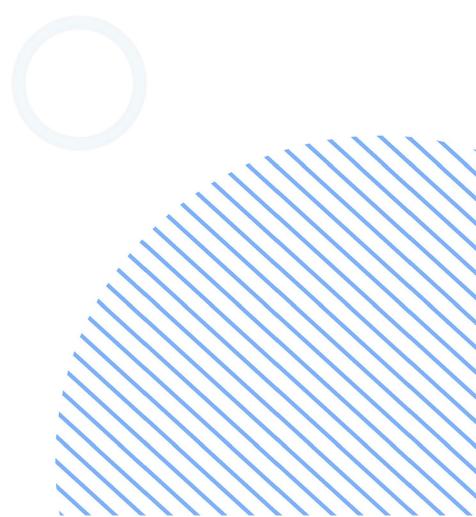


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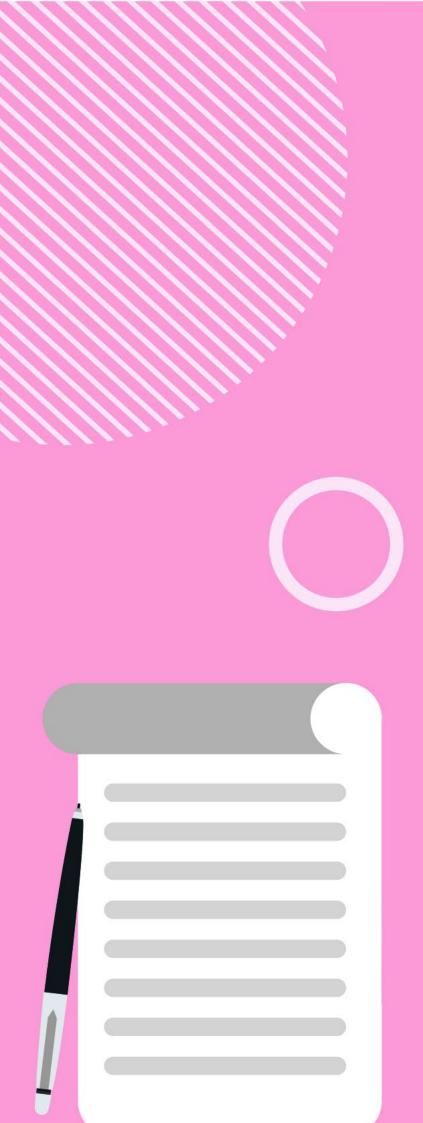
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ELECTIONS TO THE RAJYA SABHA

Why in the News?

 Recently, the Assemblies of 4 states elected 16 Members of Parliament (MPs) to Rajya Sabha.

Key Points:

About Rajya Sabha Polls:

Tenure: A third of Members of Vacancies in Rajya Sabha: In Who can Vote?: Only elected Parliament in the Rajya Sabha, addition, vacancies that arise members of the State Legislative Assemblies can vote in a Rajya from each State retire once in due to resignation, death or two years and polls are held to disqualification are filled up Sabha election. fill up the vacancies. through bypolls after which those elected serve out the The Rajyasabha MPs have a remainder of their predecessors' six-year term. Rajya Sabha Polls Voting: Voting is by single Proposers Mechanism: transferable vote, as the Candidates fielded by political parties have to be proposed by at least election is held on the principle 10 members of the Assembly or 10% of the party's strength in the of proportional representation. House, whichever is less. For independents, there should be 10 proposers, all of whom should be members of the Assembly.

What is Single Transferable Vote?

- A Single Transferable Vote means electors can vote for any number of candidates in order of their preference.
- A candidate requires a specified number of first preference votes to win. Each first choice vote has a value of 100 in the first round.
- To qualify, a candidate needs one point more than the quotient obtained by dividing the total value of the number of seats for which elections are taking place plus one.
- For Example, if there are four seats and 180 MLAs voting, the qualifying number will be 180/5=36 votes or a value of 3,600.
 - Normally, the results are clear after one round itself. The extra candidate is eliminated for want of enough first preference votes.
- However, counting may go to the second round, if more than one candidate fails to get the specified number.
- In such a situation, the second preference polled by the candidates (in ballots where the first preference has gone to those already qualified) will be transferred to their kitty, but with a diminished value.
- The total value of the votes polled by the remaining candidates both as first and subsequent preferences

would be used to decide the winner.

'None of the Above' (NOTA) Option in Rajya Sabha Polls:

- In 2018, the Supreme Court of India scrapped the 'none of the above' option provision to Rajya Sabha Polls.
- It stated that the 'none of the above' option is only for general elections held on the basis of universal adult suffrage, and cannot be applied to indirect elections based on proportional representation.

Voting Eligibility:

- The Supreme Court has ruled that a member can vote in a Rajya Sabha election even before taking oath as legislator.
- It ruled that voting at the Rajya Sabha polls, being a non-legislative activity, can be performed without taking oath.

Why do not the Rajya Sabha polls have a secret ballot?

- The Rajya Sabha polls have a system of open ballot, but it is a limited form of openness.
- As a measure to check rampant cross-voting, which was taken to mean that the vote had been purchased by corrupt means, the system of each party MLA showing his or her marked ballots to the

- party's authorised agent, before they are put into the ballot box, has been introduced.
- Showing a marked ballot to anyone other than one's own party's authorised agent will render the vote invalid.
- Not showing the ballot to the authorised agent will also mean that the vote cannot be counted. and independent candidates are barred from showing their ballots to anyone.

Does cross-voting in Rajya Sabha Polls attract disqualification?

- The cross-voting in Rajya Sabha Polls does not attract disqualification.
- The Supreme Court, while declining to interfere with the open ballot system, ruled that not voting for the party candidate will not attract disqualification under the anti-defection law.
- As voters, MLAs retain their freedom to vote for a candidate of their choice.
- However, the Court observed that since the party would know who voted against its own candidate, it is free to take disciplinary action against the legislator concerned.

Performance of Rajya Sabha:

- The Rajya Sabha has proved to be more and more a 'deliberative' body with increasingly more time being spent on important matters.
- The time share on deliberations under instruments like Short Duration Discussions, Zero Hour, Special Mentions, Discussion on Budgets and working of ministries, Motion of Thanks to President etc was **33.54%** during 1978-2004.
- Further, **it rose to 41.42** % during 2005-2014 and to a high of **46.59**% during 2015-19.

Special Powers of Rajya Sabha:

- It can authorise the Parliament to make a law on a subject enumerated in the State List (Article 249).
- It can authorise the Parliament to create new All-India Services common to both the Centre and states (Article 312).

Rajya Sabha's:

Equal Status with Lok Sabha:

 In the following matters, the powers and status of the Rajya Sabha are equal to that of the Lok Sabha:

- » Introduction and passage of ordinary bills.
- » Introduction and passage of Constitutional amendment bills.
- » Introduction and passage of financial bills involving expenditure from the Consolidated Fund of India.
- » Election and impeachment of the president.
- » Making recommendation to the President for the removal of Chief Justice and judges of Supreme Court and high courts, chief election commissioner and comptroller and auditor general.
- » Approval of ordinances issued by the President.
- » Approval of proclamation of all three types of emergencies by the President.

Unequal Status with Lok Sabha:

- In the following matters, the powers and status of the Rajya Sabha are unequal to that of the Lok Sabha:
- » A Money Bill can be introduced only in the Lok Sabha and not in the Rajya Sabha.
- » Rajya Sabha cannot amend or reject a Money Bill. It should return the bill to the Lok Sabha within 14 days, either with recommendations or without recommendations.
- » The Lok Sabha can either accept or reject all or any of the recommendations of the Rajya Sabha.
 - In both the cases, the money bill is deemed to have been passed by the two Houses.
- » The final power to decide whether a particular bill is a Money Bill or not is vested in the Speaker of the Lok Sabha.

Composition of Rajya Sabha:

- The Rajya Sabha (first constituted in 1952) is a continuing chamber, that is, it is a permanent body and not subject to dissolution.
- The Constitution has not fixed the term of office of members of the Rajya Sabha and left it to the Parliament.
- The maximum strength of the Rajya Sabha is fixed at 250, out of which, 238 are to be the representatives of the states and union territories (elected indirectly) and 12 are nominated by the president.
- At present, the Rajya Sabha has 245 members.
- The **Fourth Schedule** of the Constitution deals with the allocation of seats in the Rajya Sabha to

the states and union territories.

- The retiring members are eligible for re-election and renomination any number of times.
- The Presiding officer of the Rajya Sabha is known as the Chairman.
- The Vice-President of India is the ex-officio Chairman of the Rajya Sabha.

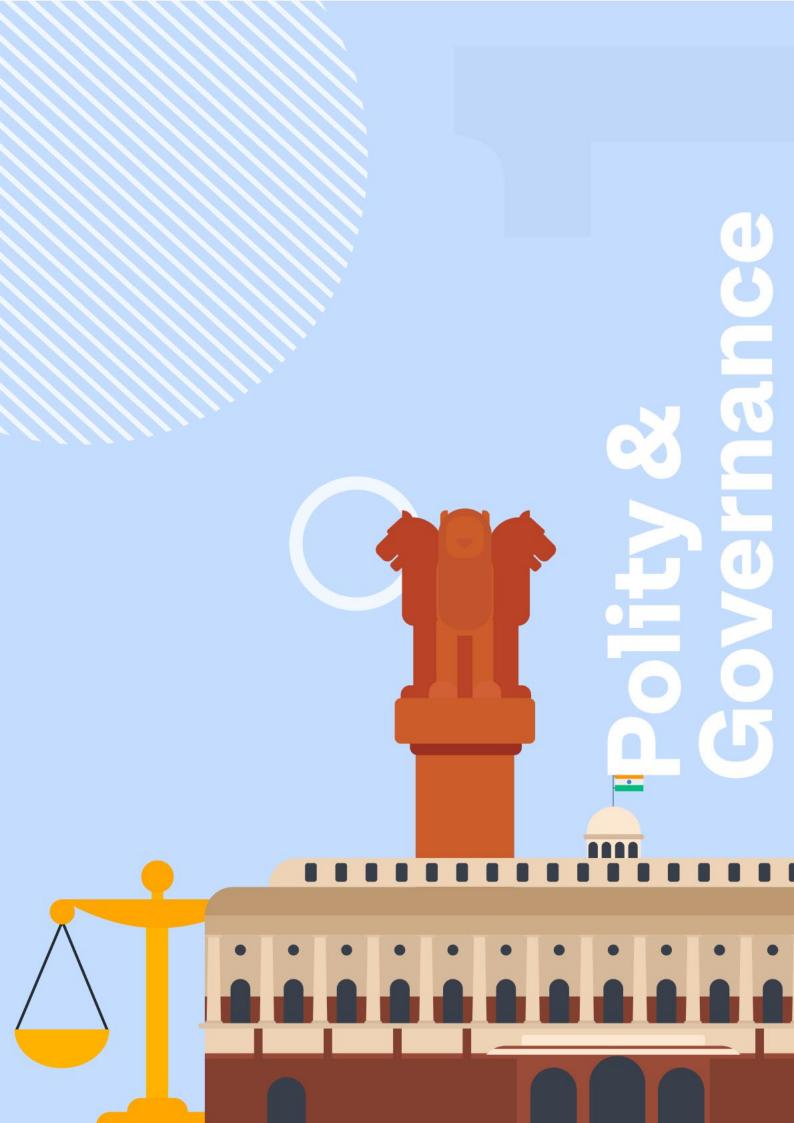
News Source: The Indian Express

Conclusion:

 Rajya Sabha has undoubtedly proved to be an excellent medium for checking hasty decision making and populist policies.

- But concerns regarding Attendance of Nominated Members, Unequal Representation of States, Bypassing of Rajya Sabha and overall legislative issues like Role of Parliamentary committees remain unattended.
- Some reforms like Appointment Commission for better Nomination of members (based on House of Lords Act 1999 Britain), 2nd Administrative Reforms Commission's (ARC) idea of compulsory Attendance of Nominated members could be incorporated to help achieve the desired goal of constitution makers.

News Source: The Indian Express



NATIONAL DATA GOVERNANCE FRAMEWORK POLICY (NDGF)

Why in the News?

 The Ministry of Electronics and Information Technology (MeitY) released a draft titled as 'National Data Governance Framework Policy' (NDGF) outlining its data governance policy.

Key Points:

About

National Data Governance Framework Policy (NDGF)

- Purpose: To manage the "safe availability" of nonpersonal data from government and private entities for the use of researchers and innovators and to accelerate digital governance.
- Aim: To transform and modernise government data collection and management by defining guidelines for its sourcing, processing, storage, access and use to improve services in healthcare, education, agriculture, and law.

Key Features:

- Collating and sourcing Data: The Government has proposed an India Datasets programme — a central repository of anonymised non-personal datasets gathered by central ministries and departments from Indian citizens or those living in the country.
- · Applicability:

» Central Government:

- The policy will apply to all ministries and Central government departments.
- It will include the collating of all non-personal data collected and managed by the Centre.
- Government entities will have to identify and classify datasets available with them to build a common repository.

» State Government:

- State Governments are encouraged to adopt the policy provisions.
- Private entities are also encouraged to share data collected by them on Indian citizens and residents with this central repository.

· The repository:

- » The India Datasets programme will be setup, designed and managed by the India Data Management Office (IDMO).
- » According to the draft, all datasets in the India Datasets programme would be accessible through a common central platform and any other platform

- designated by the IDMO.
- The platform will receive and process any requests for non-personal data.
- Data access and availability:
- The IDMO shall be responsible for the creation of protocols for sharing non-personal datasets via the datasets programme while also safeguarding privacy.

Functioning of the India Data Management Office

- As per draft, IDMO will guide ministries and departments as they develop parameters for the identification, usage, and management of nonpersonal datasets.
- The IDMO will have the final say in whether a particular entity can access the datasets.
- It will also set up a mechanism for inter-government data access.
- It will formulate disclosure norms for data collected, shared, stored or accessed over a certain threshold.

Concerns:

- There has been no clarity on over members of IDMO Composition.
- NDGFP draft doesn't state in detail how the government plans to safeguard data privacy.
- · It is silent on handling the anonymised data.

What is Non-Personal Data?

- Non-personal data can be described as a set of information which doesn't have any personal details that can trace the person.
- The Draft Data Protection Bill 2019 defined it as "any data other than personal data."

Recommendations of Gopal Krishna Committee:

- Non-Personal data generated in India be allowed to be harnessed by various domestic companies and entities.
- The committee has also suggested a separate national legislation and a separate authority to oversee non-personal data.
- It also recommended mandatory sharing of non-personal data, as it may be useful for Indian entrepreneurs to develop new and innovative services or products to benefit citizens.

Classifying Non-Personal Data

- The categorisation was mentioned by a governmentconstituted expert committee in its report on the Non-Personal Data Governance Framework.
- Non-personal data is divided into three sections public, community, and private.

- » Non-Personal data: While data collected by the government during the course of its working comes under public non-personal data.
- » **Community non-personal data**: a set of raw and unprocessed information sourced from a community is community non-personal data.
- » Private non-personal data: It is data with private entities derived through applied knowledge or algorithms.
- Al start-up and innovation Ecosystem by helping create and access to anonymized and non-personal data sets that will in turn spur research, innovation and growth of the Indian Data and Al based research and startup Ecosystem.

NDGFP will also serve to catalyse the Data and

News Source: The Hindu

Why did the need for a data policy arise?

- The existing infrastructure is not fully equipped to deal with the volume and the speed at which data is generated as the government digitises its processes.
- Presently, this data is drawn across departments and stored in a way that is affecting the efficacy of datadriven governance and preventing data science and artificial intelligence (AI) from making the most of it.
- Via this policy, the Centre has proposed to bring together anonymised non-personal datasets on one platform so that data insights can be used by ministries and researchers for "public good and more effective digital government."

Conclusion:

- The NDGFP is the first building block step of the Digital Government Architecture that in turn will accelerate Digital Governance to maximise datadriven governance.
- The NDGFP shall provide greater scope for better, more informed decision making, enhanced program/scheme evaluation and more efficient service delivery.

INDIA'S TAP WATER ACCESS

Why in the News?

 Recently, the Centre announced that over 50 per cent of rural households have access to tap water supply under Jal Jeevan Mission(JJM), as the present government completes eight years in power.

Key Points:

About

Jal Jeevan Mission:

- Launched Date: August 15, 2019.
- JalJeevan Mission Har Ghar Jal, is a decentralised, demand-driven community-managed water supply programme that seeks to empower local village communities.
- » JJM will promote and ensure voluntary ownership among local communities by way of contribution in cash, kind and/ or labour and voluntary labour (shramdaan).
- Implementation:

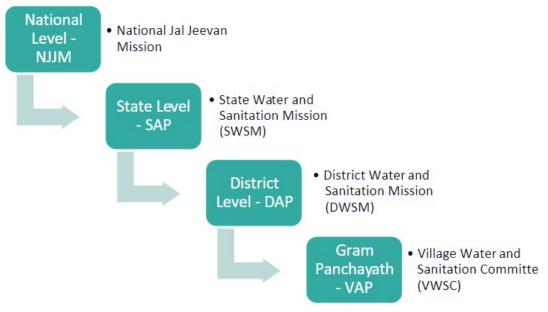


Figure 2 Institutional Mechanism under JJM

- · Nodal Ministry: Jal Shakti Ministry
- Aim: To ensure potable drinking water security in every rural household and public institution across India by 2024.
- » In collaboration with States and Union Territories (UTs), the Centre plans to provide a Functional Household Tap Connection (FHTC) to every rural household.
- Funding Pattern: Under JJM, the fund sharing pattern between Centre and States/ UTs is 100% for Union Territories without legislature, 90:10 for North

- Eastern & Himalayan States and UTs with legislature and 50:50 for the rest of the States.
- Moreover, for **Support and Water Quality Monitoring System (WQMS)** activities, the CentreStates/UTs funding share is 100 per cent for all UTs, in a ratio of 90:10 for North Eastern and the Himalayan States and 60:40 for other States.
- JJM will also implement source sustainability measures as mandatory elements, such as recharge and reuse through grey water management, water conservation, rainwater harvesting.

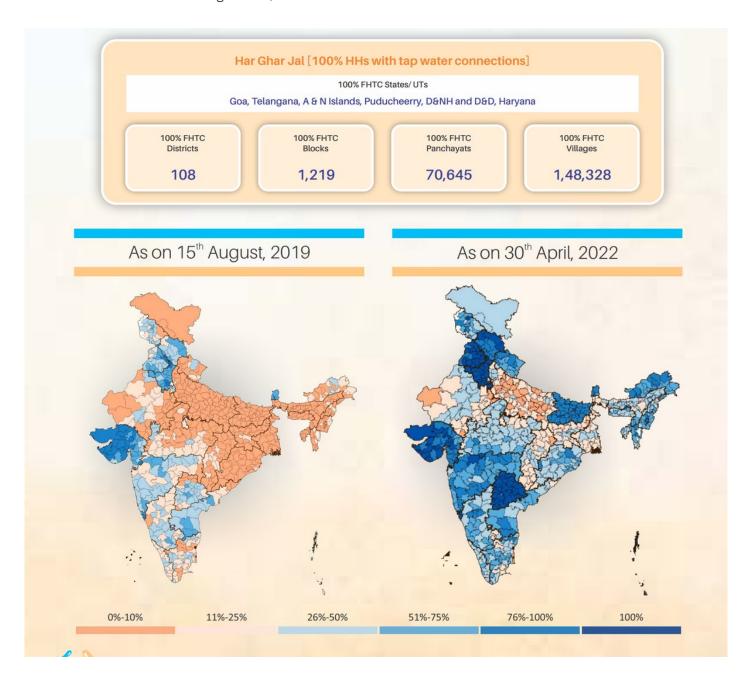


Image Source: The Hindu

Drinking water crisis in India

- According to the NITI Aayog's Composite Water Management Index (CWMI) 2018, 21 Indian cities could face Day Zero in the coming years.
- » Day Zero refers to the day when a place is likely to

have no drinking water of its own.

- The report also states that 75% of Indian households do not have drinking water on premise and about 84 percent of rural households do not have piped water access.
- Mega cities like Delhi and Mumbai get more than the standard municipal water norm of 150 litres per

capita per day (LPCD) while others get 40-50 LPCD.

Challenges:

- Groundwater contaminants such as fluoride, and arsenic, in around 56,788 households across 18 states pose a serious threat to ensure adequate water quality.
- The Jal Jeevan Mission faces a challenge similar to that faced by the Swachh Bharat Mission managing grey water discharge.
- » About 70 per cent of all household water turns into grey water, which if untreated leads to undesirable consequences.
- JJM needs additional infrastructure developments to adjust to diverse climatic conditions and water demand prevalent in Indian society.

Assessment of JJM:

- Catalyst of Social Change: The Jal Jeevan Mission is catalysing change at the grassroots level by reserving 50 per cent seats for women in village and water sanitation committees.
- » In every village, at least five women have been entrusted with water quality surveillance and many of them have been trained as plumbers, mechanics and pump operators. These pioneering women are sure to influence others who could take over jobs generally monopolised by men.
- Improved Performance: As per the JJM dashboard, FHTC coverage across India has improved from 3.23 crore households (17 per cent) in August 2019 to 9.49 crore households (49.10 per cent) as of April 2022.
- 100-percent tap connectivity: At the State level, Goa, Telangana and Haryana have achieved 100-percent tap connectivity to all households in the State.
- » Union territories like Puducherry, the Andaman and Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu have also provided 100 percent of their households with tap water connections.

Way Forward:

- Jeevan Mission needs to take cognisance of the local diversity that goes beyond the minimalist visualisation of pipelines and tap connections and encourage local innovations.
- Community involvement and involvement of non-governmental organisations, matched with adequate funding, will be necessary if the Mission has to achieve and sustain its development goals.

News Source: The Hindu

HATE SPEECH

Why in the News?

 Recently, the Delhi High court, dismissed a plea challenging a trial court's refusal to direct the registration of a first information report (FIR) against some leaders for alleged hate speeches.

Key Points:

About

Hate Speech:

- In general, Hate speech is considered a limitation on free speech that seeks to prevent or bar speech that exposes a person or a group or section of society to hate, violence, ridicule or indignity.
- There is no specific legal definition of 'hate speech'.
 However, a cluster of provisions, loosely termed hate speech laws, are invoked. These are primarily laws to deal with offences against religions.
- Provisions in law criminalise speeches, writings, actions, signs and representations that foment violence and spread disharmony between communities and groups and these are understood to refer to 'hate speech'.
- The Supreme Court, in Pravasi Bhalai Sangathan
 v. Union of India (2014), described hate speech
 as "an effort to marginalise individuals based on
 their membership in a group" and one that "seeks
 to delegitimize group members in the eyes of
 the majority, reducing their social standing and
 acceptance within society."
- Magnitude of Hate Speech:
- According to the Washington Post, 2018 can be considered "the year of online hate".
- Facebook, in its Transparency Report, disclosed that it ended up taking down 3 million hateful posts from its platform while YouTube removed 25,000 posts in one month alone.

Law Commission on Hate Speech:

• The Law Commission of India, in its 267th Report, says: "Hate speech generally is an incitement to hatred primarily against a group of persons defined in terms of race, ethnicity, gender, sexual orientation, religious belief and the like ... Thus, hate speech is any word written or spoken, signs, visible representations within the hearing or sight of a person with the intention to cause fear or alarm, or incitement to violence."

How is Hate Speech treated in Indian law?

 The following Sections of Indian Penal Code deals with Hate Speech:

- » Section 153A: It penalises the promotion of enmity between different groups;
- » Section 153B: It punishes imputations, assertions prejudicial to national integration;
- » **Section 505:** It punishes rumours and news intended to promote communal enmity.
- » Section 295A: It defines and prescribes a punishment for deliberate and malicious acts, intended to outrage religious feelings of any class by insulting its religion or religious beliefs.
- » Section 125 of the Representation of People Act: It deems that any person, in connection with the election, promoting feelings of enmity and hatred on grounds of religion and caste is punishable with imprisonment up to three years and a fine or both.
- » Section 66A: In cases where such speech is online, Section 66A of the Information Technology Act punishes sending offensive messages through communication services.
 - In a landmark verdict in 2015, the Supreme Court struck down Section 66A as unconstitutional on the ground that the provision was "vague" and a "violation of free speech".
 - However, the provision continues to be invoked.

Concerns:

- Hatespeeches, especially by elected representatives, and political and religious leaders, based on religion, caste, religion or ethnicity, militate against the concept of fraternity, bulldoze the constitutional ethos and violate Articles 14, 15, 19, 21 read with Article 38 of the Constitution.
- Hate speeches incite violence and feelings of resentment against members of specific communities and causes fear and feeling of insecurity in the minds of members of those communities

Criticism:

- The broad, vague terms in the laws dealing with hate speech are often invoked for their misuse.
- Critics have pointed out that laws related to checking hate speech are intended for the state to step in and restore "public order" rather than protect free speech.
- Section 295A has been invoked on a wide range of issues from penalising political satire and seeking bans on or withdrawal of books to even political critique on social media.

Various Proposals to tackle Hate Speech:

 The Law Commission has proposed that separate offences be added to the IPC to criminalise hate speech quite specifically instead of being subsumed

- in the existing sections concerning inflammatory acts and speeches.
- It has been proposed that two new sections,
 Section 153C and Section 505A, be added.
- Similar proposals to add sections to the IPC to punish acts and statements that promote racial discrimination or amount to hate speech have been made by the M.P. Bezbaruah Committee and the T.K. Viswanathan Committee.
- At present, the Committee for Reforms in Criminal Laws, which is considering more comprehensive changes to criminal law, is examining the issue of having specific provisions to tackle hate speech.

International Day for Countering Hate Speech:

- The UN General Assembly adopted a resolution on "promoting interreligious and intercultural dialogue and tolerance in countering hate speech".
- The resolution proclaims 18 June as the International Day for Countering Hate Speech, which will be marked for the first time in 2022.

Recommendations of:

Bezbaruah Committee 2014:

- The Bezbaruah Committee was constituted in the wake of a series of racial attacks on persons belonging to the northeast.
- It had in a report proposed amendment to Section 153 C IPC (promoting or attempting to promote acts prejudicial to human dignity), punishable by five years and fine or both and Section 509 A IPC (word, gesture or act intended to insult a member of a particular race), punishable by three years or fine or both.

Viswanathan Committee 2019:

- It proposed inserting Sections 153 C (b) and Section 505 A in the IPC for incitement to commit an offence on grounds of religion, race, caste or community, sex, gender identity, sexual orientation, place of birth, residence, language, disability or tribe.
- It proposed punishment of up to two years along with Rs. 5,000 fine.

Way Forward:

- Much of the existing penal provisions dealing with hate speech belong to the pre-Internet era.
- The need of the hour is specialised legislation that

- will govern hate speech propagated via the Internet and, especially, social media.
- Reference can be drawn to the Australian federal law called the Criminal Code Amendment Act, 2019 which requires social media platforms and other websites and providers to expeditiously remove violent material
- Thus, taking a cue from best international standards, it is important that specific and durable legislative provisions that combat hate speech, especially that which is propagated online and through social media, is enacted by amending the IPC and the Information Technology Act.

News Source: The Indian Express

KARNATAKA'S LEGISLATIVE COUNCIL ELECTIONS

Why in the News?

 Recently, the elections to the Karnataka Legislative Council's graduate and teacher constituencies were conducted.

Key Points:

About

Teacher & Graduate Constituencies:

- These constituencies exist only in states that have a legislature with two Houses—the Assembly and the Council.
- Under clause 3 of Article 171 of the Constitution, as close as possible to one-twelfth of MLCs are to be elected by an electorate consisting solely of graduates and another one-twelfth by an electorate consisting of teachers.

