulation of Online Gaming Industry in India will have its own Upsides and Downsides." Analyse the statement with respect to increasing online gaming footprints in India.

2. India follows a system of personal laws governing marriage. Critically examine the merits and demerits of this system in the context of achieving gender equality and national integration.

3. India has a long and illustrious history as the "Land of Spices." Critically examine the current state of the Indian spice industry, highlighting its strengths, weaknesses, opportunities, and threats. Suggest specific measures to strengthen India's position as a global leader in the spice trade.

4. The recent inclusion of disputed territory in Nepal's official map has reignited tensions in Indo-Nepal relations. Critically examine the contemporary challenges from this bilateral relationship. Suggest measures India can take to navigate these complexities and strengthen ties with Nepal.

5. Critically examine the challenges India faces in securing a steady supply of critical minerals for its clean energy ambitions.

SOLVED ESSAY BI-WEEKLY

Not all who wander are lost

In the annals of history, there exists a tale that epitomizes the timeless truth embedded within the profound adage, "Not all who wander are lost." Centuries ago, during the Age of Exploration, a daring navigator embarked on a perilous voyage across uncharted seas. His name was Christopher Columbus, and his journey would forever alter the course of human history. Tasked with finding a new trade route to Asia, Columbus set sail from Spain in 1492, his destination obscured by the vast expanse of the Atlantic Ocean. For weeks, his crew braved treacherous waters, their spirits tested by uncertainty and doubt. Yet, amidst the endless horizon, Columbus remained steadfast in his conviction that land lay beyond the horizon. Finally, after months of wandering, they sighted land—a continent previously unknown to the Old World. Despite the challenges and setbacks, Columbus's unwavering belief in the possibility of discovery propelled him forward, proving that in the journey of life, not all who wander are lost. This historic saga serves as a poignant reminder that wandering can lead to extraordinary discoveries and profound revelations, transcending the confines of doubt and uncertainty.

To understand the essence of the proverb, we must first distinguish between "wandering" and "getting lost." Wandering, within the context of this essay, refers to a deliberate exploration beyond the confines of the known. It's a conscious movement away from prescribed paths and comfort zones, driven by a desire to learn, grow, and experience new things. "Getting lost," on the other hand, implies a state of disorientation and confusion. It's the consequence of venturing into unknown territory without a guiding purpose or awareness of one's surroundings. Importantly, wandering can encompass both physical and metaphorical journeys. Both forms of wandering offer opportunities for growth and transformation.

The benefits of purposeful wandering are manifold. One of the most significant outcomes is self-discovery. By venturing beyond the confines of our daily routines and social circles, we encounter new cultures, ideas, and challenges. This process allows us to shed societal expectations and preconceptions, ultimately leading to

a deeper understanding of ourselves and our place in the world. Literature offers numerous examples of this phenomenon. Odysseus, the protagonist of Homer's Odyssey, endures a decade of wandering after the Trojan War. Through his encounters with mythical creatures and diverse cultures, he not only finds his way home but also discovers his own resilience, cunning, and leadership qualities. Wandering also fosters creativity and innovation. Stepping outside our comfort zones exposes us to new ideas, challenges our assumptions, and stimulates divergent thinking – the ability to generate multiple solutions to a problem. History is replete with examples of ground-breaking discoveries fuelled by a spirit of exploration.

While wandering offers undeniable benefits, it's important to acknowledge that it's not without its challenges. Aimless wandering, devoid of any guiding purpose, can lead to frustration and a sense of directionlessness. The proverb, "Not all who wander are lost," implies a crucial element – intentionality. Intention provides a compass, guiding our exploration and ensuring that wandering leads to purposeful discovery rather than aimless meandering. This intention could be a specific question, a desire to experience a new culture, or a yearning for self-discovery. Regardless of the form it takes, intention serves as an anchor, keeping the wanderer grounded and focused on the potential for growth within the journey.

In conclusion, the proverb "Not all who wander are lost" reminds us that the journey of exploration, both physical and metaphorical, is invaluable for personal growth and understanding. When approached with a sense of curiosity, openness, and a guiding purpose, wandering allows us to break free from the confines of the familiar, discover new aspects of ourselves, and contribute meaningfully to the world around us. As the Irish poet W. B. Yeats wrote, "For in the instant of transition, in the moment of change, there is the possibility of surpassing the limitations of both the past and the future." So, let us embrace the spirit of wandering, for it is not those who lose their way that are lost, but those who are afraid to find themselves.