Who can vote?

 According to Section 27 of the Representation of the People Act 1950, only those who have been

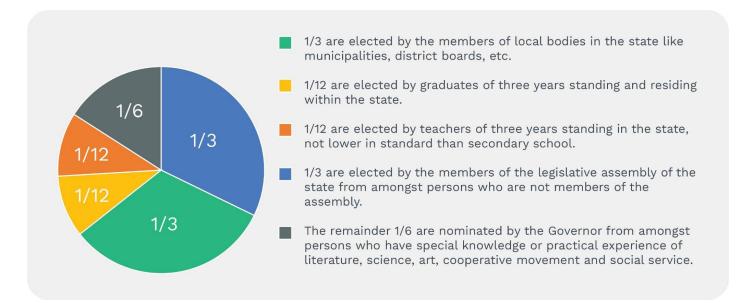
- graduates for at least three years or possess a certificate that the state government and the Election Commission recognise as equivalent to a degree are qualified to be enrolled in the voter rolls for casting their ballot.
- Similarly, everyone who is ordinarily a resident in a teachers' constituency and has at least three years of teaching experience in any educational institution recognised by the state government is entitled to vote in the election.

Why are graduates and teachers given representation?

- According to political pundits, when the Constitution was drafted, in 1950, the lawmakers thought it would be good to have some members of the Council elected only by the educated people.
- They hoped this would lead to clean and honest politics transcending caste, community and religious barriers and money power.

Legislative Council:

- Election: Unlike the members of the legislative assembly, the members of the legislative council are indirectly elected.
- Strength: The maximum strength of the council is fixed at one-third of the total strength of the assembly and the minimum strength is fixed at 40.
- It means that the size of the council depends on the size of the assembly of the concerned state.
- Continuing Chamber: The legislative council is a continuing chamber and is not subject to dissolution.
- It's one-third of members retire at the expiration of every second year. So, a member continues as such for six years.
- Role of Parliament: Though the Constitution has fixed the maximum and the minimum limits, the actual strength of a Council is fixed by Parliament.
- · Manner of Election:



- The members are elected in accordance with the system of proportional representation by means of a single transferable vote.
- The bonafides or propriety of the Governor's nomination in any case cannot be challenged in the courts.
- This scheme of the composition of a legislative council as laid down in the Constitution is tentative and not final.
- » The Parliament is authorised to modify or replace the same.

Position Of Legislative Council:

- · Equal with Legislative Assembly:
- » Approval of ordinances issued by the governor.
- » Introduction and passage of ordinary bills. However, in case of disagreement between the two Houses, the will of the assembly prevails over that of the council.
- » Enlargement of the jurisdiction of the state public service commission.
- Unequal with Legislative Assembly:
- » A Money Bill can be introduced only in the assembly and not in the council.
- » The final power to decide whether a particular bill is a money bill or not is vested in the Speaker of the assembly.
- » The council can only discuss the budget but cannot vote on the demands for grants (which is the exclusive privilege of the assembly).

Legislative Council w.r.t. Rajya Sabha:

· Even though both the Legislative council and

- the Rajya Sabha are second chambers, the Constitution has given the council much lesser importance than the Rajya Sabha due to the following reasons:
- » The Rajya Sabha consists of the representatives of the states and thus reflect the **federal element** of the polity.
 - Therefore, it has to be an effective revising body and not just an advisory body or dilatory body like that of the council.
 - On the other hand, the issue of federal significance does not arise in the case of a council.
- The council is heterogeneously constituted. It represents different interests and consists of differently elected members and also includes some nominated members. Its very composition makes its position weak and reduces its utility as an effective revising body.
 - On the other hand, the Rajya Sabha is homogeneously constituted.

Conclusion:

- Even though the Legislative council has been given less powers as compared with the assembly, its utility lies in as it checks the hasty, defective, careless and ill-considered legislation made by the assembly by making provision for revision and thought.
- It facilitates the representation of eminent professionals and experts who cannot face direct elections.
- » The Governor nominates one-sixth members of the council to provide representation to such people.

News Source: The Indian Express

CASTE-BASED CENSUS

Why in the News?

 Recently, the Bihar chief minister announced that his government will undertake a socio-economic survey of all castes and communities.

Key Points:

Government's Perspective on Caste Census:

- Inaccurate Data: The Centre reasoned that even when the census of castes were taken in the pre-Independence period, the data suffered in respect of "completeness and accuracy".
- » It said the caste data enumerated in the Socio-Economic and Caste Census (SECC) of 2011 is "unusable" for official purposes as they are "replete with technical flaws".
- Official Policy to discourage Caste: The Government said caste-wise enumeration in the Census was given up as a matter of policy from 1951.
- » It said there was a policy of "official discouragement of caste".
- Administrative Challenge: Besides, the Centre is of the view that it was too late now to enumerate caste in the Census 2021; as planning and preparations for the Census 2021 exercise begins almost four years early and cannot be altered within a short period.
- Difficulty in Classification: The Government has cited the difficulties and complexities inherent in getting an accurate count of castes, given the mindboggling numbers of castes and sub-castes, with phonetic variations and similarities.

Utility of Caste Census:

- India's social equality programmes cannot be a success without the data and a caste census would help fix that.
- A caste-based census could go a long way in bringing a measure of objectivity to the debate on reservations.
- The need for a caste census can also be seen in the vast income disparity in the country.
- » **For Example,** A 2020 Oxfam report states that the top 10% of India's population owns 74.3 % of the total wealth; the middle 40% owns 22.9%; and the bottom 50% owns a shocking 2.8 %.
- » Such an unequal distribution of wealth can be addressed by affirmative action but, in order to properly understand the distribution of wealth in the country, a caste census is imperative.
- Caste Census may also be a legal imperative, considering that courts want 'quantifiable data' to

- support the existing levels of reservation.
- Further, it will be useful to establish statistical justification for preserving caste-based affirmative action programmes.
- A caste census, which will generate exhaustive data will allow policymakers to develop better policies, and implementation strategies, and will also enable a more rational debate on sensitive issues.

What kind of caste data is published in the Census?

- Every Census in independent India from 1951 to 2011 has published data on Scheduled Castes and Scheduled Tribes, but not on other castes.
- Before that, every Census until 1931 had data on caste.
- However, in 1941, caste-based data was collected but not published.
- In the absence of such a census, there is no proper estimate for the population of OBCs, various groups within the OBCs, and others. The Mandal Commission estimated the OBC population at 52%.

How have caste details been collected so far?

- While SC/ST details are collected as part of the census, details of other castes are not collected by the enumerators.
- The main method is by self-declaration to the enumerator. So far, backward classes commissions in various States have been conducting their own counts to ascertain the population of backward castes.

Socio-Economic Caste Census (SECC):

- The SECC, 2011, is a study of the socio-economic status of rural and urban households and allows the ranking of households based on predefined parameters.
- Ithasthreecomponents that were conducted by three separate authorities, but under the coordination of the Department of Rural Development in the Union government.
- The Census in rural areas has been conducted by the Department of Rural Development, while the Census in urban areas is under the administrative jurisdiction of the Ministry of Housing and Urban Poverty Alleviation.
- The caste Census is under the administrative control of the Registrar-General of India and Census Commissioner of India, Ministry of Home Affairs.

Way Forward:

 Before carrying out a caste census; a preliminary socio-anthropological study can be done at the State and district levels to establish all sects and sub-castes present in the population.

- The outcome of the study can be tabulated under caste names that have wider recognition based on synonymy and equivalence among the appellations that people use to denote themselves.
- Thereafter, it may be possible to do a field enumeration that can mark any group under castes found in the available OBC/BC lists.
- Although a caste census may not sit well with the goal of a casteless society, it may serve, in the interim, as a useful, even if not entirely flawless, means of addressing inequities in society.

News Source: The Hindu

INTERSTATE COUNCIL

Why in the News?

 Recently, the Tamil Nadu Chief Minister wrote to the Prime Minister, asking that at least three meetings of the Inter-State Council should be held every year to strengthen the spirit of cooperative federalism.



Image Source: Ministry of Home Affairs

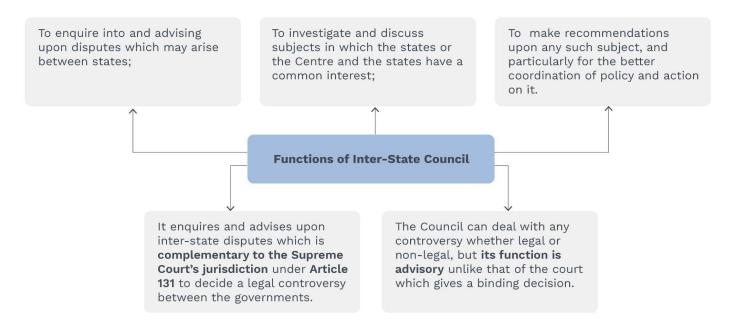
Key Points:

Genesis:

- The Sarkaria Commission on Centre-State Relations (1983–87) made a strong case for the establishment of a permanent Inter-State Council under Article 263 of the Constitution.
- In 1990 it came into existence through a Presidential Order.

Inter-State Council:

- An Inter-State Council is constituted under Article
 263 by the President of India.
- **Purpose:** To promote effective coordination between the states and between Centre and states.
- Meetings: The Council may meet at least thrice in a year. Its meetings are held in camera and all questions are decided by consensus.
- · Composition:
- » The Prime Minister is the chairman of the Council, whose members include the Chief Ministers of all states and UTs with legislative assemblies, and Administrators of other UTs. Six Ministers of Cabinet rank in the Centre's Council of Ministers, nominated by the Prime Minister, are also its members.
- Organisational Structure: The Council is assisted by a secretariat called the Inter-State Council Secretariat headed by a secretary to the Government of India.
- Standing Committee: It was set up in 1996 and consists of:
- » Union Home Minister as the Chairman
- » Five Union Cabinet Ministers
- » Nine Chief Ministers



Challenges:

- As of now, the harsh reality is that the Inter-State Council has had just 12 meetings since it was set up in 1990.
- There was a gap of a decade between the 10th meeting in 2006 and the 11th meeting in 2016, and the council met again in November 2017.
- **Zonal Councils:**
- The Zonal Councils are the statutory bodies, established by States Reorganisation Act of 1956.
- Aim: To promote cooperation and coordination between states, union territories and the Centre.
- Composition:
- » Central Home minister
- » Chief ministers of all the States in the zone
- » Two other ministers from each state in the zone
- » Administrator of each union territory in the zone

Zonal Councils	Headquarter	
Northern	New Delhi	
Central	Prayagraj	
Eastern	Kolkata	
Western	Mumbai	
Southern	Chennai	

Cooperative Federalism:

- Cooperative federalism implies the Centre and states share a horizontal relationship, where they "cooperate" in the larger public interest.
- It's visualised as an important tool to enable states' participation in the formulation and implementation of national policies.

Competitive Federalism:

- Competitive federalism can refer to the relationship between the Central and state governments (vertical) or between state governments (horizontal).
- This idea gained significance in India post the 1990s economic reforms. In a free-market economy, the endowments of states, available

- resource base and their comparative advantages all foster a spirit of competition.
- States need to compete among themselves and also with the Centre for benefits.

Way Forward:

- There is an institutional gap in the Indian union right now—and it needs to be filled before inter-state frictions get out of control.
- If the Inter-State Council is to emerge as the key institution to manage inter-state frictions, it first needs to have a regular meeting schedule.
- The council also has to have a permanent secretariat which will ensure that the periodic meetings are more fruitful.

News Source: The Indian Express

ANTI-DEFECTION LAW

Why in the News?

• Recently, the unfolding political crisis in Maharashtra has thrown the spotlight on the anti-defection law.

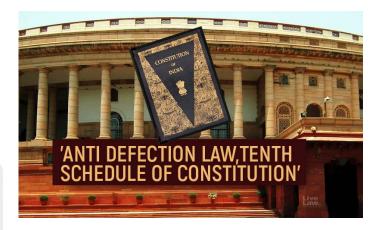


Image Source: Livelaw

Key Points:

Anti-Defection law:

- Defection in politics is when an elected representative member of a party moves to a rival party.
- The Anti-defection law came into force on March 1, 1985 through the 52nd Amendment with addition of the 10th Schedule to the Constitution.
- It provides that members of political parties who disobey the whip or vote against the party in a confidence motion, will face disqualification

- The Presiding Officers of the Legislature (Speaker, Chairman) are deciding authorities in defection cases.
- » If a complaint is received with respect to the defection of the Chairman or Speaker, a member of the House elected by that House shall take the decision.
- The Supreme Court has held legislators can challenge their decisions before the higher judiciary.

Why was it introduced?

- Its purpose was to bring stability to governments by discouraging legislators from changing parties.
- It was a response to the toppling of multiple state governments by party-hopping MLAs after the general elections of 1967.

What are the grounds for disqualification under the Anti-Defection Law's Articles 102 (2) and 191 (2)?

- If an elected member voluntarily gives up his membership of a political party;
- If he votes or abstains from voting in such House contrary to any direction issued by his political party or anyone authorised to do so, without obtaining prior permission.
- As a pre-condition for his disqualification, his abstention from voting should not be condoned by his party or the authorised person within 15 days of such incident.

Issues Involved:

- The Anti-defection law empowers political parties to force their views on MPs elected on their ticket.
- » Any disagreement with the party can result in MPs losing their seat in the legislature.
- The Law is even applicable to Rajya Sabha MPs, who have no mandate to vote out a government.
- Over the years, parties have also used the antidefection law as part of a toolkit to weaken their opposition or topple a government.
- The anti-defection law has been singularly responsible for **stifling debate** in our Parliament and state legislature due to whip issued by the party.

Kihoto Hollohan Case:

- A constitutional challenge to the Tenth Schedule was settled by the apex court in the Kihoto Hollohan Case.
- The principal question before the Supreme Court in the case was whether the powerful role given to the Speaker in deciding the disqualification

- question violated the doctrine of Basic Structure.
- In this case, the Supreme Court opined that "judicial review cannot be available at a stage prior to the making of a decision by the Speaker/ Chairman.
- Nor would interference be permissible at an interlocutory stage of the proceedings.
- Constitutional courts cannot judicially review disqualification proceedings under the Tenth Schedule (anti-defection law) of the Constitution until the Speaker or Chairman makes a final decision on merits.

What constitutes defection?

The Anti-defection law covers three kinds of scenarios.

- One is when legislators elected on the ticket of one political party "voluntarily give up" membership of that party or vote in the legislature against the party's wishes.
- » A legislator's speech and conduct inside and outside the legislature can lead to deciding to voluntarily give up membership.
- The Second scenario arises when an MP/MLA who has been elected as an independent joins a party later.
- The **third** scenario relates to nominated legislators. In their case, the law specifies that they can join a political party within six months of being appointed to the House, and not after such time.

Limitation:

- As per the 1985 Act, a 'defection' by one-third of the elected members of a political party was considered a 'merger'. Such defections were not actionable against.
- The 91st Constitutional Amendment Act, 2003, changed this. So now at least two-thirds of the members of a party have to be in favour of a "merger" for it to have validity in the eyes of the law.
- The anti-defection law does not apply if the number of MLAs who leave a political party constitute twothirds of the party's strength in the legislature.
- » These MLAs can merge with another party or become a separate group in the legislature.
- The anti-defection law does not provide a timeframe within which the presiding officer of House has to decide a defection case
- Another limitation is resigning out of party and getting reelected from ruling parties with money and muscle power.

Way Forward:

- Even though the law has been able to curb the evil of defections to a great extent, the recent incidents in the Indian political scene underline the need for a review in order to tighten all the loopholes.
- The Election Commission has suggested it should be the deciding authority in defection cases.
- Others have argued that the President and Governors should hear defection petitions.
- And last year, the Supreme Court said Parliament should set up an independent tribunal headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially.

News Source: The Hindu

QUESTIONING THE SAFETY OF AADHAAR

Why in the News?

- Two days after issuing an advisory asking people to refrain from sharing photocopies of their Aadhaar Card, the Unique Identification Development Authority of India (UIDAI) opted to withdraw the notification.
- » The action was taken to avert any possibility of 'misinterpretation' of the (withdrawn) press release.



Image Source: First post

What was the UIDAI's initial warning?

- The UIDAI, the statutory body mandated to collect Aadhaar data, issued the first press release on May 27, warning the "general public not to share photocopy of one's Aadhaar with any organisation, because it can be misused".
- Instead, it recommended that "a masked Aadhaar, which displays only the last four digits of your Aadhaar number," be used for such purposes.
- · It also asked the public to avoid using public

- computers to download their e-Aadhaar.
- Only those organisations that have obtained a User Licence from the UIDAI can use Aadhaar to establish the identity of a person.

Why was it withdrawn?

- The UIDAI withdrew the press release, on the ground that it **could be open to misinterpretation.**
- Aadhaar card holders are only advised to exercise normal prudence in using and sharing their UIDAI Aadhaar numbers, and that there are enough security features to keep it safe.

How does one keep one's Aadhaar data safe?

- Two-factor authentication: It is imperative that Aadhaar is linked to the primary mobile number and email ID.
- This is where UIDAI will send the one-time password (OTP) if someone tries to access the Aadhaar account or using it for any verification.
- Masked Aadhaar copy: a 'Masked Aadhaar' copy can be downloaded from the official UIDAI website.
- » A photocopy or version of this can be shared as a full Aadhaar id.
- » This version only has the last four digits of the Aadhaar number, instead of the full number.
- Locking biometrics: Aadhaar biometric data can be locked from the UIDAI website. After locking the biometrics (fingerprint, iris, and face), they can no longer be used for authentication.
- » However, OTP-based authentication would continue to be available as needed."
- **Use VID:** The Virtual Identity, or VID, is a system of "Limited KYC" (Know Your Customer).
- » This hides the Aadhaar number from the authenticating agency, while still confirming the identity of the user.
- This is a 16-digit number, but temporary in nature. So, unlike the permanent 12-digit Aadhaar number, the VID is valid only for some time.

What does the law say?

- The Aadhaar (Targeted Delivery of Financial and Other Subsidies Benefits and Services) Act, 2016 makes it clear that Aadhaar authentication is necessary for availing subsidies, benefits and services that are financed from the Consolidated Fund of India.
- In the absence of Aadhaar, the individual is to be offered an alternate and viable means of identification to ensure she/he is not deprived of the same.

- The requesting entity would have to obtain the consent of the individual before collecting his/ her identity and ensure that the information is only used for authentication purposes on the Central Identities Data Repository (CIDR).
- This centralised database contains all Aadhaar numbers and holder's corresponding demographic and biometric information.
- The Act makes it clear that confidentiality needs to be maintained and the authenticated information cannot be used for anything other than the specified purpose.

About UIDAI:

- The UIDAI is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016
- It Works under the jurisdiction of the Ministry of Electronics and Information Technology.
- Mandate: The UIDAI is mandated to assign a 12-digit unique identification (UID) number (Aadhaar) to all the residents of India.

News Source: The Hindu

SPECTRUM AUCTIONS

Why in the News?

- Recently, the Union Cabinet chaired by the Prime Minister approved the auctions of 5G spectrum bands.
- » This follows the **Budget 2022 announcement**, that the government would auction telecom spectrum in 2022, which will enable private players to roll out 5G services before March 2023.

Need for speed

A look at how 5G compares to previous technologies. 5G's maximum data speed is 10 times higher than the presently used 4G

Maximum Generation Year data speed none 1979 1G (voice only) 1991 **2G** 14.4 Kbps 2000 2.5G 53.6 Kbps 2001 **3G** 384 Kbps 2010 4G 100 Mbps **5**G 1 Gbps 2020

SOURCE: GRAPHIC NEWS

Image Source: The Hindu

Key Points:

- The auction of over 72 GHz of the spectrum will be held by July 2022.
- 5G spectrum in nine frequency bands will be auctioned to telecom operators such as Bharti Airtel and Reliance Jio.
- Nine frequency bands are Low (600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz), Mid (3300 MHz) and High (26 GHz) frequency bands.
- A total of 72,097.85 MHz (or 72 Ghz) of spectrum with a validity period of 20 years will be put on sale during the auction.

What are Spectrum Auctions?

- Devices such as cellphones and wireline telephones require signals to connect from one end to another.
- These signals are carried on airwaves, which must be sent at designated frequencies to avoid any kind of interference.
- The Union Government owns all the publicly available assets within the geographical boundaries of the country, which also include airwaves.
- The Central government through the Department of Telecommunications (DoT) auctions these airwaves from time to time.
- These airwaves are called spectrum, which is subdivided into bands which have varying frequencies.
- All these airwaves are sold for a certain period of time, after which their validity lapses, which is generally set at 20 years.

When will the commercial roll-out happen?

- The 5G deployment is likely to start from August-September this year, and service should commence in about 20-25 cities by the year-end (2022).
- However, given the nascent 5G ecosystem and evolving use cases, 5G rollouts would likely be granular starting with metros and larger cities.

Key Issues

- The industry has highlighted the two issues with regard to the upcoming auctions-
- » High reserve prices for the spectrum: The TRAI had earlier recommended reducing prices of airwaves across various bands by 35-40% from its earlier proposed base price; the telecom operators had expressed disappointment given their demand for a 90% cut in the prices.
- Direct allotment of spectrum to enterprises for setting up captive private networks: The Cellular Operators Association of India (COAI) has expressed

that this provision will severely degrade the business case of Telecom Service Providers (TSPs).

What are captive private networks and why do they need spectrum bands?

- Private wireless networks are cellular networks built specifically for individual enterprises.
- These networks are often deployed at a single unit, for example, a factory.
- They can also be used in a wide-area setting, for instance, to monitor a mine in real-time.
- » Airports and ports can also have their own private 5G cellular network to process imaging data coming from surveillance cameras to manage the facility.
- The key reason for its high-scale adoption is the need for greater data privacy and security.
- Unlike unlicensed Wi-Fi service available in several private places, licensed spectrum bands offer greater data privacy, security and faster connection speeds.

About 5G Technology:

• 5G is the next-generation cellular technology that

- will provide faster and more reliable communication with ultra-low latency.
- The 5G data speeds are expected to be in the range of 2-20 Gigabit per second (Gbps).
- It shapes the Fourth Industrial Revolution, or Industrial 4.0, quality of service delivery, innovation, etc. by facilitating smarter and developing societies.
- 5G mainly works in 3 bands, namely:
- » **Low:** The Low Band Spectrum has the maximum speed limited to 100 Mbps (Megabits per second).
- » Mid: It offers higher speeds compared to the low band, but has limitations in terms of coverage area and penetration of signals.
- » High: It offers the highest speed of all the three bands, but has extremely limited coverage and signal penetration strength.

The technology that 5G uses will improve data transfer speed at unexpected higher levels — almost 100 times more — and reduce latency times helping mission-critical services. Thus, 5G is essential but India needs to look if it is ready for the deployment of the technology.

Faster Speed: There is great potential for India to move to an advanced digital revolution. With 5G technology, consumers will be able to download data-heavy content with better graphics in just a few seconds.

Wider Applications: Also, it would be supporting a much larger range of applications and services, including driverless vehicles, tele-surgery and real time data analytics.

Low Latency: 5G has low latency when compared to 4G that will support new applications such as AI, IoT, and virtual reality efficiently.

 Latency is a measure of delay. In a network, latency measures the time it takes for some data to get to its destination across the network. Benefits of 5G

Governance: 5G technology would also bring positive changes in the governance of the country, ease of living and ease of doing business.

 This would boost growth in every sector like agriculture, health, education, infrastructure and logistics.

Emerging Technology: 5G is expected to form the backbone of emerging technologies such as the Internet of Things (IoT) and machine to machine communications.

News Source: The Indian Express

SURROGATE ADVERTISEMENT

Why in the News?

Recently, the government has issued a new set of guidelines to prohibit surrogate advertising and make it compulsory for celebrities to disclose any stake in the companies and brands they endorse.

 The Central Consumer Protection Authority (CCPA) under the Department of Consumer Affairs has notified the new Guidelines.



Image Source: Technolaw

Key Points:

What are the new guidelines?

About:

- The Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022, have been released to "protect the consumers" and "to ensure that consumers are not being fooled with unsubstantiated claims, exaggerated promises, misinformation and false claims".
- Key Provision:
- » Prohibit surrogate advertisements: It prohibits surrogate advertisements and has brought transparency to disclaimers in ads.
- » Advertisements for children: They aim to address the issue of misleading ads and endorsements aired during programming meant for children.
 - It seeks to disqualify advertisements that promote practices which can have an impact on children's mental or physical health.
- » Bait advertisements: It also provides clarity on 'bait' advertisements, and 'free claims' advertisements,
 - A bait advertisement is an advertisement in which goods, products or services are offered for sale at a low price to attract consumers.

- Free claims advertisements: A free claims advertisement shall not describe any goods, products, or service to be 'free', 'without charge', or use such other terms if the consumer has to pay anything.
- » The new guidelines clearly define what 'misleading advertisement' means and provide various criteria for an advertisement to be considered valid and non-misleading.
- Applicability: The guidelines will be applicable to advertisements published on all platforms like print, television and online.
- » It will also apply to government advertisements as well.
- Penalty: Action against violation of the new guidelines will be taken as per the provisions of the Central Consumer Protection Act (CCPA).
- » Rs 10 lakh penalty for the first violation and a Rs 50 lakh penalty for subsequent violations.

Significance:

- It gives a framework for the industry stakeholders to prevent misleading ads even by mistake.
- It will also empower consumers and consumer organisations to file complaints against misleading ads.
- It aims to protect consumers' interests by ensuring clarity in published advertisements, so that consumers could make informed decisions based on facts rather than wrong narratives and exaggerations.

What is surrogate advertising?

- Surrogate advertising is the strategy of advertising a product that cannot be advertised openly.
- Advertisers instead create adsthat help in building a brand and often involve popular celebrities – all without naming the actual product that is being indirectly advertised.
- For example, In India, tobacco products and alcohol cannot be advertised openly under laws like the Cigarette and Other Tobacco Products Act, 2003, which bans all kinds of direct and indirect advertisements of tobacco products.
- » To circumvent them, surrogate advertising is done.
- Now Clause 6 of the CCPA notification prohibits both direct and indirect surrogate advertising.

News Source: The Indian Express

DRAFT AMENDMENTS TO IT RULES, 2021

Why in the News?

 Recently, the Ministry of Electronics and Information Technology has published a fresh draft of the amendments to the Information Technology Rules, 2021.



Image Source: The Indian Express

Key Points:

What are the IT Rules 2021:

- The Information Technology (Intermediary Guidelines and Digital Media Ethics) Rules was enforced in February 2021.
- It brought in additional compliance requirements for significant social media intermediaries (SSMIs) such as appointment of chief compliance officer, nodal person for coordination and grievance officer.
- The IT Rules also brought in a three-tier system for handling grievances pertaining to streaming services and online news business.
- At the first level, grievances are handled within the organisation, at the second, a self-regulatory body, and at the third, a government-run committee which can override any decision taken by the other two bodies.

What are the proposed amendments to the IT Rules, 2021?

- Creation of government-appointed appeal committees: It proposes the creation of governmentappointed appeal committees that will be able to veto content-moderation decisions taken by social media intermediaries like Facebook, Twitter and YouTube.
- Grievance Appellate Committees: The Central Government shall constitute one or more Grievance Appellate Committees,
- » Organisational Structure: It shall consist of a Chairperson and such other Members, as the Central Government may, by notification in the

Official Gazette, appoint.

- Change in Grievance redressal mechanism: It has proposed a change in the grievance redressal mechanism, where intermediaries will be required to address grievances regarding content removal from platforms within 72 hours.
- For other grievances, the existing 15-day timeframe will continue.

What does this signify for the user?

 Even after this amendment, the users will have the right to directly approach a court of law against the intermediary's decision.

What was the reason for the amendments?

- Need for Grievance Appellate Committees: To ensure "actual enforcement of requirements in IT Rules, 2021 in letter and spirit".
- » The IT Rules, 2021 provide for a robust grievance redressal mechanism.
- » There have been many instances that grievance officers of intermediaries either do not address the grievances satisfactorily and/or fairly.
- The need for an appellate forum has been proposed to protect the rights and interests of users.
- Protecting the Constitutional Rights: These would ensure that the Constitutional rights of Indian citizens are not contravened by Big Tech platforms.

Concerns raised:

 The proposal to set up government-appointed committees has triggered concerns about the government overriding social media platforms' content decisions.

News Source: The Indian Express

GLOBAL SUSTAINABLE DEVELOPMENT REPORT, 2022

Why in the News?

 Recently, the UN SDSN released the Global Sustainable Development Report, 2022.

Key Highlights of the Report:

- Peace, diplomacy, and international cooperation are fundamental conditions for the world to progress on the SDGs towards 2030 and beyond.
- For the second year in a row, the world is no longer making progress on the SDGs. A global plan to finance the SDGs is urgently needed.
 - At mid-point on the way to 2030, policy efforts and

- commitments supporting the SDGs vary significantly across countries, including among G20 countries.
- » 2023 Heads of States SDG Summit should be an opportunity to re-commit to this Agenda.
- Rich countries generate negative international spillovers notably through unsustainable consumption; Europe is taking action.
- The COVID-19 pandemic forced data providers to innovate and build new forms of partnerships; these should be leveraged and scaled up to promote SDG impacts by 2030 and beyond.
- » Science, technological innovations and data systems can help identify solutions in times of crisis and can provide decisive contributions to address the major challenges of our times.
- These require increased and prolonged investments in statistical capacities, R&D, and education and skills.

Global ranking:

- The 2022 SDG Index is topped by Finland, followed by three Nordic countries -Denmark, Sweden and Norway.
- **East and South Asia** is the region that progressed most on the SDGs since their adoption in **2015.**
- Bangladesh and Cambodia are the two countries that progressed most on the SDGs since 2015.

By contrast **Venezuela** has declined the most on the SDG Index since their adoption in 2015.

India's ranking-

- India's rank in the global Sustainable Development Report, 2022 has slipped for the third consecutive year.
- India has been ranked 121 in the index with the SDG index score of 60.3. It had ranked 117 in 2020 and 120 in 2021.
- The country continues to face major challenges in achieving 11 of the 17 SDGs, which has pushed down its global ranking on SDG preparedness.
- The progress in around 10 of these goals is similar to those in 2021.
- These include SDG 2 on ending hunger, SDG 3 on good health and well-being and SDG 6 on clean water and sanitation.
- But ensuring decent work (SDG 8) has become more challenging.
- According to the report, India is on track to achieving SDG 13 on climate action.
- » This decline in India's overall performance is primarily due to eight states Bihar, Telangana, Rajasthan, Uttar Pradesh, Karnataka, Andhra Pradesh, Punjab and Jharkhand whose scores have dipped under SDG 13 in the two years.







































Image Source: un.org

About Sustainable Development Goals:

 The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

About Sustainable Development Report:

- It is a global assessment of countries' progress towards achieving the Sustainable Development Goals.
- It is published by a group of independent experts at the Sustainable Development Solutions Network (SDSN).
- SDSN was launched in 2012 to mobilize global scientific and technological expertise to promote practical problem solving for sustainable development and implement the Sustainable Development Goals (SDGs).
- Following their adoption, SDSN is now committed to supporting the implementation of the SDGs at national and international levels.
- Ranking: Countries are ranked by their overall score.
- The overall score measures the total progress towards achieving all 17 Sustainable Development Goals (SDG)
- » Since 2015, the report has been tracking and ranking the performance of 163 UN member states on SDGs.

News Source: DTE

NATIONAL E-GOVERNANCE SERVICE DELIVERY ASSESSMENT (NESDA) 2021 REPORT

Why in the News?

 The second edition of the National e-Governance Service Delivery Assessment 2021 has been released recently.

Key Points:

About National e-Governance Service Delivery Assessment 2021:

- The NeSDA 2021 report has been prepared covering the assessment of States, UTs, and focus Central Ministries on their effectiveness in delivering online services to citizens.
- It is a biennial study. The report also provides suggestions for governments to further enhance their e-Governance service delivery systems.
- Constituted by: Department of Administrative Reforms & Public Grievances (DARPG) had constituted the National e-Governance Service Delivery Assessment (NeSDA) in 2019 as part of its mandate to boost the e-government endeavours and drive digital government excellence.
- Criteria: NeSDA 2021 covers 56 mandatory services for each states & UTs and 27 services for the focus Central Ministries across seven sectors –
- » Finance
- » Labour & Employment
- » Education
- » Local Governance & Utility Services
- » Social Welfare
- Environment and
- » Tourism sectors.
- Groupings: NeSDA has followed the Good Governance Index 2021 grouping of the States and UTs.
- » First Group: North-East and Hill States
- » Second Group: Union Territories
- » Remaining States Group A
- » Remaining States Group B

Performance of various states:

- Kerala, Odisha, Tamil Nadu, Punjab, Karnataka and Uttar Pradesh had a compliance of more than 85 percent among the remaining states category.
- Jammu and Kashmir ranked the highest among the Union Territories with an overall compliance of nearly 90 percent.
- Meghalaya and Nagaland are the leading state portals with an overall compliance of more than 90 percent across all assessment parameters among the northeast and hill states.

Ranking of State / UT Portals is as follows:

Rank	North-East and Hill States	Remaining States – Group A	Remaining States – Group B	Union Territories
1	Nagaland	Kerala	Odisha	Jammu & Kashmir
2	Meghalaya	Tamil Nadu	Uttar Pradesh	Andaman & Nicobar Islands
3	Assam	Punjab	Bihar	Puducherry
4	Sikkim	Karnataka	Jharkhand	Delhi
5	Tripura	Telangana	West Bengal	Chandigarh
6	Himachal Pradesh	Goa	Madhya Pradesh	Ladakh
7	Uttarakhand	Haryana	Chhattisgarh	
8	Mizoram	Andhra Pradesh	Rajasthan	
9	Arunachal Pradesh	Maharashtra		
10	Manipur	Gujarat		

Image Source: PIB

Performance of Central Ministries:

- Among the focussed Central Ministries, Home Affairs, Rural Development, Education, and Environment, Forest & Climate Change are the leading Ministry Portals with an overall compliance of more than 80% across all assessment parameters.
- The Ministry Portal of Home Affairs had the highest overall compliance score.
- The Central Public Procurement Portal, Digital Police Portal, and Bhavishya Portal are the leading Ministry Services Portals with an overall compliance of more than 85% across all assessment parameters.

News Source: PIB

RESERVATION IN PUBLIC EMPLOYMENT

Why in the News?

Jarnail Singh judgement authored by **Justice Rohinton Nariman** indicates a critical turn in the jurisprudence of reservation in public employment.

Key Points:

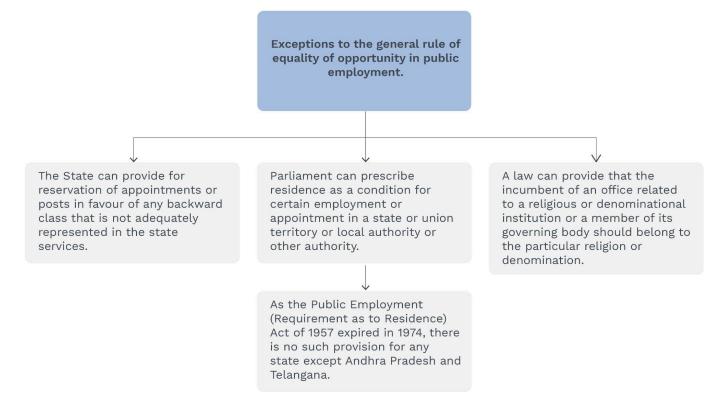
Is reservation a fundamental right?

- The Supreme Court time and again reiterated that there is **no fundamental right** to reservation or promotion under **Article 16(4)** or **Article 16(4 A)** of the Constitution.
- They are enabling provisions for providing reservation.

Constitutional provision related to reservation:

 Article 16: It provides for equality of opportunity for all citizens in matters of employment or appointment to any office under the State.

- » No citizen can be discriminated against or be ineligible for any employment or office under the State on grounds of only religion, race, caste, sex, descent, place of birth or residence.
- » Exceptions:



- Article 16 (4A): Provides that the State can make any
 provision for reservation in matters of promotion in
 favour of the Scheduled Castes and the Scheduled
 Tribes if they are not adequately represented in the
 services under the State.
- » It was inserted by the 77th Constitutional Amendment Act, 1995.
- Article 335: It recognises that special measures need to be adopted for considering the claims of SCs and STs to services and posts, in order to bring them at par.

Reservation in employment

- Reservation in employment which was otherwise confined to Scheduled Castes and Scheduled Tribes got extended to Other Backward Classes as well on the basis of the recommendations of the Second Backward Class Commission as constituted, headed by B.P. Mandal.
- The recommendation of the Mandal Commission (1980) to provide 27% reservation to Other Backward Classes in central services and public sector undertakings, over and above the existing 22.5% reservation for Scheduled Castes and Scheduled Tribes, was sought to be implemented by the Government of India in 1990.

Important Judgements and Amendments:

Indra Sawhney Judgement (1992):

- The case was decided by the Nine Judge Constitution Bench. The bone of contention in this landmark judgement was the Mandal Commission Report of 1980.
- The court upheld the constitutionality of the 27% reservation but put a ceiling of 50% unless exceptional circumstances warranting the breach, so that the constitutionally guaranteed right to equality under Article 14 would remain secured.
- The advanced sections among the OBCs (the creamy layer) should be excluded from the list of beneficiaries of reservation.
- The Supreme Court had held that Article 16(4) of the Constitution of India does not authorise reservation in the matter of promotions.

The Constitution (Seventy-seventh Amendment) Act, 1995

 It inserted Article 16(4-A), to provide that "nothing in this article shall prevent the State from making any provision for reservation in matters of promotion to any class or classes of posts in the services under the State in favour of the Scheduled Castes and the Scheduled Tribes which, in the opinion of the State, are not adequately represented in the services under

the State".

M. Nagraj V Union Of India(2006)

- A five-judge bench of the Supreme Court upheld the constitutional validity of 77th Amendment and said these were mere enabling provisions. The court laid down certain conditions:
- Quantifiable data showing backwardness of the class and
- Inadequacy of representation of that class in public employment.
- The bench held that the creamy layer among Scheduled castes and tribes is to be excluded from the reservation.

Jarnail Singh V Lachhmi Narain Gupta

- The controversy in this case arose due to the interpretation of Article 16 (4A) which was added by the Constitution 77th Amendment.
- The constitution bench invalidated the requirement to collect quantifiable data in relation to Scheduled Castes and Scheduled Tribes but upheld the principle of applicability of creamy layer in relation to Scheduled Castes and Scheduled Tribes.
- Jarnail Singh judgement authored by Justice Rohinton Nariman indicates a critical turn in the jurisprudence of reservation.

103rd Constitutional Amendment Act:

- It Introduced a 10% reservation for Economically Weaker Sections (EWS) of society by amending Article 15 and Article 16 of the Constitution.
- It provided for admission to Central Governmentrun educational institutions and private educational institutions (except for minority educational

institutions), and for employment in Central Government jobs.

Mandal Commission Report:

- The Mandal Commission was set up to investigate the extent of educational and social backwardness among various sections of Indian society and recommend ways of identifying these 'backward classes'.
- The Commission gave its recommendations in 1980 and advised that 'backward classes' should be understood to mean 'backward castes'.
- The Commission did a survey and found that these backward castes had a very low presence in both educational institutions and in employment in public services.
- It, therefore, recommended reserving 27 per cent of seats in educational institutions and government jobs for these groups.
- In August 1990, the government decided to implement one of the recommendations of the Mandal Commission pertaining to reservations for OBCs in jobs in the central government and its undertakings.
- This decision sparked agitations and violent protests in many cities of north India.
- The decision was also challenged in the Supreme Court and came to be known as the 'Indira Sawhney case', after the name of one of the petitioners.
- In November 1992, the Supreme Court gave a ruling upholding the decision of the government.

News Source: Indian Express



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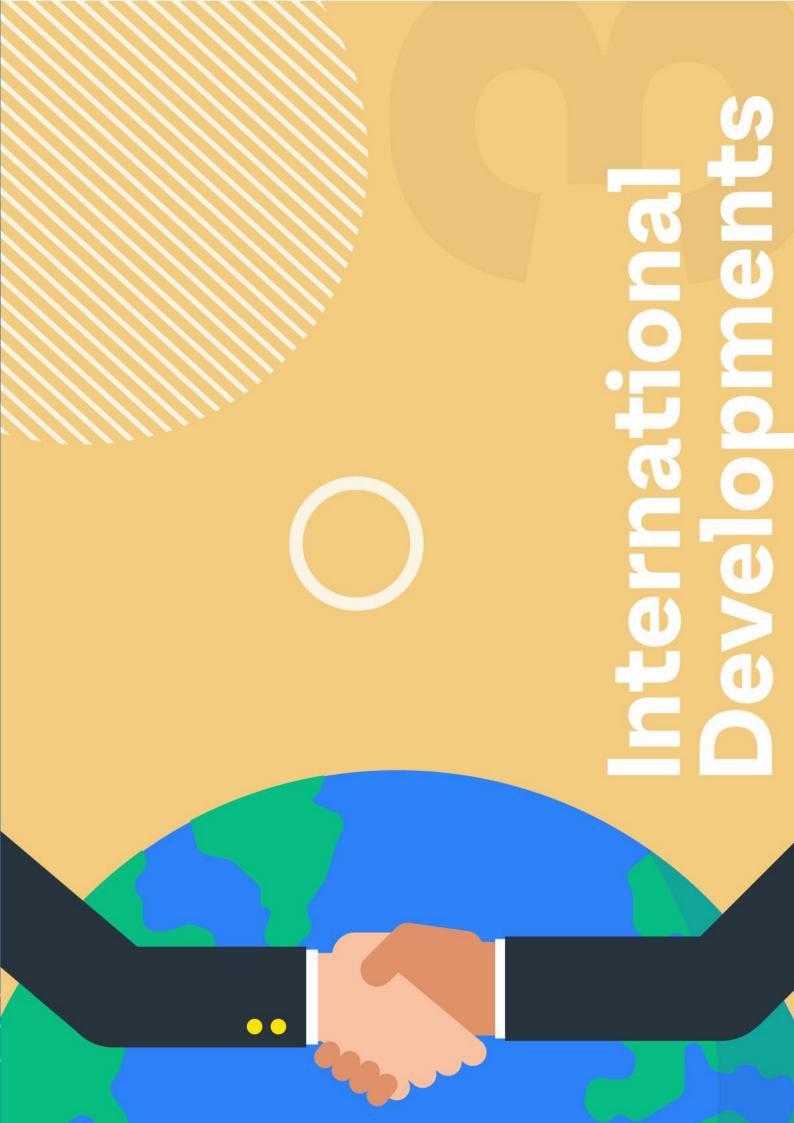
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INDO-PACIFIC ECONOMIC FRAMEWORK

By: Piyush Choubey (Unacademy PSIR Faculty)

Why in the news?

Recently, the United States launched the programme named Indo-Pacific Economic Framework on their foreign vertical end. This move is especially after the previous Donald Trump-led government withdrew the USA from the Trans-Pacific Partnership. The step of withdrawal was taken as a severe criticism during the time as the previous President had been famous for such actions, be it related to Iran Nuclear Deal, UNESCO, etc. At a public event in Tokyo on May 23, 2022, President Biden and 12 regional counterparts officially launched the Indo-Pacific Economic Framework for Prosperity (IPEF) with a joint statement and hybrid meeting of participating leaders.

What is IPEF?

• In a press briefing on the launch of the initiative, National Security Adviser Jake Sullivan said the IPEF was "foundational" to U.S. efforts in the region. He also underscored the administration's new approach to economic engagement, saying, "The fact is that past models did not address these challenges—or did not address them fully and take them head on—leaving our workers, businesses, and consumers more vulnerable. So, we believe that we need a new model that we can move on quickly to, in fact, take these challenges head on, and that's what IPEF will do."

IPEF will focus on four policy pillars, now with new names, each led by an individual agency:

- Connected Economy Fair and Resilient Trade, including labor, environment and climate, digital economy, agriculture, transparency and good regulatory practices, competition policy, and trade facilitation.
- 2. Resilient Economy Supply Chain
- 3. Clean Economy Infrastructure, clean energy, and decarbonization
- 4. Fair Economy Tax and anti-corruption measures.
- According to Mary E Lovely, by mixing economics, security, development, climate and public health challenges, the Biden strategy places the United States at the heart of efforts to meet the full panoply of challenges that face the region. Its 'strategic ends' a free and open Indo-Pacific and its 'strategic ways' strengthening the US role and building collective capacity reflect an optimism that effective mechanisms can be built to coordinate across the region while successfully managing differences.

• Australia, Brunei, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Vietnam announced their interest in the IPEF and signed onto the launch, although it is not yet clear which pillars each country plans to participate in. While it was widely expected that close advanced economy partners such as Japan, Australia, New Zealand, and Singapore would join the IPEF launch, the inclusion of seven other Indo-Pacific countries—including all seven of the Association of Southeast Asian Nations (ASEAN), members in the Asia Pacific Economic Cooperation (APEC), plus South Korea and India—is significant.

Concerns

- Scholars like William Reinsch, Matthew P Goodman, Emily Benson, and Aidan Arsasingham, raised red flags on several fronts:
- Several countries were still left out of the IPEF launch. Given political and human rights concerns, Myanmar is not participating. Laos and Cambodia, two of the least developed countries in the region, are also not participating given capacity challenges. Pacific Rim countries in the Americas that participated in TPP negotiations-Canada, Mexico, Peru, and Chilewere not invited. U.S. officials instead plan to use the upcoming Summit of the Americas as a venue to discuss many of the issues covered under the IPEF with these countries. While Taiwan had indicated interest in joining the IPEF-and 250 members of Congress called for its inclusion-the island was ultimately left out of the framework to secure the participation of other South and Southeast Asian countries reluctant to antagonize Beijing. Pacific Island nations were also notably absent from the IPEF launch.
- There are drawbacks to the IPEF not being a traditional trade agreement. Without the promise of greater U.S. market access, a significant incentive for regional partners to agree to high U.S. standards goes away. A lack of enforcement mechanisms also limits the ability of the United States to secure its interests in the framework.
- In the eyes of Joshua P Meltzer, A key challenge for Washington will be convincing other countries to accept high-standard and binding trade rules without receiving market access. As in previous trade agreements, the United States will most likely seek high labour standards, but the significant TPP labour market reforms to which Vietnam, for example, agreed were made politically possible by the promise of greater US market access.
- Tobua Harris and Trevor Sutton have brought to the horizon associated with the challenges of IPEF that there are considerable differences in how fleshed out each of the pillars are. The supply chain and infrastructure decarbonization pillars, for example,

would build on work done in bilateral and plurilateral settings like the Quadrilateral Security Dialogue. The trade pillar, meanwhile, includes the digital economy but also issues trade facilitation and labor and environmental standards. And the tax and anticorruption pillar bring a global Biden administration foreign-policy priority into an Indo-Pacific context.

Harsh V Pant raised concerns on the following subjects:

- The details that we do have are also less than encouraging. Firstly, America seems to offer little by way of market access and economic incentives to the other powers in the IPEF. To a number of countries, the IPEF is a laundry list of American demands on everything ranging from environmental and labour protection to digital standards.
- 2. While trade concessions and market access agreements might incentivise nations to accept American standards, US Trade Representative Katherine Tai argued that such incentives were a feature of "traditional" trade agreements without clarifying how the IPEF would prove any different. Given that America's Congress, which must approve trade concessions, will not be voting on the IPEF, it would seem that the Biden Administration has no real plans to give ground.
- 3. This puts the IPEF in an unenviable position. Should America fail to put together a convincing package of incentives, many nations may prefer to make looser and less consequential commitments rather than undertake difficult and costly processes like supply chain decarbonization. This would mean that Washington will be left talking to the usual suspects advanced economies like Japan, South Korea, Australia and Singapore without making any real breakthroughs in new markets.
- 4. The IPEF may also be a victim of poor timing. With negotiations set to kickstart over the next few weeks after months of lost time, it seems unlikely that major progress will be made before the US midterm elections slated for November. With inflation rampant and Biden's approval rating determined to hit new lows, every negotiating country will wonder about the American President's ability to deliver on the promises his country will make at the negotiating table. Observers of international trade will remember that the Obama Administration's foot dragging over the highly ambitious Trans Pacific Partnership condemned the promising trade accord. Should another highly vaunted American trade initiative fail, it would deal a significant blow to Washington's already bruised reputation for economic leadership in Asia.

The China Angle

 According to scholars like Mohammed Bagher Forough, the most herculean challenge for the United States is to persuade IPEF members to disentangle their economies from China's. It is worth remembering that other than the U.S., each and every country that has joined IPEF previously joined China in signing an actually binding FTA, namely, RCEP. For them, that was much more of a commitment than joining IPEF.

- In the view of **Mary E Lovely**, the China Angle comes in the following domains:
- While many Indo-Pacific nations want to bolster defenses against Chinese coercion and aggression, it is doubtful that they share the US view that China can or should be excluded from regional economic arrangements and decision-making forums. Many of Washington's intended partner economies are already integrated with China. The United States 'endorses ASEAN centrality' but ignores the presence of ASEAN at the heart of the Regional Comprehensive Economic Partnership (RCEP), of which China is a founding member.
- US plans for building secure technology value chains must include Japan, a close ally and a powerhouse supplier of machinery and electronics. What price is Japan willing to pay and in which industries to build China out of its products? Already, Japan exports almost as much to China as it does to the United States and imports almost twice as much. Much of this bilateral trade feeds Japan's onshore production. In 2016 – the most recent year for which we have data - 64 percent of Chinese exports to Japan originated in foreign-invested enterprises, many of them Japanese foreign affiliates, while more than half of China's sales to Japan result from duty-free processing arrangements. These are clear indications of the extent to which Japan's industrial engine is tied to China.
- The situation is similar for South Korea, another US ally and key supplier of integrated circuits and other electronics. Its two-way trade with China is almost double that of its trade with the United States. As with Japan, much of this flow is linked to South Korea industrial production. More than half of Chinese exports to South Korea originate in foreign-invested firms, many of them South Korean foreign affiliates, and 57 per cent reflects duty-free processing arrangements.
- Eight East Asian economies already are bound together by the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), which provides substantial and binding market access, covering goods and services market openings and commitments on regulation of foreign investment. With significantly overlapping rosters, trade relationships between CPTPP members and RCEP members will continue to grow, even if China's application to join the CPTPP is left to expire indefinitely. The United States, in contrast, is

left outside CPTPP structures that enhance bloc production sharing and complementary foreign investment flows.

- In addition to this, **Kavaljit Singh** stated: "No country in the region wishes to become a pawn in a geopolitical tussle between two giant superpowers. Nor do they prefer to choose sides if the US-China rivalry escalates. Even the US's traditional allies in the region (such as Australia, Japan, and South Korea) who view China's rise as a threat to their security and territorial integrity and look to the US as a counterbalancing force wish to maintain closer economic ties with China due to the benefits they derive from trading with China and China's pivotal role in the regional value chains. Indeed, most countries in the region want to derive benefits from both the cooperation and the competition between the US and China."
- even scholars like **Qian Feng** commented that over the years, the Asia-Pacific region has enjoyed prosperity and stability amid the chaos of today's world. The reason for this is win-win cooperation, rather than zero-sum confrontation. The US effort to interfere in regional cooperation, provoke decoupling and pressure other countries to participate in the confrontation between major powers shows the mind-set of the political elite in Washington, whose body has entered the 21st century but whose brain is still in the old era of the Cold War.

India - Opportunity/Challenges Lying Ahead

Harsh V Pant has, in a nutshell, provided both opportunities and challenges that India would be having with this new grouping. For India, IPEF may still prove a good opportunity. Given New Delhi's reluctance to join the Regional Comprehensive Economic Agreement (RCEP) or the CPTPP, signing on to the IPEF allows India another viable opportunity to shape the economic rules of the game in the region. Further, New Delhi shares America's interest in assembling an economic coalition that can secure economic growth, fight climate change and reorder supply chains while keeping an eye on Chinese moves in the Indo-Pacific. Beijing's incandescent reaction to the IPEF signals that China keenly appreciates the scale of the economic challenge that Washington, New Delhi and other aligned powers are likely to pose. However, India is likely to face a series of difficult negotiations over its well-established disagreements with developed economies on the issue of data flows and localisation. New Delhi will also be worried by the aforementioned problems of durability and incentives. Should the IPEF falter, India will lose a key economic forum to make its positions known and to rally other nations to its cause.

INDIA-GULFTIES

Why in the News?

 Recently, few countries in the Gulf region had summoned the Indian ambassadors in their nations to register their protest on a controversy erupted over a religious issue.

Key Points:

About

Persian Gulf region Countries:

- The Persian Gulf region includes Iran, Oman, United Arab Emirates, Saudi Arabia, Qatar, Bahrain, Kuwait, and Iraq.
- Saudi Arabia, Oman, Qatar, United Arab Emirates (UAE), Bahrain, Kuwait are members of the Gulf Cooperation Council (GCC).
- There is a commonality of interest among them in being major producers of crude oil and natural gas, and thereby contributing critically to the global economy and to their own prosperity.
- Traditionally, India has enjoyed centuries of good relations with countries in the gulf region.



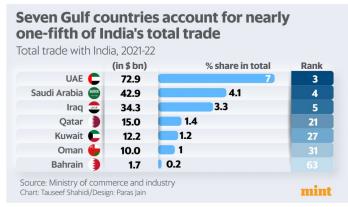
Image Source: WorldAtlas.com

India's Engagement with Gulf Region:

Trade and Investment:

 In 2021-22, India recorded a total trade of about \$189 billion with seven Gulf countries—Saudi Arabia, United Arab Emirates (UAE), Oman, Qatar, Bahrain, Kuwait and Iraq—accounting for 18.3% of its combined value of imports and exports.

- India's exports to GCC countries stood at \$43.9 billion, with the trade deficit amounting to \$66.8 billion.
- The UAE and Saudi Arabia are India's third and fourth largest trading partners respectively.
- » Further, the UAE features in the top 10 sources of FDI inflows into India.
- In February 2022, India and the UAE signed a free-trade agreement (FTA), which will allow zeroduty access to 97% of Indian products and 90% of products from the UAE over the next 10 years.



Seven Gulf countries account for nearly one-fifth of India's total trade

Energy:

- The Gulf region is a reliable partner for energy security for India while India augments food security in the region.
- A third of India's oil imports come from Bahrain, Kuwait, Qatar, Oman, Saudi Arabia, and the UAE, also known as Gulf Cooperation Council (GCC).
- India gets around 60% of its hydrocarbon requirements from West Asia. On an annualised basis, India saves up to \$1.35 billion for each \$1 drop in oil prices.

Remittances:

- As per data from the ministry of external affairs, 27.7% of overseas Indians stay in the GCC countries.
- The UAE is the biggest source as immigrants settled there had sent back \$13.8 billion in 2017. Saudi Arabia is third, at \$11.2 billion, followed by Kuwait and Qatar at \$4.6 billion and \$4.1 billion, respectively.

Strategic Cooperation:

- By forging ties in sectors other than energy and trade with the Gulf region, India has been developing a warm relationship with the Muslim world.
- This would help in building up India's engagement with organisations like the Organisation of the Islamic Conference (OIC) and the Arab League.
- India and GCC share the desire for political stability and security in the region.

Why is the Strait of Hormuz important?

- Geographical Identity: The Gulf (also known as the Persian Gulf or the Arabian Gulf) lies between Iran and the Arabian Peninsula.
- » Besides Iran and Saudi Arabia, Oman, the UAE, Qatar, Bahrain, Kuwait and Iraq also share the Gulf coastline.
- With Iran on its northern coast and the UAE and an Omanian enclave on the south, the Strait, at its narrowest point, has a width of 34 km.
- The Strait opens to the Gulf of Oman which is connected to the Arabian Sea.

• Economic Significance:

The Strait of Hormuz is important for Oil Transport; its disruption can trigger energy crises in the world.

Gulf Cooperation Council (GCC):

- Gulf Cooperation Council (GCC) is a political and economic alliance of six Middle Eastern countries:
- » Saudi Arabia
- » Kuwait
- » The United Arab Emirates
- » Qatar
- » Bahrain
- » Oman
- It was established in Riyadh, Saudi Arabia, in 1981.
- Purpose: To achieve unity among its members based on their common objectives and their similar political and cultural identities, which are rooted in Arab and Islamic cultures.
- Presidency of the council rotates annually.
- The Highest decision-making entity of the GCC is the Supreme Council, which meets on an annual basis and consists of GCC heads of state.

Way Forward:

- The Look West Policy has certainly accelerated India's engagement with the Gulf region. As India has huge stakes in the region, the policy should be supplemented with more proactive Indian involvement in the various sectors.
- With the rapid economic growth and rising profile of India, devising such a policy of engaging with the extended neighbourhood has become imperative for India.
- Further, in the longer run, India should find new

- drivers beyond energy, trade relations for the India-Gulf synergy.
- This search could begin with cooperation in healthcare and gradually extend outward towards pharmaceutical research and production, as well as the economic activities in bilateral free zones along Arabian Sea coast eventually leading to an India-Gulf Cooperation Council Free Trade Area.

News Source: The Hindu

THE INDUS WATER TREATY

Why in the News?

Recently, a delegation from Pakistan visited India to attend the 118th meeting of the Permanent Indus Commission.

Key Points:

- The two countries hold a yearly meeting to discuss cooperation on the Indus River System, as prescribed under Article VIII of the Indus Waters Treaty signed by both in 1960, with the intervention of the World Bank.
- The Commissioners are required to meet at least once a year, alternately in India and Pakistan.



rivers (subject to specific

➤ India utilises nearly 95%

of waters of Eastern rivers

criteria for design)

down to Pakistan through river Ravi

> To utilise about 0.58 MAF of

surplus waters below Ujh dam by

diverting the same to Beas basin

Image Source: Times of India

About Indus Waters Treaty:

Background:

Western rivers - Indus,

Jhelum and Chenab

India is, however.

- The Indus river basin has six rivers- Indus, Jhelum, Chenab, Ravi, Beas, and Sutlej; originating from Tibet and flowing through the Himalayan ranges to enter Pakistan, ending in the south of Karachi.
- Preceding partition, the Indus river basin was one

- common network for both India and Pakistan.
- In 1947, the line of partition, aside from delineating geographical boundaries for India and Pakistan, also cut the Indus river system into two.
- Initially, the Inter-dominion accord of May 1948 was adopted, where both countries, after meeting for a conference, decided that India would supply water to Pakistan in exchange for an annual payment made by the latter.
- This agreement, however, soon disintegrated as both the countries could not agree upon their common interpretations.
- In 1951, in the backdrop of the water-sharing dispute, both countries applied to the World Bank for funding of their respective irrigation projects on Indus and its tributaries, which is when the World Bank offered to mediate the conflict.
- Finally in 1960, after nearly a decade of fact-finding, negotiation, proposals by the World Bank and amendments to them, an agreement was reached between the two countries, and the Indus Waters Treaty (IWT) was signed by former Prime Minister Jawaharlal Nehru and then President of Pakistan, Ayub Khan.

Key Provisions of the Indus Water Treaty:

Allocation of Rivers:

- Western rivers:
- Indus, Chenab, and Jhelum are allocated to Pakistan.
- **Eastern rivers:**
- Ravi, Beas, and Sutlej are allocated to India.
- This means that 80% of the share of water went to Pakistan while leaving the 20% of water for use by India.
- Setting up of Permanent Indus Commission: It established a Permanent Indus Commission constituted by permanent commissioners on both sides.
- The functions of the commission include serving as a forum for the exchange of information on the rivers, for continued cooperation, and as the first stop for the resolution of conflicts.
- Exit Provision: IWT does not have a unilateral exit provision, and is supposed to remain in force unless both countries ratify another mutually agreed pact.
- India's Right Over Western Rivers: Besides, India is allowed to have a minimum storage level on the western rivers - meaning it can store up to 3.75

MAF of water for conservation and flood storage purposes.

- Dispute Resolution Mechanism: The IWT also provides a three-step dispute resolution mechanism:
- » Permanent Commission: Under it, "questions" on both sides can be resolved, or can also be taken up at the inter-government level.
- » World Bank: In case of unresolved questions or "differences" between the countries on watersharing, such as technical differences, either side can approach the World Bank to appoint a Neutral Expert (NE) to come to a decision.
- Court of Arbitration: And eventually, if either party is not satisfied with the Neutral Expert's decision or in case of "disputes" in the interpretation and extent of the treaty, matters can be referred to a Court of Arbitration.

India's Concerns:

- From the Indian point of view, the basic dissatisfaction with the treaty arises from the fact that it prevents the country from building any storage systems on the western rivers.
- Even though the treaty lays out that under certain exceptional circumstances storage systems can be built, the complaint raised by India is that Pakistan deliberately stops any such effort due to the political rivalry it shares with India.

IWT & Geopolitics:

- Internationally, the IWT is seen as one of the most successful cases of conflict resolution especially considering the fact that it has stayed in place despite the two countries having been engaged in four wars.
- Following the Uri attack in September 2016, India decided to not hold a meeting of the Permanent Indus Commission so long as Pakistan does not stop funding terrorist activities.

Indus Water Treaty & India's Projects:

 Since the treaty's conception in 1960, India-Pakistan has been embroiled in conflicts over a number of projects including the Salal hydroelectric project on the Chenab, the Tulbul project, the Kishenganga, and Ratle hydroelectric plants.

Kishanganga Hydro Project:

 Kishanganga is also known as Neelum, a tributary of the Jhelum river, originates in J&K and joins the river in Pakistan occupied Kashmir

- The Kishanganga hydroelectric plant is an \$864 million worth project that was initiated in 2007 and was projected to be completed by 2016.
- Pakistan took the project to the Court of Arbitration in 2010 raising six issues that they say violate the treaty.
- In 2013, the Court of Arbitration ruled India to go ahead with the project under the condition that a minimum water flow to Pakistan of 9 cubic metres per second is maintained.

News Source: The Hindu

U.N. PEACEKEEPING MISSION

Why in the News?

 A United Nations (U.N.) official has lauded the Blue Helmet peacekeepers from India as well as other countries for thwarting an attack by an armed group in the Congo.

Key Points:

About

U.N. Peacekeeping mission

- The U.N. Peacekeeping mission is a joint effort between the Department of Peace Operations and the Department of Operational Support.
- **Aim:** To assist host countries to transition from situations of conflict to peace.
- U.N. Peacekeepers provide security as well as political and peacebuilding support to conflictridden countries.
- The International Day of UN Peacekeepers is observed annually on May 29 to pay tribute to the uniformed and civilian personnel for their invaluable contribution.

Basic Principles U.N.'s Peacekeeping missions are:

- Consent of the parties
- Impartiality
- Non-use of force except in self-defence and defence of the mandate

India's Contribution to UN Peacekeeping Mission:

- In 2007, India became the first country to deploy an all-women contingent to a U.N. Peacekeeping mission.
- Over 200,000 Indians have served in 49 U.N. Peacekeeping missions since 1948. Currently,

5,581 Indians are part of various U.N. Peacekeeping missions.

 As of November 2021, India is the second-highest military (1,888) and fifth-highest (139) policecontributing country to the United Nations Organisation Stabilisation Mission in the Democratic Republic of the Congo (MONUSCO).

Uniformed Personnel Contributing Countries by Ranking

Experts on Mission, Formed Police Units, Individual Police, Staff Officer, and Troops As of: 31/03/2022

Line Number	Rank	Country	Male	Female	Total	Report Date
1	1	Bangladesh	6247	463	6710	31/03/2022
2	2	Nepal	5337	369	5706	31/03/2022
3	3	India	5479	102	5581	31/03/2022
4	4	Rwanda	4788	467	5255	31/03/2022
5	5	Pakistan	4041	82	4123	31/03/2022
6	6	Ethiopia	3346	414	3760	31/03/2022
7	7	Egypt	2708	84	2792	31/03/2022
8	8	Indonesia	2522	148	2670	31/03/2022
9	9	Ghana	2162	413	2575	31/03/2022
10	10	China	2136	101	2237	31/03/2022

Image Source: The Hindu

Who are 'Blue Helmets'?

- Blue Helmets are the military personnel of the U.N. that work alongside the U.N. Police and civilian colleagues to promote "stability, security, and peace processes".
- The personnel get the name from the iconic blue helmets or berets they wear.
- All military personnel under Blue Helmets are members of their national armies first who are seconded to work under the U.N. command.
- African and Asian countries outnumber their western counterparts in contributing soldiers to Blue Helmets.

The Dag Hammarskjöld Medal:

 It is a posthumous award given by the United Nations (UN) to military personnel, police, or civilians who lose their lives while serving in a United Nations peacekeeping operation.

UN Medal:

The UN medal was established by the Secretary-

General in **1966** for military personnel and civilian police who are or have been in the service of the United Nations.

News Source: The Hindu

COMMON SECURITY AND DEFENCE POLICY (CSDP)

Why in the News?

 In a historic referendum in Denmark, two-thirds of Danish voters supported abandoning a 30-year-old waiver that has kept the country out of the European Union's (EU) Common Security and Defence Policy (CSDP).

Key Points:

About

Background:

 Concrete provisions for a common European Security and Defence Policy (ESDP) were introduced in the late 1990s, in the aftermath of wars in the Balkans.

- The ESDP became operational in 2003. Since then the EU has initiated more than 35 crisis management missions and operations.
- After the signing of the Lisbon Treaty on December 1, 2009, the ESDP was renamed the Common Security and Defence Policy (CSDP).



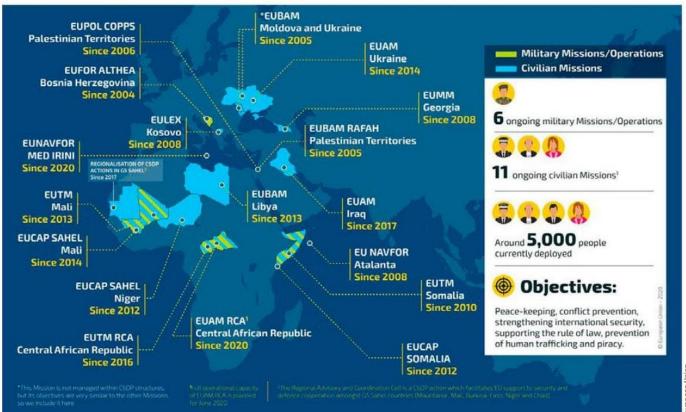


Image Source: The Hindu

Common Security and Defence Policy

- CSDP is a framework for cooperation among the EU member states to conduct peace-keeping and international security operations in developing countries using civil and military assets provided by the states.
- CSDP missions and operations contribute to global security abroad and within the EU.
- They aim to help prevent or resolve conflicts and crises and enhance the capacities of allies.

Significance:

 Once Denmark joins CSDP, its officials will be allowed to stay in the room when EU officials conduct defence-related discussions, and Danish troops will be allowed to participate in EU military operations.

News Source: The Hindu

THE WESTERN SAHARA DISPUTE

Why in the News?

Recently, Algerian President Abdelmadjid Tebboune announced the suspension of its 20-year-old treaty of "friendship, good neighbourliness, and co-operation" with Spain.

This is being seen as an intensification of Algeria's anger over Spain's recent foreign policy shift on the **disputed Western Sahara region.**

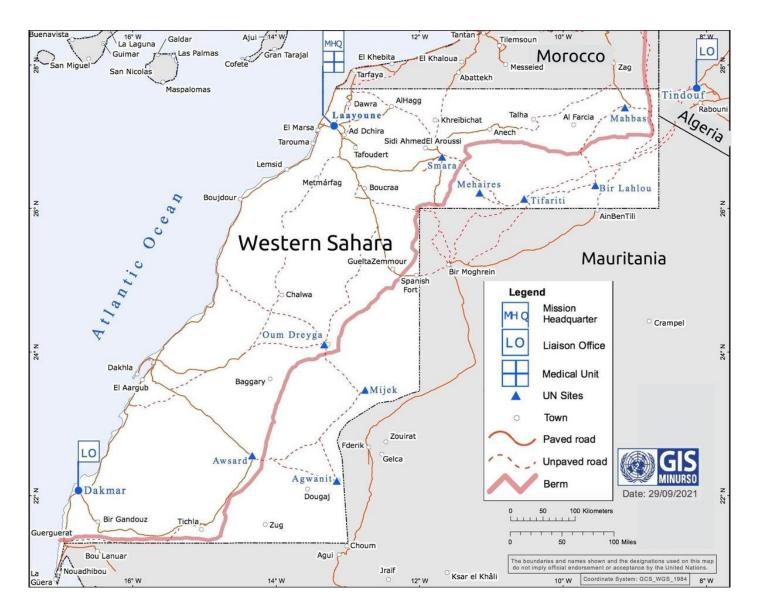


Image Source: The Hindu

Key Points:

Background:

- Spain was the former colonial power in Western Sahara until the region was annexed by Morocco in 1975.
- Since then it has been the subject of a long-running territorial dispute between Morocco and its indigenous Saharawi people, led by the Polisario Front.
- In March 2022, Spain endorsed a plan by Morocco which would give limited autonomy to Western Sahara, but still keep it under Moroccan rule.
- Before the recent shift, Spain had supported the United Nation's mandate to hold a referendum in Western Sahara to allow self-determination.
- In the wake of this dispute, Algeria had cut diplomatic ties with Morocco in 2021 and now set for suspenion of its 20-year-old treaty of "friendship, good neighbourliness, and co-operation" with Spain.

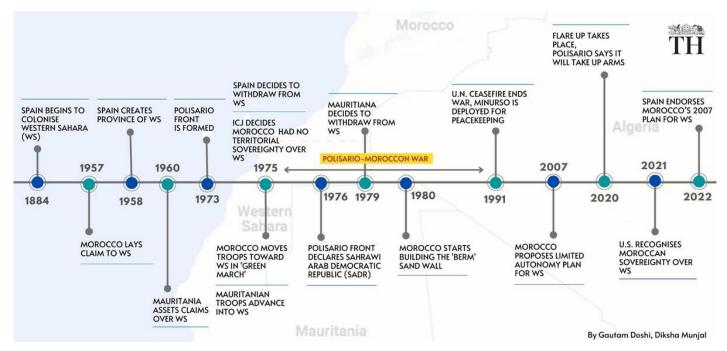


Image source: The Hindu

Polisario Front:

- The Polisario Front is a politico-military group founded in 1973 with the help of Libya and Algeria, which have had historic ties with the indigenous population of Western Sahara.
- It called for self-determination and enjoys the backing of Algeria.
- The Polisario Front—also called the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro— waged a successful guerilla war against the Spanish colonialists, and Spain withdrew from the region in 1975.
- On February 27, 1976, a day before Spain formally exited the province, the Polisario Front declared the Sahrawi Arab Democratic Republic (SADR) in Western Sahara.
- » While SADR does not have Western recognition, it has been recognised by 70 countries and is a member of the African Union.
- Later, Both Morocco and Mauritania moved troops to Western Sahara to assert their claims.
- Mauritania signed a peace treaty with Polisario in 1979, consequently withdrawing from the region.

International Court of Justice Verdict over Dispute:

- In 1975, the UN General Assembly asked the International Court of Justice(ICC) at The Hague to decide whether Morocco and Mauritania's claims over Western Sahara were authentic.
- ICC ruled that there was no evidence of "any ties of territorial sovereignty" between Western Sahara

and either Morocco or Mauritania while stating that there were "indications" that some tribes in the territory were loyal to the Moroccan Sultan.

 The Court reaffirmed the UNGA 1541 resolution that called for the region's decolonisation and complete compliance with the principle of self-determination.

UN Brokered Deal:

- While the UN has been unsuccessful in its calls to hold a referendum since the ceasefire, it finally succeeded in bringing both Morocco and Polisario to the negotiating table in 2007.
- Morocco proposed a plan to grant Western Sahara limited autonomy under which the Sahrawis would run their government but under Moroccan sovereignty.
- Besides this, under the terms of the plan, Rabat would continue to control the phosphate reserves and fisheries, defence, and foreign affairs.
- Polisario rejected these plans and has continued to call for independence. Algeria has also opposed the Moroccan proposal.

About

Western Sahara region

- Western Sahara is a vast, sparsely-populated desert region in Northwest Africa, stretching across 2.5 lakh sq km.
- It is bordered by Morocco in the North, Algeria in a small northeastern patch, and Mauritania in the East and South.
- It also has a long coast with the Atlantic Ocean in

the West and Northwest.

 It is a region rich in phosphates and other minerals and has a lucrative fishing industry on its Atlantic coast.

News Source: The Hindu

CONFLICT OVER AEGEAN SEA: TURKEY & GREECE

Why in the News?

 Turkey has accused Greece of building a military presence in violation of the 1923 Treaty of Lausanne and the 1947 Paris Treaty, which guarantee the Aegean islands' unarmed status.

Key Points:

Background:

- Greece and Turkey have been regional adversaries on a host of issues concerning the Aegean sea since the 1970s, both asserting rival claims over their borders in the Sea.
- They came to the brink of war in 1996 over a pair of uninhabited islets in the Aegean Sea, referred to as the Imia islets in Greece and as Kardak in Turkey.
- Turkey alleges that Greece has been building a military presence in violation of international treaties that guarantee the unarmed status of the Aegean islands.
- Meanwhile, Greece maintains that Turkey has deliberately misinterpreted the treaties (Treaty of Lausanne and the 1947 Paris Treaty), adding that it has legal grounds to defend itself.

Points of Dispute:

Territorial Seas:

- In 1995, Greece ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which provides a legal framework to recognise the limits of maritime zones of coastal nations. Turkey did not sign it as it did not favour its interest in the Aegean Sea.
- Presently, Turkey claims a territorial sea of six nautical miles and has not exercised its claim over the 12 nautical miles from its coast in the Aegean Sea.
- Turkey argues that if Greece extends its territorial waters it would have control over two-thirds of the Aegean Sea, depriving Turkey of its basic access to international waters and trade routes.

Continental Shelves and Exclusive Economic Zones:

- Greece argues, citing UNCLOS provisions, that every Greek island in the Aegean generates its own continental shelf, which would mean that the Greek Continental Shelves extend to Eastern Greek islands near the Turkish Coast.
- » However, Turkey contends that the continental shelf border in the Aegean is the median line between the coasts of the two countries and should be determined on an equitable basis.
- Turkey maintains that it will undertake exploratory work in the areas it lays claims to as there is no bilateral agreement between the two countries delimiting their continental shelves.

Continental Shelf:

- In geological terms, the continental shelf is defined as the seabed and subsoil that is the prolongation of a country's landmass, extending beyond its territorial sea.
- As per the UNCLOS, the continental shelf extends to 200 nautical miles from the country's coastal baseline but is within its continental margin. A country has sovereign rights over the natural resources in the water and the seabed and soil within its continental shelf.

Exclusive Economic Zone (EEZ):

- EEZ is a zone in which a country has special rights to exploration, use of natural resources, wind and hydro-power generation, and other economic activities like laying of pipelines, fishing and so on.
- EEZs also extend to 200 nm from the coastline.

Militarisation:

- Turkey has cited the Lausanne and Paris treaties, arguing that Greece is violating them by increasing its military presence in the Aegean Islands.
- Greece argues that it has a military presence in such islands for the purposes of self-defence. After Turkey's invasion of Cyprus in the 1970s, Greece militarised the Dodecanese Islands near Turkey for defensive purposes.

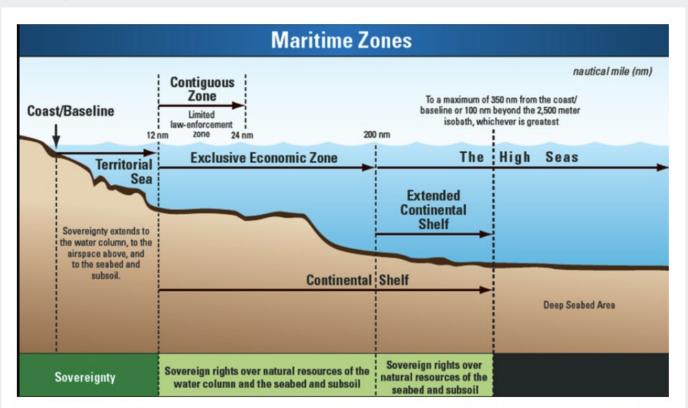
Airspace Violations:

- UNCLOS states that a country has sovereign rights over the airspace above its territorial sea
- Currently, Greece claims six nm of territorial sea in the Aegean, starting from its coast. Hence, its internationally recognised airspace over the Aegean is also up to six nm.

Both Greece and Turkey have alleged that the other is carrying out flights near or over their coasts.

United Nations Convention on the Law of the Sea (UNCLOS)

- UNCLOS is an international treaty which was adopted and signed in 1982.
- It **replaced the four Geneva Conventions** of April 1958, which respectively concerned the territorial sea and the contiguous zone, the continental shelf, the high seas, fishing and conservation of living resources on the high seas.
- · It is also known as the Law of the Sea.
- UNCLOS divides marine areas into five main zones which are-
- Internal Waters
- Territorial Sea
- Contiguous Zone
- Exclusive Economic Zone (EEZ)
- · the High Seas



Maritime zones under the United Nations Convention on the Law of the Sea (UNCLOS) | Photo Credit: National Oceanic and Atmospheric Administration (American govt agency), noaa.gov

Image Source: The Hindu

International treaties about Aegean islands:

The Lausanne Treaty of 1923:

- It was signed at the end of the First World War to settle the conflict between Turkey (the successor of the Ottoman Empire) and the Allied Powers including Greece.
- The Treaty defined the boundaries of Turkey and Greece, and several islands, islets and other major territories in the Aegean Sea beyond three miles

from the Turkish coast were ceded to Greece, with the exception of three groups of islands.

- Under the terms of the Treaty and the Lausanne Convention of 1923, **Greece was obligated to keep the islands demilitarised.**
- The Treaty also opened up civilian shipping passage in the Turkish Straits and mandated Turkey to demilitarise the straits. Turkey also ceded Cyprus to the British.

Paris Peace Treaties of 1947

- At the end of the Second World War, as part of the Paris Peace Treaties of 1947, the Dodecanese Islands (a group of 12 islands in the Aegean Sea) were given to Greece, again with the obligation of permanent and total demilitarisation.
- » They had been ceded to Italy in 1923.
- While Turkey recognises both these treaties, Greece accuses it of wrongly interpreting them, and argues that the 1936 Montreux Convention Regarding the Regime of the Straits superseded the Lausanne Treaty on the Straits, as it gave Turkey the power to militarise the Turkish Straits, hence nullifying the obligation upon Greece to demilitarise the Aegean Islands.

Montreux Convention:

- The Montreux Convention was signed in 1936 regarding the Regime of the Straits.
- Under the accord, Turkey has control over the Bosphorus and Dardanelles and the power to regulate the transit of naval warships.
- It also guarantees the free passage of civilian vessels in peacetime and restricts the passage of ships not belonging to Black Sea countries.
- In wartime, Turkey is authorised to close the straits to all foreign warships or when it is threatened by aggression.
- It can also refuse transit for merchant ships from countries at war with Turkey and fortify the straits in case of conflict.
- All non-Black Sea countries wishing to send vessels must notify Turkey 15 days in advance, while Black Sea nations must give eight days' notification.



Image Source: WorldAtlas

Aegean Sea:

- Location: The sea is situated between the Anatolia and Balkan peninsulas and lies between Turkey and Greece.
- Islands In The Aegean Sea: North Aegean Islands, West Aegean Islands, Sporades, Cyclades, Saronic Islands.
- The Aegean Sea experiences a Mediterranean climate, experienced in Western Turkey and Greece.
- The Bosphorus and Dardanelles Straits connect the Aegean Sea to the Black Sea and the Marmara Sea respectively.
- The Aegean is **subdivided** into the **Myrtoan Sea** and the **Thracian Sea** (marked on the map above) and lies on the African and Eurasian tectonic plates' collision path, making the region one of the most seismically active areas in the Mediterranean.

News Source: The Hindu

INDIAN DELEGATION'S VISIT TO AFGHANISTAN

Why in the News?

- India has sent a multi-member team of senior diplomats to Afghanistan to oversee the delivery of its humanitarian assistance in Afghanistan.
- This is the first official delegation-level engagement of India with the Taliban regime after the August 15, 2021 takeover.

Key Points:

About

Location of Afghanistan:

 Afghanistan is bordered by Iran, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan, it has a short border in the Wakhan Corridor panhandle with Xinjiang, an autonomous region of China.



Image Source: The Indian Express

What prompted India to initiate talks with the Taliban Regime?

- **Investment:** India has made investments worth billions of dollars in the past 20 years.
- » It would want to protect these investments and retain the Afghan people's goodwill.
- Checking Terrorism: During 1990s in Taliban era, Afghanistan became a safe haven for anti-India

terrorist groups.

- » India would not like history to repeat itself and would want commitments from the Taliban that they would not offer support for anti-India groups.
- Strategic Interests: The Taliban remaining a Pakistani satellite forever is not in India's strategic interest.
- India cannot pursue any of these objectives if it does not engage with the Taliban.

Significance of Indian Delegation Visit to Afghanistan:

- As part of its cautious approach to the Taliban, India has been supportive of the humanitarian requirements of the Afghan people, and has been sending medicines and food to Kabul since earlier this year.
- The Indian delegation's visit is the culmination of quiet engagement with the Taliban, which started soon after it provided indirect help in the evacuation of Indian officials from Kabul in August 2021.

India's Hesitation with the Taliban rule:

- Terror Threat: Lashkar-e-Taiba and the Jaish-e-Mohammad that have been keeping bases and training grounds along with the southern provinces that border Pakistan could now have more ungoverned spaces to carry out attacks against India.
- Influence of Pakistan: The Taliban's control could also mean a bigger hand for the Pakistani military and intelligence agencies to influence outcomes for the country, which will mandate a much smaller role for Indian development and infrastructure work that has won it goodwill over the past 20 years.
- Trade: In addition, trade through Afghanistan under a
 Taliban regime could be routed through Karachi and
 Gwadar, and the Indian investment in the Chabahar
 port, meant to circumvent Pakistan, may become
 unviable.
- Radicalisation: There is a threat of growing radicalisation and space for pan-Islamic terror groups in India's neighbourhood with the Taliban regime in power.

Importance of Afghanistan:

- Geostrategic Location: Afghanistan is geostrategically extremely critical, in terms of our outreach to the Central Asian Republics and as a counterbalance to Pakistan and China.
- Natural Resources: A substantial concentration of such resources is along Afghanistan's borders with Tajikistan, Uzbekistan, Iran, and Turkmenistan which remain untapped.

India-Afghanistan Cooperation: Brief Overview

 The 2011 India-Afghanistan Strategic Partnership Agreement recommitted Indian assistance to help rebuild Afghanistan's infrastructure and institutions; education and technical assistance for capacitybuilding in many areas; encourage investment in Afghanistan; and provide duty-free access to the Indian market.

- India emerged as the **largest regional donor** for Afghanistan with pledges of almost \$3 billion.
- India has executed several major infrastructure projects, including the new parliament building, the 218-km Zaranj-Delaram highway and the \$290-million Friendship Dam.
- Despite the denial of an overland route by Pakistan, India-Afghanistan trade has grown with the establishment in 2017 of an air freight corridor. In 2019-20, bilateral trade crossed \$1.3 billion.
- Afghan exports are mainly fresh and dried fruit while India's Exports include pharmaceuticals, medical equipment, computers and related materials, cement, and sugar.

Way Forward:

- India should not hurry in to offer diplomatic recognition to the Taliban's predominantly Pashtun, men-only regime, which has imposed harsh restrictions on women at home.
- India should work with other regional and global players to push the Taliban to adopt a more inclusive regime, while at the same time maintaining a policy of gradual bilateral engagement rooted in realism.

About Taliban:

- The **Taliban**, **or "students" in the Pashto language**, emerged in the early 1990s in northern Pakistan following the withdrawal of Soviet troops from Afghanistan.
- It is believed that the predominantly Pashtun movement first appeared in religious seminaries
 mostly paid for by money from Saudi Arabia which preached a hardline form of Sunni Islam.
- The promise made by the Taliban in Pashtun areas straddling Pakistan and Afghanistan - was to restore peace and security and enforce their own austere version of Sharia, or Islamic law, once in power.

News Source: The Hindu

14TH BRICS SUMMIT

Why in the News?

- Recently, the Prime Minister led India's participation at the 14th BRICS Summit hosted by China in a virtual format.
- The theme of the summit is "Foster High-quality BRICS Partnership, Usher in a New Era for Global Development".

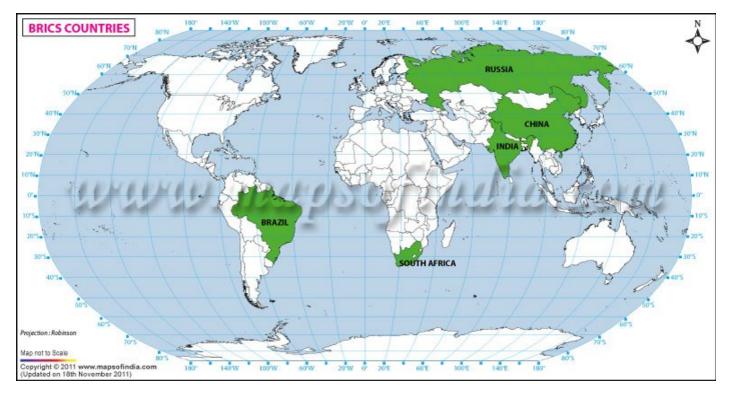


Image Source: Map Of India

Key Highlights of 14th BRICS Summit:

- Participating Guest Countries: Algeria, Argentina, Cambodia, Egypt, Ethiopia, Fiji, Indonesia, Iran, Kazakhstan, Malaysia, Senegal, Thailand and Uzbekistan.
- Russia-Ukraine War: The BRICS declaration backed Russia-Ukraine talks, and called for the UN to strengthen efforts to manage the humanitarian situation in and around Ukraine.
- **Terrorism:** The BRICS declaration reiterated that terrorism should not be associated with any religion, nationality, civilisation or ethnic group.
- Corruption: The summit welcomed the BRICS Initiative on Denial of Safe Haven to Corruption, which aims to further strengthen anti-corruption capacity building through education and training programs.
- **Economic Partnership:** The summit emphasised the importance of continued implementation of the Strategy for BRICS Economic Partnership 2025.
- Digital Economy: The declaration welcomed the establishment of the Digital Economy Working Group by upgrading the E-commerce Working Group.
- BRICS Framework for Cooperation on Trade in Services: BRICS nations agreed to strengthen exchanges and cooperation in trade in services and the engagement of BRICS national focal points.
- Common position on Afghanistan: It calls for inclusive and representative government.

Importance of Afghanistan for the BRICS:

- The war torn Afghanistan is in close proximity with China, Russia and India. Whatever happens in there it has an impact on the three of the member countries and globally too.
- **Economic Governance:** India focussed on the common agenda on economic governance, the importance of multilateral systems.
- **UN Reforms:** Brazil made a push for UN reform to become a BRICS initiative- significant since China and Russia are UNSC permanent members.
- **BRICS Plus:** BRICS countries agreed to push for expansion of the group to a "BRICS Plus", and this year saw outreaches to Argentina, Egypt, Indonesia, Kazakhstan, Saudi Arabia, UA, Nigeria, Senegal and Thailand to attend development meetings.

What are the practical BRICS initiatives?

- **New Development Bank or BRICS Bank:** It has so far given about \$6.9 billion in loans to India.
- Contingent Reserve Arrangement: To help members whose currencies are buffeted by global economic trends.
- BRICS Payment System: It has been envisaged as an alternative to the SWIFT payment system.
- Customs agreement to coordinate and ease trade transport between BRICS countries.
- R&D centre on Covid vaccine research in South Africa.

- A Remote Sensing constellation of satellites has been launched – with 6 satellites including 2 from India, 2 from China, 1 from Russia, and 1 Brazil-China collaboration
- Digital BRICS Task Force (DBTF) and a plan to hold the Digital BRICS Forum in 2022

Contradictions in BRICS:

- BRICS members don't discuss bilateral issues, but issues like the India-China border dispute and PLA transgressions over the LAC are bound to have an impact on BRICS solidarity in the long run.
- India and even Russia are not part of China's big infrastructure push the Belt and Road Initiative, while Brazil and South Africa are
- The BRICS document emphasising National Positions on Ukraine, indicates there are differences between the members over Russia's actions, and this could prove problematic in the years ahead.
- China and Russia have come closer, especially with the announcement of a no-limits partnership, India, Brazil and South Africa have all made outreaches to the US and Europe in equal if not greater measure.

India & BRICS:

- From the Indian perspective, BRICS has emerged as the voice of developing countries, or the global south. As BRICS countries face an aggressive club of developed countries, raising challenges on issues from WTO to climate change, India sees BRICS as a platform to protect the rights of the developing countries.
- The BRICS allows India and China to modulate their rivalry within the setting of a small grouping, even when bilateral relations remain rocky.
- » This was clear during the Doklam standoff of 2017, when both sides remained engaged through BRICS throughout the entirety of the crisis.
- BRICS provides **India a transcontinental reach** by virtue of Brazil and South Africa's presence.

BRICS

In 2001, Jim O'Neill, a British economist coined

- **the term 'BRIC'** to describe the four emerging economies of Brazil, Russia, India, and China.
- The grouping was formalised during the first meeting of BRIC Foreign Ministers on the margins of the UNGA in 2006.
- » South Africa became a member at the BRICS Foreign Ministers' meeting in 2010.
- The BRICS bloc brings together five of the largest developing countries of the world, representing 27% of the world's land mass, and 42% of the world's population, 24% of global GDP, and 16% of Global trade, and produces 33% of the world's food.

Significance of the BRICS summit:

- The summit was the first meeting of such a grouping including Russia since the invasion of Ukrainegiving the message that Russia is not isolated, economically or otherwise, as the US and Europe may like to project.
- BRICS has emerged as an important forum for India to engage with the non-Western countries.
- It gives credence to its policy of multi-engagement where it engages with all the powers relevant to its national interests.
- » For Example: BRICS leaders met one month after the Quad summit in Tokyo, and days before a G-7 summit in Germany, where both India and South Africa have been invited to attend a few sessions.

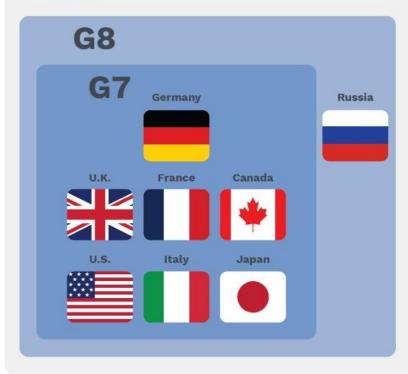
News Source: The Indian Express

PARTNERSHIP FOR GLOBAL INFRASTRUCTURE AND INVESTMENT (PGII)

Why in the News?

- Recently, the G7 leaders launched the Partnership for Global Infrastructure and Investment (PGII).
- » Germany holds the presidency of the G7 in 2022.

G20





Background:

G6, G8, G7

- G7 was launched in **1975 by former French President** Valéry Giscard d'Estaing.
- The heads of state and government of Germany, France, Great Britain, Italy, Japan and the US — a Group of Six — met for a fireside chat at Rambouillet Castle in France.
- In 1976, Canada was added to the group, and the first G7 met in Puerto Rico.
- In 1998, the Group of Eight was constituted as Russia became a member.
- » Russia was removed from the group after its violation of Ukraine's sovereignty and territorial integrity in 2014.

About Partnership For Global Infrastructure And Investment (PGII):

- The Partnership for Global Infrastructure and Investment (PGII) was unveiled during the G7 Summit.
- » PGII is being considered as an official launch and a rebranding of the Build Back Better World initiative (rolled out at the G7 summit last year).
- It aims to mobilise nearly USD 600 billion from the G7 by 2027 to invest in critical infrastructure that improves lives and delivers real gains for all of our people.

- PGII is set to rival China's Belt and Road Initiative (BRI) by raising funds for global infrastructure programmes in poor countries.
- » China's BRI seeks to connect Asia with Africa and Europe via land and maritime networks with the aim of improving regional integration, increasing trade and stimulating economic growth.

· About G7:

- The G7 is an informal forum of leading industrialised nations.
- Members: Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
- Representatives of the European Union are always present at the annual meeting of the heads of state and government of the G7.
- Participating organisations: the United Nations, the World Health Organisation (WHO), the World Trade Organisation (WTO), the International Monetary Fund (IMF), and the World Bank.
- G7 numbers:
- As of 2022, G7 countries make up 10% of the world's population.
- 31% of global GDP, and
- 21% of global carbon dioxide emissions, according to the Summit website.

News Source: The Hindu

THE FRAGILE STATE OF NUCLEAR DISARMAMENT

Why in the News?

The Stockholm International Peace Research Institute (SIPRI) has released its yearbook highlighting some trends of the past year in international security.

• The expected rise of the global nuclear arsenal was the chief cause of concern among SIPRI experts.

GLOBAL SPENDING TOPS \$2 TRN FOR 1ST TIME ■America ■ Asia ■Europe ■West Asia ■Africa 1,796 1,843 1,908 1,960 2,113 TOTAL 186 181 189 193 40 43 41 42 41 418 363 378 346 339 470 506 519 586 484 2017 2018 2019 2020 2021 Source: SIPRI

Image Source: business-standard

Key Highlights of the Yearbook

Trends in Military Spending:

- During 2012-2021, military spending as a percentage of gross domestic product has largely been stable.
- Russia leads the charge in absolute numbers of nuclear inventory (5977) followed by the USA (5428).

Global Arms Imports:

- Military modernisation is seen to be a global trend.
- India was the top weapons importer during the 2017-2021 period.
- Other countries in the top five arms importers list include Saudi Arabia, Egypt, China, and Australia.
- These five nation-states account for **38% of total global arms imports.**

Concerns flagged by the yearbook:

- It mentions the following as worrying indicators of an unstable system.
- » Low-level border clashes between India and Pakistan.
- » The civil war in Afghanistan, and
- » Armed conflict in Myanmar as some of the worrying indicators of an unstable system.

- It highlighted three cause of concern trends:
- » Chinese-American rivalry
- Involvement of state and non-state actors in multiple conflicts, and
- » The challenge that climatic and weather hazards pose.
- The Russian invasion of Ukraine has raised some serious concern because of the continuous rhetoric from the Kremlin over them not shying away from the use of nuclear weapons.
- China's recent activities surrounding the construction of 300 new nuclear missile silos have also been turning heads.
- The report claimed that Iran's military budget grew to \$24.6 billion, growing for the first time in four years.

General attitude among countries about existing nuclear and arms-related treaties:

- The leaders of the P5 countries (China, France, Russia, the U.K. and the U.S.) issued a joint statement affirming the belief that "a nuclear war cannot be won and must never be fought".
- This highlights collective belief that bilateral and multilateral arms control agreements and commitments were indeed important.
- The nation-states are making sure to remain well within the ambit of what the treaties and agreements ask for.
- The states are aware of the value of the rhetoric and the security dilemma that their actions present.
- » The recent Russian invasion of Ukraine and the subsequent NATO bids by Finland and Sweden seem to be telling events.
- The year 2021 also saw the Treaty on the Prohibition of Nuclear Weapons, 2017 coming into effect.
- The Nuclear Suppliers Group (NSG) and the Missile Technology Control Regimes (MTCR) held their annual meetings despite decision making being limited due to the COVID-19 pandemic.

What lies ahead?

- A strong political opposition would be needed to help keep the ruling dispensation in check.
- Furthermore, the two largest nuclear weaponsholding states need to take on a more engaging role in the international arena.
- Negotiation should be used by nations to reach a peaceful settlement.

News Source: The Hindu

FATF: PAKISTAN ON GREYLIST

Why in the News?

Recently, the global financial crime watchdog
 Financial Action Task Force (FATF) in its latest
 plenary meeting, announced that Pakistan could be
 removed from the "grey list" after a visit by a factfinding team to verify the measures it has taken to
 deal with terror financing.



Telegraph india

Key Points:

Formation of FATF

The FATF was established at the G7 Summit of 1989 in Paris, over concerns of the member countries about growing money laundering activities.

The heads of G7 countries and the president of the European Commission brought together a Task Force after addressing loopholes in the global financial system.

Later, in the aftermath of the 9/11 terror attack on the United States, FATF also added terror financing as the main focus area.

This was broadened In 2012, to include restricting the funding of weapons of mass destruction.

About FATF

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Financial Action Task Force:

- The FATF is an inter-governmental body established in 1989.
- Headquarters: Paris
- Membership: The FATF currently has 39 members including two regional organizations the European Commission and Gulf Cooperation Council.
- » India has been a member of the FATF since 2010.
- » It is also a member of its regional partners, the Asia Pacific Group (APG) and the Eurasian Group (EAG).
- It aimed to combat money laundering, terrorist financing, and other related threats to the integrity of the international financial system.
- It lays down international standards with the objective to prevent money laundering and terror financing.
- FATF depends on the voluntary implementation of its reports by member countries.

What are FATF's 'grey' and 'black' lists?

- While the words 'grey' and 'black' list do not exist in the official FATF lexicon, they designate countries that need to work on complying with FATF directives and those who are noncompliant, respectively.
- At the end of every plenary meeting, FATF comes out with two lists of countries:

» The Grey List Countries:

- These are the countries that are "actively working" with the FATF to counter criminal financial activities.
- In their cases, the watchdog does not tell other members to carry out due-diligence measures vis-a-vis the listed country but does tell them to take into account the risks such countries possess.
- Currently, there are 23 countries on the grey list. Some of the other countries on the list are Pakistan, Myanmar, Morocco, the Philippines, Panama, Senegal, Albania, Jamaica, and Turkey.

The Black List Countries:

These are the countries that are designated

by the FATF as 'high-risk jurisdictions subject to call for action'.

- In this case, the countries have considerable deficiencies in their AML/CFT regimens.
- For such countries, the body calls on members and non-members to apply enhanced due diligence and in the most serious cases, apply counter-measures such as sanctions.
- Currently, two countries- North Korea and Iran are on the black list.

Why is Pakistan on the Grey List?

- The case of Pakistan is significant as it has found itself on the grey list frequently since 2008, for weaknesses in fighting terror financing and money laundering.
- In 2009, the FATF reaffirmed its designation of Pakistan in the grey list, as the country began to cooperate with the FATF-like regional body, Asia Pacific Group (APG), for a Mutual Evaluation (ME) process.
- Due to significant progress made by Pakistan, by early 2015, Pakistan was no longer on the grey list.
- » However, it came back to the list in 2018 and was given an action plan to restrict terror financing activities and monitor the actions of UN-designated terrorists in the country.
- In October 2019, Pakistan was warned by FATF for addressing only five out of the 27 tasks given to it in controlling funding to terror groups like the Lashkar-e-Taiba, Jaish-e-Mohammad, and Hizbul Mujahideen, responsible for a series of attacks in India
- In June 2021, however, Pakistan was given another seven-point action plan by the APG, focused

- specifically on combating money laundering.
- The FATF appreciated Pakistan's commitment to fighting financial crimes and said that the country now aims to complete the 2021 action plan by January 2023.
- During the latest meeting that concluded on June 17, FATF announced that Pakistan could be removed from the "grey list" after a visit by a fact-finding team to verify the measures it has taken to deal with terror financing.

Implications of listing of Countries on FATF:

- Being listed under the FATF's two lists makes it difficult for countries to get aid from organizations like the International Monetary Fund (IMF), Asian Development Bank (ADB), and the European Union.
- According to an IMF study, it may also affect capital inflows, foreign direct investments, and portfolio flow in the country.

News Source: The Hindu

INDIA - U.S TRADE TIES

Why in the News?

 Recently, the U.S. surpassed China to become India's top trading partner in 2021-22, reflecting strengthening economic ties between the two countries.

About:

In 2021-22, the UAE with \$72.9 billion, was the third-largest trading partner of India. It was followed by Saudi Arabia (\$42,85 billion), Iraq (\$34.33 billion) and Singapore (\$30 billion).

India-US Trade Ties:



Major Export items:

 petroleum polished diamonds, pharmaceutical products, jewellery, light oils and petroleum, frozen shrimp

Major Import items:

• petroleum, rough diamonds, liquified natural gas, gold, coal, waste and scrap, almonds etc.

Reason for Increasing Bilateral Trade:

- India is emerging as a trusted trading partner and global firms are reducing their dependence only on China for their supplies and are diversifying their business into other countries like India.
- In the coming years, the bilateral trade between India and the U.S. will continue to grow. India has joined a U.S.-led initiative to set up an Indo-Pacific Economic Framework (IPEF) and this move would help boost economic ties further.

India-China Trade

- During 2021-22, India's two-way commerce with China aggregated at \$115.42 billion as compared to \$86.4 billion in 2020-21.
- Exports to China marginally increased to \$21.25 billion last fiscal year from \$21.18 billion in 2020-21, while imports jumped to \$94.16 billion from about \$65.21 billion in 2020-21.
- Trade gap rose to \$72.91 billion in 2021-22 from \$44 billion in the previous fiscal year.
 - Generalised system of Preference (GSP):

· The GSP is the largest and oldest US trade

- preference programme, is designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.
- India has been the biggest beneficiary of the GSP regime and accounted for over a quarter of the goods that got duty-free access into the US in 2017.
- But in 2019, the USA has terminated" India's designation as a beneficiary of its Generalised System of Preferences (GSP).

News Source: The Hindu

CHINA GROWING FOOTPRINT IN PACIFIC ISLAND NATION

Why in the News?

- China's recent effort to push for a comprehensive framework deal with the 14 pacific island countries has failed to gain consensus among the PICs.
- » The Foreign Minister of China, is currently on an eight-day visit to ten Pacific Island Countries (PICs).

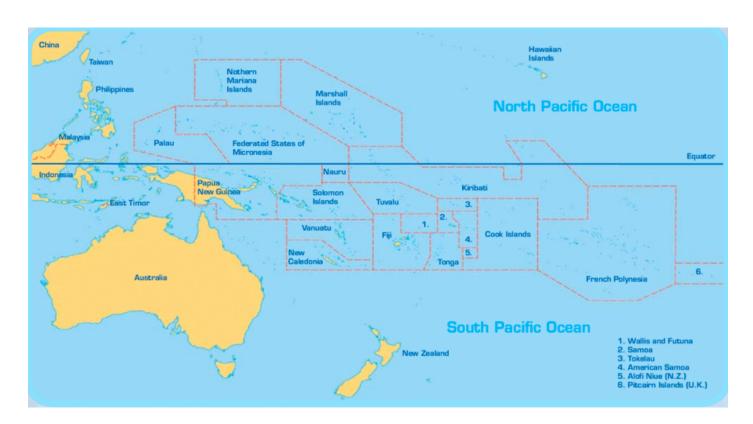


Image Source: Researchgate.net

About the Pacific Island Countries:

- They are a cluster of 14 states which are located largely in the tropical zone of the Pacific Ocean between Asia, Australia and the Americas.
- The PICs lie in the natural line of expansion of China's maritime interest.
- They include Cook Islands, Fiji, Kiribati, Republic of Marshall Islands, Federated States of Micronesia (FSM), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
- The islands are divided on the basis of physical and human geography into three distinct parts — Micronesia, Melanesia and Polynesia.

Significance of the PICs:

· Economic:

- » The islands are very small in land area, and are spread wide across the vast equatorial swathe of the Pacific ocean.
- » As a result, though they are some of the smallest and least populated states, they have some of the largest Exclusive Economic Zones (EEZs) in the world.
- » Large EEZs translate into huge economic potential due to the possibility of utilising the wealth of fisheries, energy, minerals and other marine resources present in such zones.
- » Hence, they prefer to be identified as Big Ocean States, rather than Small Island States.
- » In fact, Kiribati and FSM, both PICs, have EEZs larger than that of India.

· Strategic:

» Moreover, these countries have played an important role in major power rivalry as springboards for power projection and laboratories for developing and demonstrating strategic capabilities.

· Geopolitical:

- The Pacific islands also acted as one of the major theatres of conflict during the Second World War – between imperial Japan and the U.S.
- » Due to the remoteness of these islands from the Soviet Union and major population centres of the world, some of the major nuclear weapon test sites of the U.S., the U.K. and France were located here.

Mobilise International Opinion:

» In addition, the 14 PICs, bound together by shared economic and security concerns, account for as many votes in the United Nations, and act as a potential vote bank for major powers to mobilise international opinion.

China's interest in PICs:

Security: At a time when the Quadrilateral Security Dialogue has emerged as a major force in the Indo-Pacific vis-à-vis China, the need to influence the PICs becomes even more pressing for China.

Geostrategically: The PICs are strategically positioned in what China refers to construct its "Far Seas," control of which will make China a formidable Blue Water Navy.

Taiwan Factor:

- It becomes important for China to break Western domination of island chains of the Pacific which could **impede the reunification of Taiwan.**
- China has been successful in getting diplomatic recognition from 10 out of the 14 PICs through its economic largesse.

Implications of China's latest move:

- The secrecy with which it was discussed sent worrying signals across the Pacific.
- The PICs as a collective did not agree to China's extensive and ambitious proposals, and therefore China failed to get a consensus on the deal.
- The powers who have traditionally controlled the regional dynamics like the U.S. and Australia became more cautious.
- The U.S. has started revisiting its diplomatic priority for the region ever since the China-Solomon Islands deal.
- The strengthening of China's diplomacy toward the Pacific Islands has made the countries that have historically dominated regional dynamics, such as the United States and Australia, increasingly wary.

News Source: The Hindu

INDIA OPPOSES (E-TRANSMISSION) AT WTO

Why in the News?

- Recently, at the 12th ministerial meeting of the World Trade Organization in Geneva, India reiterated its opposition to a proposal to extend the global moratorium on customs duties on electronic transmission.
- The moratorium was extended at the 11th MC in Argentina in 2017 for two years.

Key Points:

Key Highlight of 12th Ministerial Meeting

- Curtailing harmful fishing subsidies: The WTO passed a multilateral agreement that would curb 'harmful' subsidies on illegal, unreported and unregulated fishing for the next four years, to better protect global fish stocks.
- » Since 2001, member states have been negotiating the banning of subsidies that promote overfishing.
- Global Food Security: Members agreed to a binding decision to exempt food purchased by the UN's World Food Programme (WFP) for humanitarian purposes, from any export restrictions.
- » In light of the global food shortages and rising prices caused by the war between Ukraine and Russia, the group's members issued a declaration on the importance of trade in global food security and that they would avoid bans on food exports.
- » However, countries would be allowed to restrict food supplies to ensure domestic food security needs.
- E-commerce transactions: India has asked the WTO to review the extension of the moratorium on custom duties on e-commerce transactions, which include digitally-traded goods and services.
- » All members agreed to continue the long standing moratorium on custom duties on e-commerce transmissions until the subsequent Ministerial Conference or until March 31, 2024.
- Covid-19 vaccine production: WTO members agreed to temporarily waive intellectual property patents on Covid-19 vaccines without the consent of the patent holder for 5 years, so that they can more easily manufacture them domestically.

About E-transmission Moratorium:

- In 1998, the General Council (GC) of the WTO
 established the Work Programme on E-Commerce
 (WPEC), with an exploratory and non-negotiating
 mandate, to comprehensively examine all traderelated issues relating to global e-commerce.
- WTO members had agreed not to impose customs duty on electronic transmission since 1998 and the moratorium has been periodically extended at the Ministerial Conferences, which is the highest decision-making body of the WTO.
- The moratorium is on digitizable products like photographic films, cinematographic films, printed matter, music, media, software and video games.
- The validity of the current extension on the moratorium is up to the 12th ministerial which will be held in June 2022 in Geneva, Switzerland.

Why is India opposing the extension of the E-transmission Moratorium?

- India is witnessing an exponential rise in imports
 of electronic transmissions, mainly of items like
 movies, music, video games and printed matter,
 some of which could fall within the scope of the
 moratorium.
- Allowing moratorium to lapse is important for developing nations to preserve policy space for their digital advancement.
- While the profits and revenues of digital players are rising steadily, the ability of governments to check these imports and generate additional tariff revenues is being 'severely' limited because of the moratorium on e-commerce.
- The United Nations Conference on Trade and Development has estimated the potential tariff revenue loss for developing countries every year due to the moratorium on e-transmissions at \$10 billion as compared to only \$289 million for high-income countries.
- India and South Africa on several occasions have asked the organisation to revisit the issue and have highlighted the adverse impact of the moratorium on developing countries.

About WTO (World Trade Organisation):

- The World Trade Organization is the only international organization that deals with the rules of trade between countries.
- The WTO is run by its 164 members, and according to its rules, all decisions are taken through consensus and any member can exercise a veto.
- It is the successor to the General Agreement on Tariffs and Trade (GATT), which was created in 1947.
- The Uruguay Round (1986-94) of the GATT led to the WTO's creation. WTO began operations on 1st January 1995.
- The Agreement Establishing the WTO, commonly known as the "Marrakesh Agreement", was signed in Marrakesh, Morocco in 1994.
- **Headquarters:** Geneva, Switzerland.
- Members: The WTO has 164 members
- » **India is a founder member** of the 1947 GATT and its successor, the WTO.
- Objective: The overall objective of the WTO is to help its members use trade as a means to raise living standards, create jobs and improve people's lives.

- GOVERNING STRUCTURE:
- Ministrial Conference(MC):
- The Ministerial Conference is the WTO's top decision-making body and usually meets every two years.
- All members of the WTO are involved in the MC and they can take decisions on all matters covered under any multilateral trade agreements.
- The WTO's 12th Ministerial Conference was held in Geneva from 12-17 June.
- · General Council (GC):

- It is composed of all WTO members and is required to report to the Ministerial Conference.
- Dispute Settlement Body and Trade Policy Review Body:
- General Council convenes in two particular forms:
- **Dispute Settlement Body:** To oversee the dispute settlement procedures.
- Trade Policy Review Body: To conduct regular reviews of the trade policies of individual WTO members.

News Source: The Indian Express



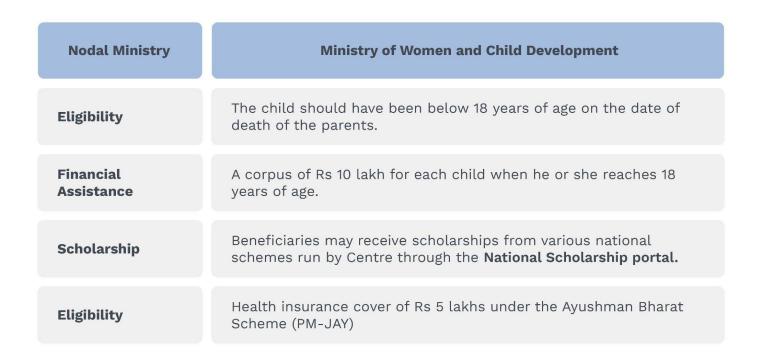
PM CARES FOR CHILDREN SCHEME

Why in the News?

 Recently, the Prime Minister released benefits for children who have lost their parents due to the pandemic under the PM CARES for Children scheme. The PM CARES Fund, is the parent source of funds for the PM CARES for Children scheme.

Key Points:

About PM CARES for Children:



Mechanism of fund flow for beneficiaries under PM CARES for Children Scheme

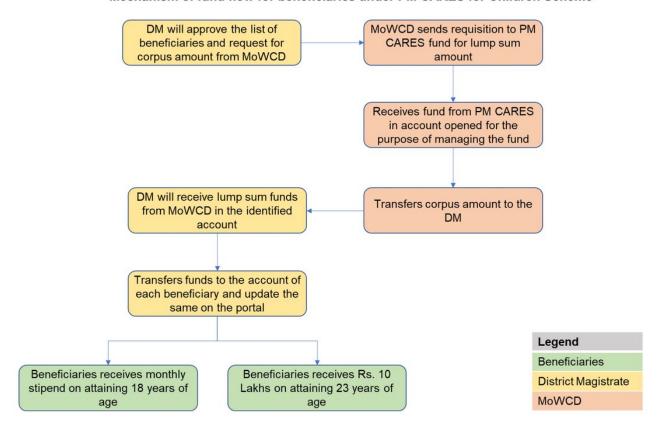


Image Source: The Hindu

PM CARES Fund:

- PM CARES Fund is a Public charitable trust.
- Objective: To deal with any kind of emergency or distress situation, like posed by the COVID-19 pandemic, and to provide relief to the affected.
- Head Office: New Delhi
- Organisational Structure: The Prime Minister is Chairperson (ex-officio) of the PM CARES Fund and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.
- Administration: The fund is administered on an honorary basis by a Joint Secretary (Administration) in the PMO as Secretary to the fund, who is assisted on honorary basis by an Officer of the rank of Director/Deputy Secretary (Administration) in the PMO.
- PM CARES Fund accepts voluntary contributions by individuals/organisations as well as contributions as part of CSR from Companies/Public Sector Undertakings (PSUs).
- » However, contributions flowing out of budgetary sources of the PSUs are not accepted.
- All contributions towards the PM CARES Fund are 100% exempt from Income Tax under Section 80(G) of the Income Tax Act, 1961.

News Source: The Hindu

SURROGACY ACT

Why in the News?

 Recently, the petitioners in the Delhi High Court questioned why marital status, age, or gender were the criteria for being allowed to commission or not commission surrogacy in India.

Key Points:

Provisions of Surrogacy Act

- Eligibility: A married couple can opt for surrogacy only on medical grounds. Additionally, the couple should not have a child of their own.
- » The **law defines a couple** as a **married Indian "man and woman"** and also prescribes an age-criteria with the woman being in the age group of 23 to 50 years and the man between 26 to 55 years.
- **Gender Criteria:** The law allows single women to resort to surrogacy, she should either be a widow or a divorcee, between the age of 35 to 45 years.
- » Single men are, however, not eligible.

- Any couple that has 'proven infertility' are candidates. The 'intending couple' as the Act calls them, will be eligible if they have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
- Certificate of Essentiality Criteria: It will be issued if the couple fulfils three conditions:
- » One, a certificate of infertility of one or both from a district medical board;
- » Two, an order of parentage and custody of the surrogate child passed by a Magistrate's court;
- » Thirdly, insurance cover for the surrogate mother.
- Eligibility Certificate:
- » An eligibility certificate mandates that the couple fulfils the following conditions:
 - They should be Indian citizens who have been married for at least five years;
 - The female must be between 23 to 50 years and the male, 26 to 55 years; they cannot have any surviving children (biological, adopted or surrogate);
 - However, this would not include a 'child who is mentally or physically challenged or suffers from life-threatening disorder or fatal illness.'
- Purposes for which surrogacy is Permitted:
 Surrogacy is permitted when it is:
- » for intending couples who suffer from proven infertility;
- » altruistic;
- » not for commercial purposes;
- » not for producing children for sale, prostitution or other forms of exploitation; and
- » for any condition or disease specified through regulations.

Why is there a need for a Surrogacy Act in India?

- The Act sought to regulate the surrogacy part of a rather flourishing infertility industry in the country.
- India has emerged as a hub for infertility treatment, attracting people from the world over with its stateof-the-art technology and competitive prices to treat infertility.
- Due to prevailing socio-economic inequities, underprivileged women found an option to 'rent their wombs' and thereby make money to take care of their expenses often to facilitate marriage, enable children to get an education, or provide for

- hospitalisation or surgery for someone in the family.
- Therefore the need was felt to regulate surrogacy in India.

Who can become a surrogate mother?

- Only a close relative of the couple can be a surrogate mother, one who is able to provide a medical fitness certificate.
- She should have been married, with a child of her own, and must be between 25 and 35 years, but can be a surrogate mother only once.

Regulating Surrogacy

- The Centre and State governments are expected to constitute a National Surrogacy Board (NSB) and State Surrogacy Boards (SSB) respectively, within 90 days of the passing of the Act.
- This body is tasked with enforcing standards for surrogacy clinics, investigating breaches and recommending modifications.
- Further, surrogacy clinics need to apply for registration within 60 days of the appointment of the appropriate authority.
- Offences under the Act include commercial surrogacy, selling of embryos, exploiting, abandoning a surrogate child etc.
- These may invite up to 10 years of imprisonment and a fine of up to Rs. 10 lakh.

What are the controversies behind the Act?

- Even at the Bill stage, there was some apprehension about the too restrictive regulations.
- For instance, it does not allow single (never been married) women, or men, or gay couples to go in for surrogacy.

Assisted Reproductive Technology (ART) Act:

It came into force in January 2022.

What is ART?

- ART is defined as all techniques used to obtain a pregnancy by handling the sperm or egg cell outside the human body and transferring the embryo into the woman's reproductive tract.
- · These include:
- » sperm donation
- » in-vitro-fertilisation (IVF) (where the sperm is fertilised in a lab), and
- » gestational surrogacy (the child is not biologically related to the surrogate).

Rules for ART Clinics & Banks

- Every ART clinic and the bank must be registered under the National Registry of Banks and Clinics of India which will maintain a central database with details of such institutions.
- The registration of such clinics and banks is valid for five years and can be renewed for another five years.
- Clinics are not allowed to provide a child of predetermined sex and must check for genetic diseases before an embryo is implanted in a woman's body.

What is 'Surrogacy'?

- According to the Surrogacy Act, 'surrogacy' is a practice where a woman undertakes to give birth to a child for another couple and agrees to hand over the child to them after birth.
- It is permitted only for **altruistic purposes** or for couples who suffer proven infertility or disease.
- Surrogacy is prohibited for commercial purposes including for sale, prostitution or any other forms of exploitation.
- Moreover, once the child is born, it will be deemed to be the biological child of the couple for all intents and purposes.
- Only the medical expenses and insurance coverage is provided by the couple to the surrogate mother during pregnancy.
- No other monetary consideration will be permitted.

Types of Surrogacy:

- Altruistic surrogacy: It involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- Commercial surrogacy: It includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage

News Source: The Hindu

NATIONAL AIR SPORTS POLICY

Why in the News?

 Recently, the Ministry of Civil Aviation (MoCA) announced the country's first national air sports policy (NASP 2022).

Key Points:

Highlights of the NASP 2022:

- About: The new policy lays out the vision of making India one of the top sports nations by 2030 by providing a safe, affordable, accessible, enjoyable and sustainable air sports ecosystem in India.
- Key Objectives of the NASP 2022:
 - a. Promote an air sports culture in the country
 - b. Enable adoption of international good practices in safety including but not limited to, air sports infrastructure, equipment, operations, maintenance and training
 - c. Develop a simple, stakeholder-friendly and effective governance structure
 - d. Enhance participation and success of Indian sportspersons in global air sports events; and
 - e. Promote design, development and manufacturing of air sports equipment in India in line with the Atmanirbhar Bharat Abhiyan.
- Governance structure: under the new policy, there will be a four-tier governance structure for air sports in India namely:
 - a. Air Sports Federation of India (ASFI) as the apex governing body
 - b. National associations for individual air sports or a set of air sports, as appropriate
 - Regional (e.g. West/ South/ North East etc.)
 or State and Union Territory level units of the
 national air sports associations, as appropriate;
 and
 - d. District-level air sports associations, as appropriate.
- **Coverage:** It encompasses various sports activities involving the medium of air.
- » These include sports like air-racing, aerobatics, aeromodelling, hang-gliding, paragliding, paramotoring and skydiving etc.
- Significance of the Policy:
- » Other than the direct revenue from air sports activities, it has the multiplier benefits in terms of growth of travel, tourism, infrastructure and local employment, especially in hilly areas of the country, are several times greater.
- » Creation of air sports hubs across the country will bring in air sports professionals and tourists from across the world.

Way Forward:

The NASP 2022, is a step in the right direction

and will ensure the establishment of good quality infrastructure, equipment, instructors and services.

Additional information:

- The Fédération Aéronautique Internationale (FAI), headquartered in Lausanne, Switzerland is the world governing body for air sports.
- Founded on 14 October 1905, it sets standards, organises events and maintains global records.
 FAI has over 100 members.

About Air Sports Federation of India:

- ASFI shall be an autonomous body under the Ministry of Civil Aviation.
- ASFI shall represent India at FAI and other global platforms related to air sports.
- It will be chaired by the Secretary, Ministry of Civil Aviation.

News Source: The Indian Express

AGNIPATH SCHEME

Why in the News?

- Recently, the Union Government cleared the 'Agnipath' scheme for the recruitment of youth in the Armed Forces.
- Ourrently, the Army recruits young people under the Short Service Commission for an initial tenure of 10 years, which is extendable up to 14 years.

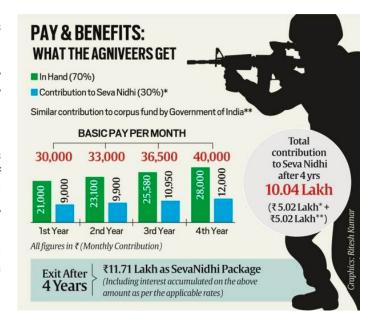


Image Source: The Indian Express

Key Points:

About Agnipath Scheme:

- The scheme is called Agnipath and the youth selected under this scheme will be known as **Agniveers**.
- Agnipath allows patriotic and motivated youth to serve in the Armed Forces for a period of four years.
- The Agnipath scheme has been designed to enable a youthful profile of the Armed Forces.
- Age: youth between 17-and-a-half years of age to those aged 21.
- **Duration:** four years.

Benefits to the Agnevvers:

- Agniveers will be given an attractive monthly package along with Risk and Hardship allowances in the three services.
- On completion of the engagement period of four years, Agniveers will be paid one time 'SevaNidhi' package (about 11.04 lakh crore) which shall comprise their contribution including accrued interest.
- It provides opportunities for Agniveers to train in the best institutions and enhance their skills & qualifications.
- · They will also get an Agniveer Skill Certificate,

which will aim to assist them in finding post-release job opportunities.

Significance:

- It will enhance the youthful profile of the Armed Forces and provide a fresh lease of 'Josh' and 'Jazba'.
- It will bring about a transformational shift towards a more tech savvy Armed Forces – which is indeed the need of the hour.
- It will provide a unique opportunity to the youth to serve the country and contribute to Nation Building.
- The scheme is aimed at slashing the salary and pension bills of the three services, which have been increasing rapidly.
- » The **defence Budget of ₹5,25,166 crore for 2022-23** included **₹1,19,696 crore** for defence pensions.

International Practices:

- Recruitment of soldiers across the world is done in two broad categories — voluntary and conscriptionbased recruitment.
- » Russia has a system of conscription-based service for a period of 12 months, Israel for 30 and 22 months — for men and women, respectively, and South Korea for 21, 24 and 25 months, respectively, for army, navy and air force respectively.

News Source: The Hindu





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*Source: The Indian Edtech Story, Q1 2022 Round-Up by Markelytics. **T&C Apply.



STATE FOOD SAFETY INDEX

Why in the News?

 On World Food Safety Day, the Ministry of Health and Family Welfare released the FSSAI's 4th State Food Safety Index (SFSI).



The State Food Safety Index ranks States/UTs annually on five parameters of food safety through rigorous evaluation process.

Image Source: Ministry of Health and Family Welfare

Key Points:

About World Food Safety Day:

- World Food Safety Day is observed on June 7 every year.
- The theme for 2022: "Safer Food, Better Health".

About State Food Safety Index:

- It was started in 2018-19 on the occasion of World Food Safety Day.
- The Index is a dynamic quantitative and qualitative benchmarking model that provides an objective framework for evaluating food safety across all States/UTs.
- Aim: To create a competitive and positive change in the food safety ecosystem in the country.
- Developed by: FSSAI (Food Safety and Standards Authority of India)
- Performance:
- » Larger States: Among large States, Tamil Nadu topped the list.
- » Smaller States: Goa stood first followed by Manipur and Sikkim.
- » Union Territories: Jammu & Kashmir, Delhi and Chandigarh secured first, second and third ranks

• **Significance**: The index will help in providing safe and nutritious food to our citizens.

About FSSAI:

- The Food Safety and Standards Authority of India (FSSAI) has been established under the Food Safety and Standards Act, 2006.
- It has been created for laying down sciencebased standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure the availability of safe and wholesome food for human consumption.
- The Ministry of Health & Family Welfare, Government of India is the Administrative Ministry for the implementation of FSSAI.

News Source: The Hindu

DRAFT NATIONAL POLICY FOR THE PERSON WITH DISABILITY

Why in the News?

 Recently, the Ministry of Social Justice and Empowerment has invited public feedback on the new draft national policy on persons with disabilities (PwD).

Key Points:

Draft National Policy for Persons with Disabilities:

About:

 Taking the note of research findings that show onethird of disabilities in children are preventable if detected early, the new draft National Policy for Persons with Disabilities will replace the 2006 policy once approved.

Key Provision:

- **Certification:** The district medical authorities ensure that the disability certificate is issued within 30 days of receipt of the application.
- Health: A targeted mission to ensure PwDs get health services that are accessible and affordable.
- Ayushman Bharat PMJAY should be aligned with the objective of the RPwD Act and universal coverage for PwDs.
- **Employment:** Develop a National Employment portal for PwDs. Every government and private establishment will report their vacancies to the ministry of labour and employment for updating in the portal.

- Accessibility: All local body building bye-laws will incorporate accessibility standards specified under the existing guidelines or those specified under National Building Code.
- » The ministry of road transport and highways will issue necessary guidelines for making modifications in the personal vehicles being used by PwDs.
- CDEICs (Cross Disability Early Intervention Centres): It calls for developing a network of CDEICs to provide facilities like screening and identification and referral for rehabilitative services.
- Aligned with New Education Policy & RPwD (Rights of Persons with Disability Act, 2016) Act:
- » The new policy, as per the Department of Empowerment of Persons with Disabilities (DEPwD) of the ministry of social justice and empowerment, has been drawn in keeping with the provisions of the RPwD Act and the vision of the National Education Policy 2020 which promotes inclusive education.

Constitutional Provision:

 Article 41 of the Directive Principles of State Policy (DPSP) states that State shall make effective provisions for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement, within the limits of its economic capacity and development.

United Nations Convention on the Rights of Persons with Disabilities in 2007:

- It is an international human rights treaty dealing with the rights of disabled people.
- It was adopted in 2006 in the New York headquarters of the United Nations and entered into force in 2008.

- India ratified the UNCRPD in October 2007.
- The Convention follows decades of work by the United Nations to change attitudes and approaches to persons with disabilities.
- · It is aimed at:
- » Discrimination against people with disabilities must be eliminated.
- » Providing opportunities for people with disabilities to live independently.
- » Making the education system more inclusive.
- Making sure persons with disabilities are protected against all forms of abuse, violence and exploitation.

Data Point:

- As per Census 2011, there are about 20.42 lakh children in the age group of 0-9 years who have some form of disabilities - either congenital or acquired.
- As per the Census 2011, there was 2.68 crore PwDs.
- The literacy rate of the total PwD population was about 55%.
- As regards to higher education, only about 5% of PwDs were graduates and above.

Related Initiatives:

- Unique Disability Identification (UDID) Portal
- Accessible India Campaign
- DeenDayal Disabled Rehabilitation Scheme
- Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP)
- National Fellowship for Students with Disabilities

News Source: The Hindu



FOREIGN PORTFOLIO INVESTORS

Why in the News?

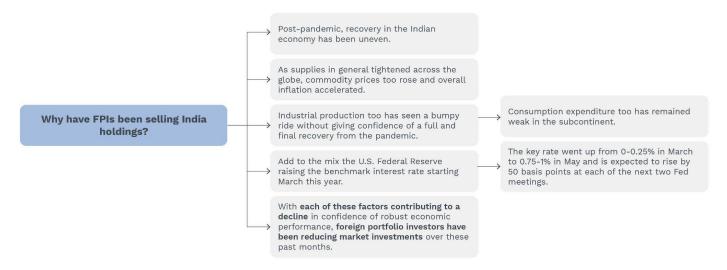
 Of late, there has been a trend that Foreign portfolio investors (FPIs) have been on a selling spree in India.

Key Points:

FPIs:

- Foreign portfolio investors are those that invest funds in markets outside of their home country.
- Their investments typically include equities, bonds and mutual funds.
- They are generally not active shareholders and do not exert any control over the companies whose shares they hold.

- The passive nature of their investment also allows them to enter or exit a stock at will and with ease.
- On a macro-level, foreign portfolio investment is part of a country's capital account and shown on its balance of payments (BOP).
- » BOP calculates the amount of money flowing from one country to other countries over a financial year.
- FPI is relatively liquid depending on market volatility.
- Unlike FDI, FPI consists of passive ownership; investors have no control over ventures or direct ownership of property or a stake in a company.
- FPI is often referred to as "**hot money**" because of its tendency to flee at the first signs of trouble in an economy.



Impact:

- When FPIs sell their holdings, and repatriate funds back to their home markets, the local currency takes a beating.
- As supply of the rupee in the market rises, its value declines.
- Their selling actions trigger a significant slide in benchmark indices which often results in a fall in market capitalization of companies.

Foreign Portfolio Investment

Pros:

- Feasible for retail investors
- Quicker return on investment
- Highly liquid

Cons:

No direct control/management of investments

- Volatile
- Cause of economic disruption (if withdrawn)

News Source: The Hindu

INITIAL PUBLIC OFFERING (IPO)

Why in the News?

 Recently, the initial public offering (IPO) of Life Insurance Corporation of India (LIC) was opened for subscription.

Key Points:

About

Initial Public Offering (IPO):

- An initial public offering (IPO) refers to the process of offering shares of a private corporation to the public in a new stock issuance.
- IPOs provide companies with an opportunity to

obtain capital by offering shares through the primary market.

- A Primary market deals with new securities being issued for the first time.
- After listing on the stock exchange through IPO, the company becomes a publicly-traded company and the shares of the firm can be traded freely in the open market.
- looking for funds to grow and expand their business issues IPO.

More often, new and medium-sized firms that are

New SEBI Rules of IPO:

- The price band of an IPO should be set in such a way that the ceiling price is at least 105% of the floor price.
- Price ceiling is a situation when the price charged is more than or less than the equilibrium price determined by market forces of demand and supply.
- Floor Price is the minimum price (lower level) at which bids can be made for an IPO.
- Companies will not be allowed to use more than 35% of the money that they collect through IPOs to fund the purchase of other businesses, unless they offer sufficient details.
- Promoters with a stake of over 20% in a company cannot sell more than half of their stake in an IPO.

Anchor investors will not be able to sell more than half their shares before 90 days from the date of the IPO, against the current time stipulation of 30 days.

News Source: The Hindu

BAD BANK

Why in the News?

Recently, the Finance Minister announced that the National Asset Reconstruction Company (NARCL) along with the India Debt Resolution Company (IDRCL) will take over the first set of bad loans from banks.

Genesis of the idea of Bad Bank:

- The troubled asset relief program, also known as TARP, implemented by the U.S. Treasury in the aftermath of the 2008 financial crisis, was modelled around the idea of a bad bank.
- Under the program, the U.S. Treasury bought troubled assets such as mortgage-backed securities from U.S. banks at the peak of the crisis and later resold it when market conditions improved.
- It is estimated that the Treasury through its operations earned a nominal profit of anything between \$11 billion to \$30 billion, although some contest these figures.

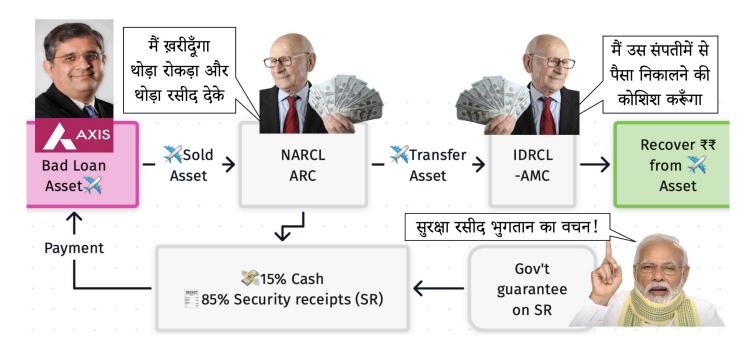


Image Source- Mrunal's Economy Handout for Unacademy Plus Students.

Indian Context:

- In Budget 2021-22, the Government announced the setting up of a National Asset Reconstruction Company (a bad bank) and India Debt Resolution Company Ltd (IDRCL) as part of resolution of bad loans.
- NARCL proposes to acquire stressed assets of about Rs. 2 Lakh crore in phases within extant regulations of RBI.
- It intends to acquire these stressed assets through 15% Cash and 85% in Security Receipts (SRs).

Need of NARCL-IRDCL Framework:

- Existing Asset Reconstruction Companies(ARCs)
 have been helpful in resolution of stressed assets
 especially for smaller value loans. Various available
 resolution mechanisms, including Insolvency and
 Bankruptcy Code have proved to be useful.
- However, considering the large stock of NPAs, additional options/alternatives are needed which led to the creation of NARCL-IRDCL framework in Union-Budget 2021-22.

About Bad Bank:

- A bad bank is a financial entity set up to buy nonperforming assets (NPAs), or bad loans, from banks.
- **Aim:** To ease the burden on banks by taking bad loans off their balance sheets and get them to lend again to customers without constraints.
- After the purchase of a bad loan from a bank, the bad bank may later try to restructure and sell the NPA to investors who might be interested in purchasing it.
- A bad bank makes a profit in its operations if it manages to sell the loan at a price higher than what it paid to acquire the loan from a commercial bank.
- Technically, a bad bank is an asset reconstruction company (ARC) or an asset management company that manages bad loans of commercial banks and finally recovers the money over a period of time.
- It is not involved in lending and taking deposits.

Pros:

- One of the key ideas behind formation of bad banks is to de-stress the balance sheets of the banks.
- Once Non-Performing Assets are taken over by bad banks; Commercial banks will be in a position to lend more to consumers.
- Moreover, in India, a large portion of NPAs is with the government-owned public sector banks.
- » In the past, the Government had to infuse fresh capital to prove the financial health of PSBs. The government infusing fresh capital in PSBs means less money for other schemes.

Cons:

- A bad bank backed by the government will merely shift bad assets from the hands of public sector banks, which are owned by the government, to the hands of a bad bank, which is again owned by the government.
- Unlike a bad bank set up by the private sector, a bad bank backed by the government is likely to pay too much for stressed assets which is bad news for taxpayers who will once again have to foot the bill for bailing out troubled banks.
- There is a huge risk of moral hazard. Commercial banks that are bailed out by a bad bank are likely to have little reason to mend their ways.
- » After all, the safety net provided by a bad bank gives these banks more reason to lend recklessly and thus further exacerbate the bad loan crisis.

Associated Challenges:

- Finding Buyers: It could be a challenge to find buyers for bad assets in an economy struggling to find its feet after a pandemic.
- This becomes a more daunting task especially when governments are facing the issue of containing the fiscal deficit.
- Lack of Governance Reforms: In the wake of absence of governance reforms in the public sector banks, setting up of Bad bank may serve as an adhoc mechanism to tackle NPAs, as these banks may go on doing business the way they have been doing in the past and may end up piling-up of bad debts again.
- The price at which bad assets are transferred from commercial banks to the bad bank will not be market-determined and price discovery will not happen.

Functioning of Bad Bank:

- NARCLandIDRCLwill have an exclusive arrangement that will be as per the scope defined in the 'Debt Management Agreement' to be executed between these two entities.
- This arrangement will be on a 'Principal-Agent' basis and final approvals and ownership for the resolution shall lie with NARCL.
- Further, the NARCL will purchase bad loans through a 15:85 structure, where it will pay 15 per cent of the sale consideration in cash and issue **security** receipts (SRs) for the remaining 85 per cent.
- The SRs will be guaranteed by the government which essentially aims to cover the gap between the face value of the security receipts and realised value of the assets when eventually sold to the prospective buyers.

Reason for accumulation of Bad Loans:

- A key reason behind the bad loan crisis in public sector banks, some critics point out, is the nature of their ownership.
- Unlike private banks, which are owned by individuals
 who have strong financial incentives to manage
 them well, public sector banks are managed by
 bureaucrats who may often not have the same
 commitment to ensuring these lenders' profitability.
- To that extent, bailing out banks through a bad bank does not really address the root problem of the bad loan crisis.

About National Asset Reconstruction Company (NARCL):

- NARCL has been incorporated under the Companies Act and has applied to Reserve Bank of India for licence as an Asset Reconstruction Company (ARC).
- NARCL has been set up by banks to aggregate and consolidate stressed assets for their subsequent resolution.
- PSBs will maintain51% ownership in NARCL.

India Debt Resolution Company Ltd (IDRCL):

- IDRCL is a service company/operational entity which will manage the asset and engage market professionals and turnaround experts.
- Public Sector Banks (PSBs) and Public Fls will hold a maximum of 49% stake and the rest will be with private sector lenders.

What are Non-Performing Assets?

 A non performing asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.

News Source: The Hindu

MINIMUM SUPPORT PRICE

Why in the News?

 Recently, the Centre announced the Minimum Support Price (MSP) at the rate of Rs 2,040 per quintal for paddy (Common) and Rs 2,060 per quintal for paddy (Grade A) for the kharif marketing season 2022-23.

Key Points:

About

Origin of Minimum Support Price:

- MSP was introduced in the mid-sixties when India was in food deficit.
- The government was keen to boost domestic production through green revolution technologies but realised farmers wouldn't plant input-intensive high-yielding wheat or paddy varieties unless guaranteed a minimum price

What is the Minimum Support Price?

- MSP is a "minimum price" for any crop that the government considers as remunerative for farmers and hence deserving of "support".
- In other words, the MSP for a crop is the price at which the government is supposed to procure/ buy that crop from farmers if the market price falls below it.
- MSP is determined on the recommendations of the Commission for Agricultural Costs and Prices (CACP).
- The Cabinet Committee on Economic Affairs (CCEA) chaired by the Prime- Minister takes a final decision on the level of MSPs.
- MSPs have no statutory backing a farmer cannot demand MSP as a matter of right.

Commission for Agricultural Costs and Prices:

- CACP is not a statutory body but an executive body.
- CACP recommends MSPs for 22 mandated crops and fair and remunerative price (FRP) for sugarcane.
- CACP is an attached office of the Ministry of Agriculture and Farmers Welfare.
- It is an advisory body whose recommendations are not binding on the Government.
- · Calculation of MSP:

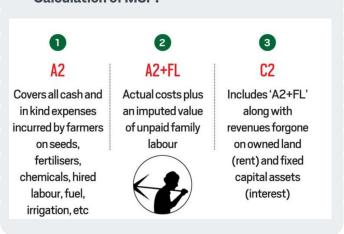
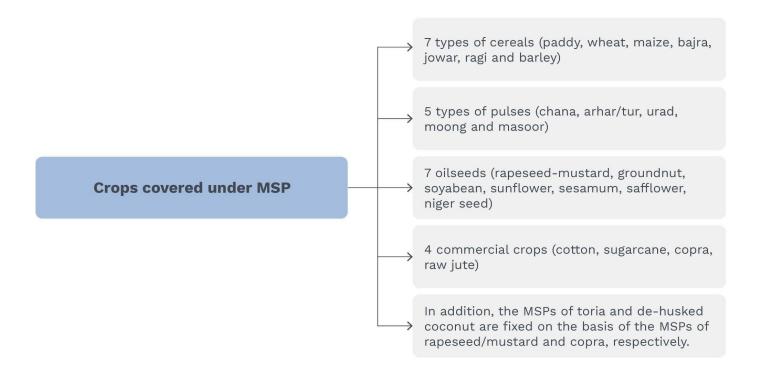


Image Source: The Indian Express



What are the factors considered by CACP while recommending MSP?

- the demand and supply of a commodity;
- its cost of production;
- the market price trends (both domestic and international);
- · inter-crop price parity;
- the terms of trade between agriculture and nonagriculture (that is, the ratio of prices of farm inputs and farm outputs);
- a minimum of 50 per cent as the margin over the cost of production; and
- the likely implications of an MSP on consumers of that product.

Issues involved in Minimum Support Price:

- Ad-hoc Mechanism: As against the official announcement of MSP for 23 crops, only two, rice and wheat are procured as these are distributed in the National Food Security Act.
- » For the rest, it is mostly ad-hoc and insignificant.
- Limited Beneficiaries: As per the Shanta Kumar Committee report, only six per cent of all farmers have benefited from Minimum Support Price (MSP) through the sale of food grains to an official procurement agency.
- MSP regime & Domestic Market: The current MSP regime has no relation to prices in the domestic market.
- » Its sole raison d'être is to fulfil the requirements of

NFSA making it effectively a procurement price rather than an MSP.

- Lack of Government Machinery: The major problem with the MSP is the lack of government machinery for procurement of all crops except wheat and rice, which the Food Corporation of India actively procures under the PDS.
- Procurement System: The MSP-based procurement systemisalso dependent on middlemen, commission agents and APMC officials, which smaller farmers find difficult to get access to.
- Burden on Exchequer: The cost of MSP and subsidised food supplies are being met by heavy borrowings from the National Small Savings Fund (NSSF) — which is an unsustainable burden on the country's salaried class.

Significance of MSPs:

- The Government uses MSPs to incentivise the production of certain crops, thus ensuring that India does not run out of staple food grains.
- Typically, MSPs create the benchmark for farm prices not just in those commodities for which they are announced, but also in crops that are substitutes.
- The Major objective of MSP is to support the farmers from distress sales and to procure food grains for public distribution.
- MSP is a price fixed by the Government of India to protect the producer - farmers - against excessive falls in price during bumper production years.
- Thus, the minimum guaranteed prices are fixed to set a floor below which market prices cannot fall.

Farmer's Agitation & Minimum Support Price:

 The farmer unions who led the yearlong agitation that led to the repeal of the three farm laws, want the government to enact legislation conferring mandatory status to MSP, rather than just being an indicative or desired price.

Way Forward:

- A true MSP requires the government to intervene whenever market prices fall below a predefined level, primarily in case of excess production and oversupply or a price collapse due to international factors.
- It does not require the government to buy all the products but only to the extent that creates upward price pressures in the market to stabilise prices at the MSP level. What is needed is a mechanism to monitor the prices. While such a mechanism already exists, a policy for requisite market intervention is missing.

News Source: The Hindu

BEAR MARKET

Why in the News?

 Recently, Wall Street opened the week with heavy losses that put the benchmark S&P 500 at a level considered to be a so-called bear market.

Key Points:

About

Bear Market:

- Bear market is the term used to describe when the equity markets are down 20% or more from their most recent all-time high..
- Bear markets are often accompanied by negative investor sentiment and declining economic prospects.
- It can be **cyclical or longer-term.** The former lasts for several weeks or a couple of months and the latter can last for several years or even decades.

Why use a bear to represent a market slump?

 Bears hibernate, so bears represent a market that's retreating, In contrast, Wall Street's nickname for a surging stock market is a bull market, because bulls charge,

Reasons for Bear Market:

- **Rising Interest Rates:** Market enemy No. 1 is interest rates, whose quick rise as a result of the high inflation causes bearish trends in the market.
- There is uncertainty about the Russia-Ukraine war, continued ravages of COVID, and skyrocketing energy and commodity prices.
- This is cumulatively escalating the fear among investors

Consequences of a Bear market

- A bearish trend depicts the slowdown of an economy, with rising investor pessimism and recessionary trends.
- As the total amount of investments undertaken falls significantly in such events, owing to a slowdown of aggregate demand, businesses often face a monetary crunch, thereby reducing their total output.
- Therefore, a country often faces high unemployment problems, a downtrend in the overall price level causing deflation.

Bull Market:

- A bull market is a period of time in financial markets when the price of an asset or security rises continuously.
- The commonly accepted definition of a bull market is when stock prices rise by 20% after two declines of 20% each.
- Traders employ a variety of strategies, such as increased buy and hold and retracement, to profit off bull markets.

News Source: The Indian Express

INDIA'S EMERGING TWIN DEFICIT PROBLEM

Why in the News?

 In its latest 'Monthly Economic Review', the Ministry of Finance report highlights two key areas of concern for the Indian economy: the Fiscal Deficit and the Current Account Deficit.

Key Points:

About

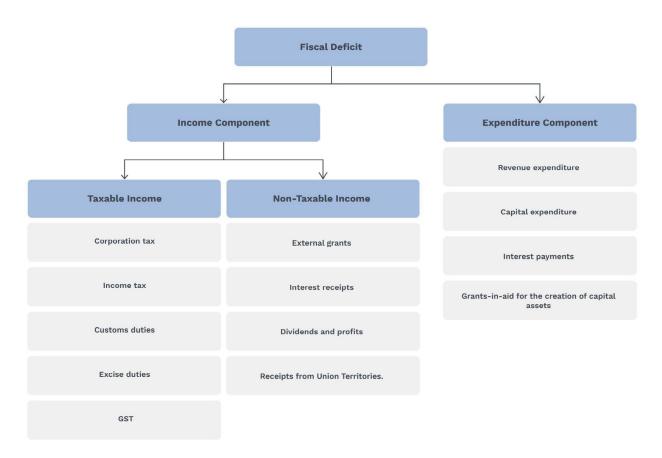
Fiscal Deficit

 The word 'fiscal' refers to annual government account statements and the word 'deficit' stands for 'shortage'. Therefore, the fiscal deficit is the term used to define the difference between what a government spends and what it collects as revenue.

How is the Fiscal Deficit Calculated?

- Fiscal deficit is calculated both in absolute terms and as a percentage of the country's gross domestic product (GDP).
- The fiscal deficit of a country is calculated as a percentage of its GDP or simply as the total money

- spent by the government in excess of its income.
- In either case, the income figure includes only taxes and other revenues and excludes money borrowed to make up the shortfall.
- The deficit is calculated by taking out the difference between the government's total income or receipts and its expenditures.
- The fiscal deficit calculations are based on two components — income and expenditure.



Is the Fiscal Deficit bad?

- A moderate fiscal deficit is considered good for the economy if the money is spent on infrastructure projects like highways, roads, ports and airports as these constructions boost economic growth and create job opportunities.
- Higher levels of fiscal deficit typically imply the government eats into the pool of investible funds in the market which could have been used by the private sector for its own investment needs.

How is the fiscal deficit balanced out?

- To balance the fiscal deficit in short-term macroeconomics, the government looks at market borrowings by issuing bonds and selling them in through banks.
- Banks buy these bonds with currency deposits and then sell them to investors. Government bonds are considered an extremely safe investment instrument, so the interest rate paid on loans to the

government represents risk-free investment.

 The government also sees a deficit situation as an opportunity to expand policies and schemes, including welfare programmes, without having to raise taxes or cut spending in the Budget.

Current Account Deficit (CAD)

- CAD is the shortfall between the money flowing in on exports, and the money flowing out on imports.
- Current Account Deficit (or Surplus) measures the gap between the money received into and sent out of the country on the trade of goods and services and also the transfer of money from domesticallyowned factors of production abroad.

Reasons for CAD:

- CAD exists due to a host of factors including existing:
- » Exchange rate
- Consumer spending level

- » Capital inflow
- » Inflation level
- » Prevailing interest rate.
- For the Current Account Deficit in India, crude oil and gold imports are the primary reasons behind high CAD.

Understanding CAD:

 To understand CAD in detail, it is essential to learn about the Current Account.

- A nation's Current Account maintains a record of the country's transactions with other nations, in terms of trade of goods and services, net earnings on overseas investments and net transfer of payments over a period of time, such as remittances.
- This account goes into a deficit when money sent outward exceeds that coming inward which in turn, implies that the demand for the foreign currency (say the US dollar) is more than the demand for the Indian rupee.

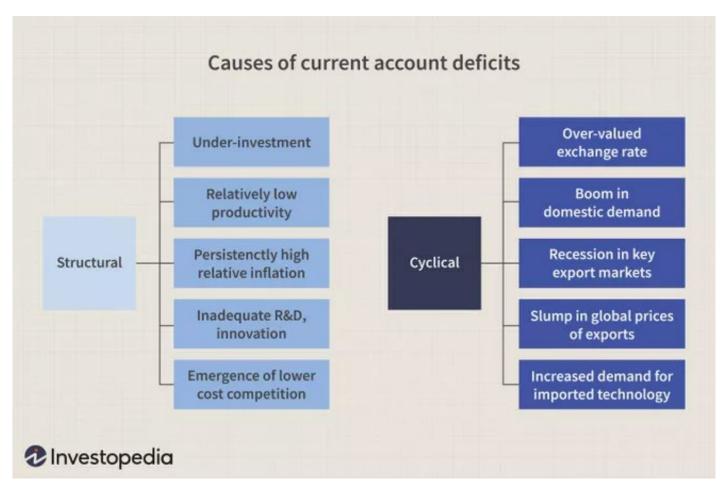


Image Source: Investopedia

Calculating Current Account Deficit:

- The current account constitutes net income, interest and dividends and transfers such as foreign aid, remittances, donations among others.
- » It is measured as a percentage of GDP.

Trade gap = Exports - Imports

Current Account = Trade gap + Net current transfers
+ Net income abroad

Tackling CAD:

• The Current Account Deficit could be reduced by:

- » Boosting exports
- » Curbing non-essential imports such as gold, mobiles, and electronics.
- » Currency hedging
- » Bringing easier rules for manufacturing entities to raise foreign funds
- The Government and RBI could also look to review debt investment limits for FPIs, among other measures.

Significance of CAD:

- Higher CAD shows a country's economy has become uncompetitive.
- Investors may withdraw their investments.

- Current Account Deficit may be a positive or negative indicator for an economy depending upon why it is running a deficit.
- » Foreign capital is seen to have been used to finance investments in many economies.
- Current Account Deficit may help a debtor nation in the short-term, but it may worry in the long-term as investors begin raising concerns over adequate return on their investments.

News Source: The Indian Express

WORLD COMPETITIVENESS INDEX

Why in the News?

- India maintained 43rd rank on an annual World Competitiveness Index compiled by the Institute for Management Development (IMD).
- » This year, the rankings expose the economic impact of the pandemic across the globe.

Key Points:

About World Competitiveness Index:

 It ranks 64 economies and assesses the extent to which a country promotes the prosperity of its people by measuring economic well-being through hard data and survey responses from executives.

Parameters:

- Economic Performance
- Government efficiency
- Business efficiency
- Infrastructure

Global Performance:

WHO STANDS WHERE			
2022	Country	2021	
1 <	Denmark	0	3
2 <	Switzerland	0	1
3 <	Singapore	0	5
4 <	Sweden	0	2
5 <	Hong Kong	0	7
6 <	Netherlands	0	4
7 <	Taiwan, China	0	8
8 <	Finland	0	11
9 <	Norway	0	6
10 <	US	0	10
37 <	India	0	43

Image Source: Business Standard

- BRICS nation Performance
- » Among the BRICS nations, India is ranked second after China (16), followed by Russia (45th), Brazil (57th) and South Africa (62th)

Reasons for Improved India's Performance:

- Majorimprovements in the context of retrospective taxes in 2021, India appears to have restored the trust of the business community.
- Its re-regulation of a number of sectors, including drones, space and geo-spatial mapping, also likely played a role in the country's improved performance in the 2022 rankings.
- India is also a driving force in the global movement to fight climate change and sits in harmony with its strength in environment-related technologies in the ranking.

News Source: The Indian Express

OPEN NETWORK FOR DIGITAL COMMERCE (ONDC)

Why in the News?

 Recently, the government of India announced the launch of the pilot phase of the Open Network for Digital Commerce (ONDC) in five cities.

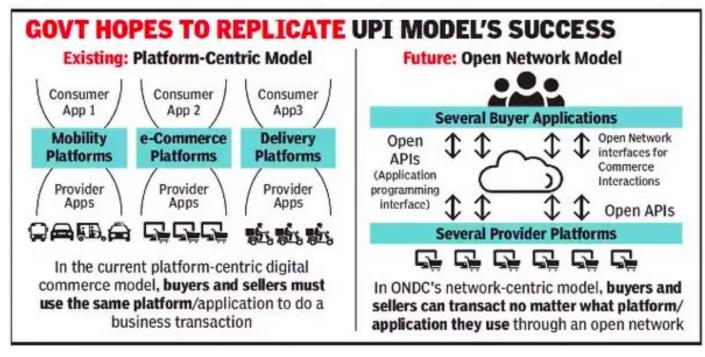


Image Source: Times of India

About ONDC:

- It is a not-for-profit organisation that will offer a network to enable local digital commerce stores across industries to be discovered and engaged by any network-enabled applications.
- It is neither an aggregator application nor a hosting platform.
- All the existing digital commerce applications and platforms can voluntarily choose to adopt and be a part of the ONDC network.
- The ONDC aims to enable buying of products from all participating e-commerce platforms by consumers through a single platform.
- The ONDC model is trying to replicate the success of the Unified Payments Interface (UPI) in the field of digital payments.
- Over the next five years, the ONDC expects to bring on board 90 crore users and 12 lakh sellers on the network, enabling 730 crore additional purchases.
- **Aim:** To "democratise" the country's fast-growing digital e-commerce space.

News Source: The Hindu

US FED RESERVE RATE HIKE & IMPACT ON INDIA

Why in the News?

 Recently, The US Central bank has raised its target interest rate by 0.75 percent to lower the inflation of the US economy to 2 percent from 8.6 percent.



Image Source: Livemint

 It was the biggest rate hike by the US central bank since 1994.

Reason for rate hike:

- Inflation: The Consumer Price Index (CPI) based inflation in the United States grew by 8.6 per cent year-on-year in May.
- The other reason for monetary tightening is the impact of the surplus funds in the economy on inflation.
- » US inflation as measured by Personal Consumption Expenditure (PCE) index hit multi-decade high at 5 per cent in October 2021. This is far above Fed's tolerance of 2 per cent.

Impact on the Indian economy:

- Increasing Financial Strain: Higher interest rates will reduce the "push factor" for risk capital to flow into emerging markets like India.
- India will face tighter financial conditions in the coming quarters.

- Rupee Depreciation: The latest rate hike by the US Fed will improve yields on US treasuries and reinforce the dollar's strength against the rupee.
- » This will make the Indian financial market less attractive to foreign investors and accelerate outflows from the Indian bond and equity market.
- **Current Account Deficit:** Freefall depreciation of the rupee would benefit exporters but will also cause a huge current account deficit.
- **Worsening Inflation:** India's inflation rate may accelerate as a result of the Fed rate hike.
- » Depreciation of the rupee will increase the rupee cost of imported goods such as crude oil, chemicals and fertilisers, active pharmaceutical ingredients and electronics.

What lies ahead?

- RBI may go for additional rate hikes in the coming two or three quarters.
- » This may impact overall demand in the economy and GDP growth.

News Source: The Hindu

RBI PLAN TO LINK CREDIT CARDS WITH UPI

What is the News?

 Recently, the Reserve Bank of India has proposed to allow linking of credit cards with the Unified Payments Interface(UPI).



Image Source: The Hindu

Key Points:

- The linking of Credit Cards with UPI will first begin with the indigenous RuPay credit cards.
- · Both the RuPay network and UPI are managed by the

National Payments Corporation of India(NPCI).

Challenges:

- It is not clear how the Merchant Discount Rate (MDR) will be applied to UPI transactions done through credit cards.
- » The MDR is a fee that a merchant is charged by their issuing bank for accepting payments from their customers via credit and debit cards.
- According to a norm that has been in effect since January 2020, UPI and RuPay attract zero-MDR, meaning that no charges are applied to these transactions.
- Applicability of zero-MDR on UPI could also be a reason why other card networks such as Visa and Mastercard may not have been onboarded to UPI for credit cards yet.

Significance of this move:

- The linkage of UPI and credit cards could possibly result in credit card usage zooming up in India given UPI's widespread adoption.
- The integration also opens up avenues to build credit on UPI through credit cards.
- The move could also be a push to increase adoption by banking on UPI's large user base. So far, UPI could only be linked to debit cards and bank accounts.
- This will provide additional convenience to the users and enhance the scope of digital payments.

🔟 tech

UPI extends its lead over cards

Debit Cards | Credit Cards | UPI

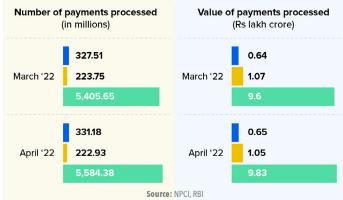


Image Source: RBI

National Payments Corporation of India (NPCI):

 It is an umbrella organisation for operating retail payments and settlement systems in India.

- It is an initiative of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007.
- Aim: To create a robust Payment & Settlement Infrastructure in India.
- Unified Payments Interface (UPI)
- It is a system that powers multiple bank accounts into a single mobile application, merging several banking features, seamless fund routing & merchant payments into one hood.
- · It also caters to the "Peer to Peer" collect

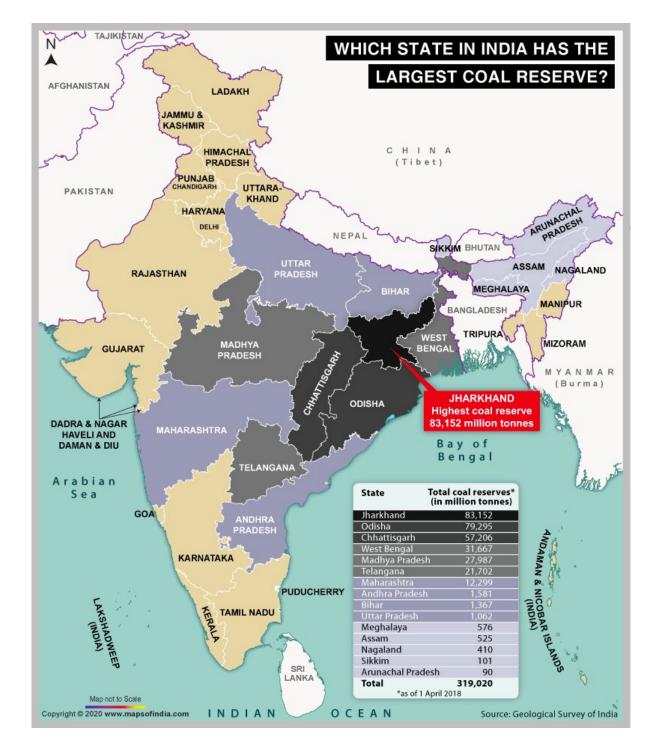
request which can be scheduled and paid as per requirement and convenience.

News Source: The Hindu

INDIA'S CHANGING GOAL POSTS OVER COAL

Why in the News?

 In April, the Union Finance Minister had said India's transition away from coal as a fuel for power would be hampered by the Russia-Ukraine war.



Why is the 'move away from coal' so important?

- The threat of global warming looms over the planet, promising to bring about unprecedented natural calamities.
- An effective way to keep the danger at bay is to cut the use of fossil fuels **coal, natural gas and oil.**
- » About 80% of the world's energy requirements are met by these three fuels.
- They trigger the emission of carbon dioxide. However, the worst culprit of them all is coal, which emits nearly twice as much carbon dioxide as natural gas and about 60% more than oil, on a kilogram-tokilogram comparison.
- Combusting coal also leaves behind partially-burnt carbon particles that feed pollution and trigger respiratory disorders.
- The consequence of these chemical reactions gains great significance because the power sector in India accounts for 49% of total carbon dioxide emissions, compared with the global average of 41%.

India's dependence on Coal:

- As of February 2022, the installed capacity for coalbased power generation across the country was 2.04 lakh megawatt (MW).
- This accounts for about 51.5% of power from all sources.
- According to the IEA's Coal Report 2021, India's coal consumption will increase at an average annual rate of 3.9% to 1.18 billion tonnes in 2024.
- · So, it is not easy to shift away from coal overnight.

How has war made India's move away from coal difficult?

- **Natural gas** has been dubbed as the transition fuel in India's plans to move away from coal.
- The international cost of natural gas has increased in the recent past from a level that was considered already too high to be financially viable.
- Last year in India, the government put in place a committee to ensure that natural gas prices remained stable.
- Of the 25,000 MW of gas-based power plants, about 14,000 MW remains stranded, or idle, because they are financially unviable.
- While renewable energy sources are cheaper than coal, their ability to generate power consistently is subject to nature — the wind and the Sun.
- Storage technologies are still not mature enough to help renewable energy sources become reliable generators of power.

News Source: The Hindu

BHARAT DRONE MAHOTSAV

Why in the News?

 Recently, the PM inaugurated India's biggest Bharat Drone Mahotsav at Pragati Maidan in Delhi.



Image Source: Financial Express

About Drone:

- Drones are commonly referred to as Unmanned Aerial Vehicles (UAV) whereas the entire system that allows a drone to function is a UAS (Unmanned Aerial System).
- It was originally developed for the military and aerospace industries, drones have found their way into the mainstream because of the enhanced levels of safety and efficiency they bring.

Threat posed by UAV:

- It can be used for smuggling, reconnaissance, or to carry out various types of attack, targeting VIPs, crowded areas or other aircraft.
- The Ministry of Civil Aviation in 2019 put together guidelines for countering rogue drones.
- » The rogue drones guidelines suggest a three-tier approach to guarding against drones.
- » It envisages a protective cover that includes primary and passive detection systems like radar, radio frequency detectors, electro-optical and infrared cameras.
- » For the task of neutralising drones these sites can have both 'soft kill' systems, like radio frequency jammers, and 'hard kill' mechanisms like highpowered electromagnetic and LASER weapons, drone-catching nets, etc.

Application of Drone: Recently, the Ministry of Civil Aviation has urged other ministries to make better use of drones in their respective domains.

- Ministry of Home Affairs: VVIP security, Surveillance, situational analysis, crime control, and counter-terror operations.
- Ministry of Defence: Combat operations, communication in remote areas, counter-drone

solutions, reconnaissance and surveillance.

- Ministry of Health and Family Welfare: Delivery of medicines, collection of samples from remote or epidemic/pandemic-affected areas, delivery of blood and organ transplantation.
- Ministry of Environment, Forests and Climate Change: Anti-poaching actions, monitoring of forests and wildlife, pollution assessment, and evidence gathering.
- **Ministry of Information and Broadcasting:** The Ministry could use drones for high-quality videography of events and difficult-to-reach-places at a fraction of the cost and approvals required.
- This move would also facilitate low altitude shooting without noise, and prevent dust pollution and risk of accidents.
- Ministry of Agriculture: Crop and soil health monitoring, anti-locust work, insurance claim survey, spraying fertilisers and pesticides targetedly.
- Ministry of Panchayati Raj: Land Records and property rights.
- Ministry of Petroleum and Natural Gas and Ministry of Power: Real-time surveillance of assets and transmission lines, theft prevention, visual inspection/maintenance, construction planning and management.
- Ministry of Railways: unmanned aerial vehicles could be used to undertake disaster management, incidence response, inspection/maintenance works and project monitoring.

Significance of Drone Mahotsav:

- Drone technology promotion is another means of strengthening our commitment to good governance and ease of life.
- The sector shows great possibilities of a major sector for employment generation.
- Drone technology is going to play a major role in empowering farmers and modernising their lives.

Key features of Drone Rules 2021:

- In August last year, the government notified the Drone Rules 2021 with an aim to liberalise the stringent regime for civilian drone operations that it had established in 2018.
- Ease of Doing Business: The total number of forms that were to be filled has been reduced from 25 to 5.
- And the total number of fees that are to be paid before being able to operate drones has been reduced from 72 to just 4.
- Several **Approvals Abolished:** unique authorisation unique prototype number, identification number, certificate manufacturing and airworthiness, certificate of conformance, certificate of maintenance, import clearance, acceptance of existing drones, operator permits, authorisation of R&D organisation, student remote pilot licence, remote pilot instructor authorisation, drone port authorisation etc.
- Digital Sky Platform: It shall be developed as a user-friendly single-window system. There will be minimal human interface and most permissions will be self-generated.
- Digital Sky Platform is an initiative by the Ministry of Civil Aviation (MoCA) to provide a secure and scalable platform that supports drone technology frameworks, such as NPNT (no permission, no take-off), designed to enable flight permission digitally and manage unmanned aircraft operations and traffic efficiently.
- Interactive Airspace Map: Interactive airspace maps with green, yellow and red zones shall be displayed on the digital sky platform within 30 days of publication of these rules.
- » The yellow zone, which was earlier a 45 km zone from the airport perimeter, has now been reduced to a 12 km zone, meaning that outside of a 12 km radius of an airport perimeter, it would be a green zone, where drone operators no longer need permission to fly.

News Source: PIB



GREEN HYDROGEN

Why in the News?

 At the World Economic Forum in Davos, Switzerland, the Minister of Petroleum and Natural Gas said that India will emerge as the leader of green hydrogen by taking advantage of the current energy crisis across the globe.

About

Green Hydrogen

- Green hydrogen is hydrogen that is produced using renewable energy sources through electrolysis.
- » In electrolysis, electrical current is passed to separate hydrogen from oxygen in water.
- Hydrogen fuel can be a game-changer for the energy security of India, which imports 85% of its oil and 53% of gas requirements.
- The by-product of burning hydrogen is water, making it the most environmentally friendly fuel.

Green Hydrogen

Produced using renewable energy sources.

Environmentally friendly fuel.

Grey Hydrogen

- Most common form of Hydrogen
- Generated from natural gas, or methane

Blue Hydrogen

 Carbon neutral in nature

Brown Hydrogen

 Manufactured using coal without carbon sequestration

Application of Green Hydrogen:

- Green chemicals such as ammonia and methanol can be used directly in existing applications such as fertilisers, mobility, power, chemicals, and shipping.
- Green Hydrogen has a low carbon footprint and can act as an energy storage option, which would be essential to meet intermittencies (of renewable energy) in the future.
- In terms of mobility, for long-distance mobilisations for either urban freight movement within cities and states or for passengers, Green Hydrogen can be used in railways, large ships, buses or trucks, etc.
- Hydrogen has the potential to be the key renewable target in supporting infrastructure as well.

Why is India pursuing green hydrogen?

- Under the Paris Agreement of 2015, India is committed to reducing its greenhouse gas emissions by 33-35% from the 2005 levels.
- » India proposed a five-fold strategy known as ('Panchamrita' meaning the 'five ambrosia') for India to play its part in helping the world get closer to 1.5 degrees Celsius on the first day of the global climate meet in Glasgow.
- » 'Panchamrita' promises include:
 - India will get its non-fossil energy capacity to 500 gigawatt by 2030.
 - India will meet 50 per cent of its energy requirements till 2030 with renewable energy.

- India will reduce its projected carbon emission by one billion tonnes by 2030.
- India will reduce the carbon intensity of its economy by 45 per cent by 2030.
- India will achieve net zero by 2070.
- At the 2021 Conference of Parties in Glasgow, India reiterated its commitment to move from a fossil and import-dependent economy to a net-zero economy by 2070.
- India's average annual energy import bill is more than \$100 billion and the increased consumption of fossil fuel has made the country a high carbon dioxide (CO2) emitter, accounting for nearly 7% of the global CO2 burden.
- In order to become energy independent by 2047, the government stressed the need to introduce green hydrogen as an alternative fuel that can make India the global hub and a major exporter of hydrogen.
- National Hydrogen Mission (NHM): The announcement is made in the 2021 Budget, for the launch of NHM that would enable the generation of hydrogen "from green power sources".
- The cost of Green Hydrogen manufactured through the electrolysis process is estimated to be around Rs.350 per kg. The Government plans to bring it down to Rs.160 per kg by 2029-30.

News Source: Livemint

GREEN JOBS

Why in the News?

 Recently, the Prime Minister spoke about India's consistent efforts to combat climate change through 'green jobs' at an event to mark World Environment Day.

Key Points:

About

Green Jobs:

- 'Green jobs' refer to a class of jobs that directly have a positive impact on the planet, and contribute to the overall environmental welfare.
- Jobs involving renewable energy, conservation of resources, ensuring energy efficient means are categorised under the same.
- In all, they're aimed at reducing the negative environmental impact of economic sectors and furthering the process of creating a low-carbon economy.

Indian Economy and Green Jobs:

- According to the ILO, India moving to a green economy by the next decade would alone create about 3 million jobs in the renewable energy sector.
- The renewable energy sector created about 47,000 new jobs in 2017 accounting for a 12% increase in just the span of a year.
- For India 'green jobs' can prove immensely useful to the country with sectors like renewable energy, waste management, green transport and urban farming all having great potential to employ a trained workforce.

Government of India's Initiatives to promote Green Jobs:

- The Skill Council for Green Jobs:
- » It was launched by the Union government on October 1, 2015.
- » Aim: It aims to help manufacturers and other service providers in India's 'green business' sector to implement industry-led, collaborative skills to push the country on the path to truly realising the real potential and significance of 'green jobs'.
- » Aligned to the National Skill Development Missions, it was set up to be a not-for-profit, independent, industry-led initiative.
- » Promoted by the Ministry of New and Renewable Energy (MNRE) and the Confederation of Indian Industry (CII).

Global Initiatives to Promote Green Jobs:

- Organisation, the International Labour Organisation, the International Trade Union Confederation, the United Nations Environment Programme and the International Employers Organisation collectively launched the Green Jobs Initiative in 2008, aimed at bettering placements, training and creating opportunities for individuals to work in 'green jobs'.
- The United Kingdom is likely to have nearly 694,000 green jobs by the year 2030, projecting an overall 11% increase per year in the green economy.

News Source: The Indian Express

BAN ON SINGLE USE PLASTIC

Why in the News?

 Recently, the Centre has defined a list of single-use plastic items that will be banned from July 1, 2022.



Image Source: Livemint

Key Points:

About

Single-Use Plastic:

- Single Use Plastic refers to plastic items that are used once and discarded.
- It is used from packaging of items, to bottles (shampoo, detergents, cosmetics), polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.

Menace of Single Plastic:

- As per, report of 2021 by one of the Australian philanthropic organisations the Minderoo Foundation single-use plastics account for a third of all plastic produced globally, with 98% manufactured from fossil fuels.
- On the current trajectory of production, it has been

- projected that single-use plastic could account for 5-10% of greenhouse gas emissions by 2050.
- India features in the top 100 countries of single-use plastic waste generation at rank 94.
- With domestic production of 11.8 million metric tonnes annually, and import of 2.9 MMT, India's net generation of single-use plastic waste is 5.6 MMT, and per capita generation is 4 kg.

What are the items being banned?

- The Central Pollution Control Board (CPCB) has announced a ban on the following items:-
- » Earbuds, Balloon sticks, Candy and ice-cream sticks, cutlery items including plates, cups, glasses, forks, spoons, knives, trays, sweet boxes, invitation cards, cigarette packs.
- » PVC banners measuring under 100 microns; and polystyrene for decoration.

How The Plastic Ban Will Be Enforced From July 1, 2022?

- The ban will be monitored by the CPCB from the Centre, and by the State Pollution Control Boards (SPCBs) that will report to the Centre regularly.
- Directives have been issued at the national, state and local levels to not supply raw materials to industries that operate in banned items.
- Those found violating the ban can be penalised under the Environment Protection Act 1986 – which allows for imprisonment up to 5 years, or a penalty up to Rs 1 lakh, or both.
- Violators can also be asked to pay Environmental Damage Compensation by the SPCB. In addition, there are municipal laws on plastic waste, with their own penal codes.

Impact of Plastic Waste:

- Impacts on climate change: Plastic production contributes to climate change. If plastic waste is incinerated, it releases carbon dioxide and methane (from landfills) into the atmosphere, thereby increasing emissions.
- **Impacts on tourism:** Plastic waste damages the aesthetic value of tourist destinations, leading to decreased income from tourism
- Impacts on food and human health: Several chemicals used in the production of plastic materials are known to be carcinogenic and to interfere with the body's endocrine system, causing developmental, reproductive, neurological, and immune disorders in both humans and wildlife.
- Poor Drainage: Drainage system clogged with plastic bags, films, and other plastic items, causes flooding.

Plastic Waste Management Amendment Rules, 2021:

- The rules prohibit identified single use plastic items which have low utility and high littering potential by 2022.
- Thickness of plastic carry bags increased from 50 to 75 microns from 30th September, 2021 and to 120 microns with effect from the 31st December, 2022.
- The provisions will not apply to commodities made of compostable plastic.
- The plastic packaging waste, which is not covered under the phase out of identified single use plastic items, shall be collected and managed in an environmentally sustainable way through the Extended Producer Responsibility (EPR) of the Producer, importer and Brand owner (PIBO), as per Plastic Waste Management Rules, 2016.

News Source: The Indian Express

STOCKHOLM CONFERENCE

Why in the News?

Recently, the conference was held to commemorate
 50 years of the Stockholm Conference — the first
 United Nations conference on the environment.

Key Points:

Key Highlights of the Conference:

- The two-dayinternational meeting Stockholm+50

 concluded with a call for urgent commitment to addressing global environmental concerns and a just transition to a sustainable economy.
- Sweden and Kenya co-hosted the landmark Stockholm+50 conference as part of the United Nations' collaborative path toward a healthy planet.
- Stockholm+50 will assist in the implementation of the 2030 Agenda and the Sustainable Development Goals to create a healthy and resilient planet.
- Aim: The conference aimed to provide a platform for the nations and stakeholders to engage, share expertise, and solve complex and sensitive issues for immediate action that will result in long-term system transformation.
- The event also aimed to provide a chance to reflect on, celebrate, and build on the last 50 years of environmental activism.
- Theme: Stockholm+50: A healthy planet for the prosperity of all — our responsibility, our opportunity.

About Stockholm Conference, 1972:

- · Background:
- » In 1968, Sweden first proposed the idea of the Stockholm conference (this is why it was referred to as the Swedish Initiative).
- » In 1968, the UN General Assembly for the first time discussed climate change using emerging scientific evidence.
- » Until 1972, no country had an environment ministry.
- » **Norwegian** delegates returned from the conference to set up a ministry for the environment.
- » India set up its ministry of environment and forest in 1985.
- About:
- The United Nations Conference on the Human Environment in Stockholm was held From June 5 to June 16, 1972.
- » Theme: 'Only One Earth'.
- » Participating Countries: 122 countries participated in the conference.
- Aim: The aim was to create a common governance structure for the planet's environment and natural resources.
- It adopted the Stockholm Declaration on June 16.
- They essentially committed to 26 principles and an action plan that set in a multilateral environmental regime.
- This was the first globally subscribed document that recognised the "interconnections between development, poverty and the environment.
- The three dimensions of this conference were:
- » Countries agreeing not to "harm each other's environment or the areas beyond national jurisdiction";
- » An action plan to study the threat to Earth's environment;
- » And the establishment of an international body called the **UN Environment programme (UNEP)** to bring in cooperation among countries.

Way Forward:

- Stockholm+50 could be a new watershed moment for environmental protection and human wellbeing.
- It's high time we start narrowing the gap between targets and actual actions since we have a limited window to reverse climate change and the course of our future.
- Countries must move beyond gridlocked international negotiations and show the political

will needed for bold actions to safeguard the future of our planet and of our future generations.

News Source: The Hindu

UDAIPUR'S 'BIRD VILLAGE' SET TO BE DECLARED WETLAND

Why in the News?

- Recognised as the "bird village" following community-driven conservation efforts, Menar in Udaipur district is set to be notified as Rajasthan's new wetland.
- » This will pave the way for getting the Ramsar site status for this rural heartland of the Mewar region.



Image Source: The Hindu

About Menar wetlands:

- It is situated **45 km away from Udaipur, Rajasthan.**The two lakes in the village **the Brahma and Dhandh** play host to a large number of migratory birds in the winter season every year.
- The State government's Forest Department has initiated the process for notification of Menar as a wetland.
- With the status of wetland, the two lakes will be strengthened for increasing the vegetation of aquatic plants and protecting biodiversity.
- Observed species: More than 150 species of local and migratory birds inhabit the two lakes in the winter season. They include greater flamingo, whitetailed lapwing, pelican, marsh harrier, bar headed goose etc.

Rajasthan has two wetlands recognised as Ramsar sites:

- Keoladeo Ghana in Bharatpur district and
- · Sambhar Salt Lake in Jaipur district.

News Source: The Hindu

KERALA TO HAVE ITS OWN REGIONAL RED LIST OF BIRDS

Why in the News?

• The Kerala Bird Monitoring Collective will conduct the regional red list assessment of its Birds.

Key Points:

- Once it gets ready, Kerala will be the first State to have a region-specific red list of birds.
- Assessment will be done on the basis of IUCN guidelines for preparing the red list that have the following criteria:
- » Population size reduction
- » Area of occupancy
- » Small population size and decline
- According to the global IUCN red list, Kerala has 64 threatened species of birds.
- » In that, the Red-headed vulture and White-rumped

- vulture are critically endangered.
- » Steppe Eagle, Banasura Chilappan and Nilgiri Chilappan are endangered and 11 species are vulnerable.
- Issues with the IUCN List: There are limitations to the global assessment as it is a process prepared in a global context.
- A species seen common at the global level may be a threatened species at the regional level.

IUCN

- The International Union for Conservation of Nature Red List of Threatened Species was founded in 1964.
- It is the world's most comprehensive inventory of the global conservation status of biological species.

THE RED LIST CATEGORIES



Extinct (EX): no reasonable doubt that the last individual has died

Extinct in the Wild (EW): known only to survive in captivity, cultivation or well outside its natural range

Critically Endangered (CR): facing extremely high risk of extinction in the wild Endangered (EN): facing a very high risk of extinction in the wild,

Vulnerable (VU): facing a high risk of extinction in the wild.

Near Threatened (NT): close to qualifying, or likely to qualify for a threatened category in the near future Least Concern (LC):

population is stable enough that it is unlikely to face extinction in the near future

Data Deficient (DD): not enough information on abundance or distribution to estimate its risk of extinction

Image Source: Birdlife International

News Source: The Hindu

KAZIRANGA NATIONAL PARK & TIGER RESERVE FACES NEW THREAT FROM INVASIVE PLANT SPECIES

Why in the News?

- The Kaziranga National Park and Tiger Reserve (KNP&TR) is faced with a major threat from several invasive plant species that are threatening to destroy the habitats of one horned rhinos and other animals in the wild.
- » These invasive plant species that have been found in different ranges of the national park are posing a grave threat to the habitats, including grasslands.

Key Points:

- An invasive species is an organism that causes ecological or economic harm in a new environment where it is not native.
- » For ex: In India, Parthenium (came from wheat imported from the U.S. in 1950s) and lantana (brought by British as ornamental plants from South America) threaten more than 40% of India's tiger reserves.
- At present, there are 18 invasive plants that are silently taking over the landscape at the cost of indigenous grasses, shrubs and trees.
- » Herbivores usually avoid the invasive plants, which regenerate at an alarming speed and threaten to edge out the indigenous flora.
- The list includes **Ipomoea** (Ipomoea carnea) and **Mimosa** (Mimosa himalaica) but marked them as largely controlled.
- Some identified species have herbal properties (For ex- Leea macrophylla, Cestrum diurnum etc) but their toxicity outweighs their utility.

About Kaziranga National Park (KNP):

- Situated in Assam, KNP is a UNESCO World Heritage Site (1985).
- It has the largest-population of one-horned rhinoceros in the world.
- In 2006, The Indian Government declared it as a Tiger Reserve after the Tiger Population dropped

News Source: Economic times

FOUR NEW CORALS RECORDED FROM INDIAN WATERS

Why in the News?

 Recently, scientists have recorded four species of azooxanthellate corals for the first time from Indian waters.



Image Source: NDTV

Key Points:

- · The four coral species are
- » Truncatoflabellum crassum
- » T. incrustatum
- » T. aculeatum
- » T. irregulare.
- Location: These new species of azooxanthellate corals were found from the waters off the Andaman and Nicobar Islands.

About azooxanthellate corals:

- The azooxanthellate corals are a group of corals that do not contain zooxanthellae and derive nourishment not from the sun but from capturing different forms of planktons.
- They are deep-sea representatives with the majority of species being reported from depths between 200 metres and 1,000 metres.
- They are also reported from shallow waters unlike zooxanthellate corals that are restricted to shallow waters.

Significance:

- These new species can enhance knowledge about non-reef-building solitary corals.
- Hard corals are the prime and intrinsic part of the coral reef ecosystem.
- It will also enhance the national database of biological resources of India and also define the expansion of scope to explore these unexplored and non-reef building corals.

About Corals:

- Corals are made up of genetically identical organisms called polyps.
- These polyps have microscopic algae called

zooxanthellae living within their tissues.

News Source: The Hindu

HARYANA GRANTS NO-OBJECTION CERTIFICATE (NOC) FOR FIELD TRIALS OF BT COTTON VARIETY

Why in the News?

 Haryana government has issued a no-objection certificate (NoC) to conduct field trials on BG-2 RRF, a herbicide tolerant and insect resistant variety of Bt cotton.



Image Source: Hindustan times

Key Points:

- So far, India has allowed commercial use of BG-1 and BG-2 GM cotton in the country while the approval for the BG-2 RRF has been pending at various stages.
- Currently, the available BG-2 RRF can provide protection against devastating pest attacks such as American Bollworm.

About Genetic Modification of crops:

- GM is a technology that involves inserting DNA into the genome of an organism.
- **Bt. cotton** is the only GM crop approved by the GEAC for commercial cultivation in the country.
- To produce a GM plant, new DNA is transferred into plant cells. Usually, the cells are then grown in tissue culture where they develop into plants. The seeds produced by these plants will inherit the new DNA.
- Depending on the nature of edit, the process is divided into three categories: site directed nuclease (SDN) 1, SDN 2 and SDN 3.

GM Crops:

Advantages

- GM crops may contain more nutrients, are grown with fewer pesticides, and are usually cheaper.
- Enhanced taste and quality.
- Reduced maturation time.
- Increased yields, and stress tolerance.
- Improved resistance to disease, pests, and herbicides.

Disadvantages

- They may cause allergic reactions because of their altered DNA and they may increase antibiotic resistance.
- GM crop is the violation of natural organisms' intrinsic values by mixing among species.

News Source: The Hindu

WORLD'S FIRST FISHING CAT CENSUS DONE IN CHILIKA

Why in the News?

 Recently, the world's first fishing cat census has been conducted in Chilika lake.



Image Source: The Hindu

Key Points:

About the Census:

- Census has been conducted by the Chilika Development Authority (CDA) in collaboration with The Fishing Cat Project (TFCP).
- According to a census, the Chilika Lake, Asia's largest brackish water lagoon, has 176 fishing cats.
- This is the world's first population estimation of the fishing cat, which has been conducted outside the protected area network.
- The estimation was conducted in two phases.
- » Phase-I was conducted in 2021 in the 115 sq km marshland present in the north and north-eastern section of Chilika and its surrounding areas.
- Phase II was conducted in 2022 in the Parikud side along the coastal islands of Chilika.
- Method was used to analyse the data.

About the Fishing Cats:

- Protection Status: The fishing cat is listed as 'Endangered' on the International Union for Conservation of Nature (IUCN)'s Red List.
- Habitat: occur in wetlands like marshlands, mangroves and flooded forests in major South and Southeast Asian river basins starting from Indus in Pakistan till Mekong in Vietnam and in the island nations of Sri Lanka and Java.
- They are found in 10 Asian countries but have remained undetected in Vietnam and Java since the last decade or so.

News Source: The Hindu

WEST NILE VIRUS

Why in the News?

 Recently, the Kerala Health department is on alert after the death of a 47-year-old from Thrissur due to the West Nile Virus.

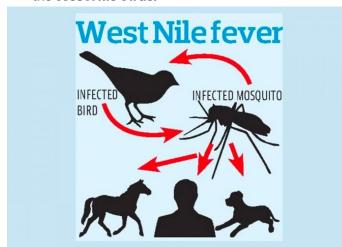


Image Source: Deccan Herald

About West Nile Virus (WNV):

- The West Nile Virus is a mosquito-borne, singlestranded RNA virus.
- Culex species of mosquitoes act as the principal vectors for transmission.
- It is transmitted by infected mosquitoes between and among humans and animals, including birds, which are the reservoir host of the virus.
- WNV can also spread through blood transfusion, from an infected mother to her child, or through exposure to the virus in laboratories.
- It is not known to spread by contact with infected humans or animals.
- To date, no human-to-human transmission of WNV has been documented.

Symptoms

- The disease is asymptomatic in 80% of the infected people.
- In these 20% cases, the symptoms include fever, headache, fatigue, body aches, nausea, rash, and swollen glands.

Detection of West Nile Virus (WNV):

- The virus was first isolated in a woman in the West Nile district of Uganda in 1937.
- It was identified in birds (crows and columbiformes like doves and pigeons) in the Nile delta region in 1953.
- Today, the virus is found commonly in **Africa, Europe,** the **Middle East, North America, and West Asia.**

News Source: The Hindu

E-VTOL

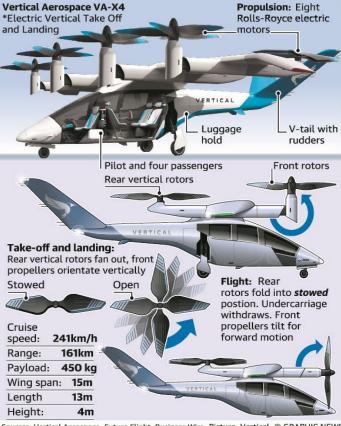
Why in the News?

 The Government of India is exploring the possibility of inviting manufacturers of Electric Vertical Take off and Landing (eVTOL) aircraft to set up bases in India.

THEMOMHINDU

What are electric aircraft?

The Union Aviation Minister while speaking at the seventh edition of the India Ideas Conclave in Bengaluru, stated that India is in 'conversation' with a number of eVTOL producers. But how are Electric Vertical Take off and Landing aircraft structured? And what are they capable of?



Sources: Vertical Aerospace, Future Flight, Business Wire Picture: Vertical © GRAPHIC NEWS

About eVTOL:

- It is an electric vertical take-off and landing (eVTOL)
 aircraft that uses electric power to hover, take off,
 and land vertically.
- It is also fuelled by the need for new vehicle technology that ensures Urban Air Mobility (UAM).
- Most eVTOLs also use what is called as distributed electric propulsion technology which means integrating a complex propulsion system with the airframe.
- There are multiple motors for various functions; to increase efficiency; and to also ensure safety.
- Thus, eVTOL is one of the newer technologies and developments in the aerospace industry.
- The global market for eVTOLs was put at \$8.5 million in 2021 and is to grow to \$30.8 million by 2030.
- The demand will be on account of green energy and noise-free aircraft, cargo carrying concepts and the need for new modes of transport.

What are the challenges?

- Crash Prevention System: As the technology so far is a mix of unpiloted and piloted aircraft, the areas in focus include "crash prevention systems".
- **Safety**: There are also issues such as ensuring safety in case of powerplant or rotor failure.
- **Cyberattacks:** Aircraft protection from cyberattacks is another area of focus.
- Operating in bad weather: A third area is in navigation and flight safety and the use of technology when operating in difficult terrain, unsafe operating environments and also bad weather.
- Certification: EVTOL certification is also complex because of planned operations within urban areas, new battery systems and the need for higher levels of automated redundancy.

How will it be in India?

- The concept of 'Advanced Air Mobility' comes in, i.e., connecting places through vertical aircraft and thus skipping road travel. This is being done now by helicopters, but eVTOLs will step into this space.
- The official said that Blade U.S. is currently working with electric vertical aircraft (EVA) manufacturers such as Beta Technologies and has partnered with them for an all-electric fleet by the year 2024.
- Beta technologies and other EVA manufacturers have been extended an invitation to manufacture in India.

Benefits of eVTOL:

Provides clean alternatives: This would decrease

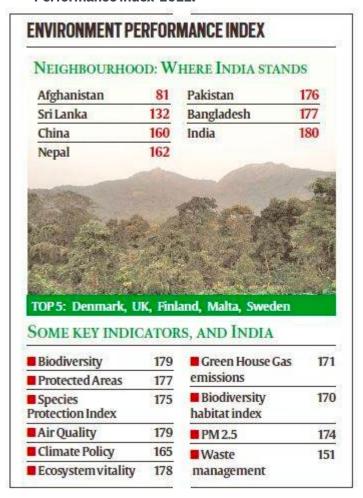
- the noise and carbon emissions from vehicles, promoting a cleaner city.
- Tackle increasing vehicular traffic: eVTOLs do not require a runway to land or takeoff, making it a good option for cities with a lack of wide open space. This would hopefully reduce the amount of vehicles on roads.
- Provides manoeuvrability & efficiency.

News Source: The Hindu

ENVIRONMENT PERFORMANCE INDEX

Why in the News?

 Recently, the World Economic Forum in collaboration with the Yale Centre for Environmental Law and Policy released the Environment Performance Index-2022.



Key Points:

About Environment Performance Index:

- It is an international ranking system that measures the environmental health and sustainability of countries.
- The **EPI, a biennial index, was started in 2002** as Environmental Sustainability Index by the World

Economic Forum in collaboration with the Yale Centre for Environmental Law and Policy and the Columbia University Centre for International Earth Science Information Network.

- It uses 40 performance indicators across 11 issue categories.
- EPI ranks 180 countries on climate change performance, environmental health, and ecosystem vitality.
- These indicators provide a gauge at a national scale of how close countries are to established environmental policy targets.
- India's Performance:
- » India has been ranked **last among 180 countries** that have been ranked.
- With a paltry score of 18.9, India's 180th ranking comes after Pakistan, Bangladesh, Vietnam and Myanmar — the bottom five together make up the poorest performing countries for environmental health.
- » India has also scored low on rule of law, control of corruption and government effectiveness.
- » India was ranked 168th in EPI-2020, with a score of 27.6.
- Global Performance:
- » Denmark holds the top rank emerging as the most sustainable country in 2022.
- The United States is lagging behind its peers of wealthy nations. It ranked 43 out of 180 countries in the index.
- » As per EPI estimates, only a handful of countries, including Denmark and the United Kingdom, are on track to meet net zero-emission goals by 2050.
- » Nations such as China, India, and Russia are headed towards the wrong direction with rapidly rising greenhouse gas emissions.
- » The EPI projections indicate that four countries China, India, the United States, and Russia — will account for over 50% of residual global greenhouse gas emissions in 2050 if the current trends hold.

News Source: The Indian Express

CARBON BOMBS

Why in the News?

 A group of environmentalists, lawyers, and activists have come together to identify and 'defuse carbon bombs' – coal, oil and gas projects that have the potential to contribute significantly to global warming.

Key Points:

What are Carbon Bombs:

- The usage of the term 'carbon bombs' picked up after an investigative project of The Guardian from May this year.
- It is "an oil or gas project that will result in at least a billion tonnes of CO2 emissions over its lifetime."

What does the report say:

- The project reported the plans of countries and private companies all over the world to engage in 195 'carbon bomb' projects.
- Each such project, it is believed, will release huge amounts of CO2 emissions into the atmosphere.
- Whenever coal, oil, or gas is extracted it results in pollution and environmental degradation.
- » Further, carbon emissions take place in particularly large amounts when fuel is burned.
- Apart from coal, oil, and gas operations, the report highlighted the **threat of methane**, which "routinely leaks from gas operations and is a powerful greenhouse gas, trapping 86 times more heat than CO2 over 20 years".

What is the plan for 'defusing' carbon bombs?

- The network working towards this goal is called Leave It In the Ground Initiative (LINGO).
- » Its mission is to "leave fossil fuels in the ground and learn to live without them."
- It believes the root of climate change is the burning of fossil fuels, and the 100% use of renewable energy sources is the solution.
- LINGO aims to organise ground support for protesting such projects, challenge them through litigation, and conduct analysis and studies for the same.

News Source: The Indian Express

LIQUID NANO UREA

Why in the News?

 Recently, the Indian Farmers Fertiliser Cooperative (IFFCO) claimed it has started commercial production of 'nano urea liquid', a first-of-its-kind product.



Image Source: Livemint

Key Points:

About Liquid Nao Urea:

- Liquid nano urea is essentially urea in the form of a nanoparticle.
- Nano urea liquid is expected to potentially replace
 13.7 million tonnes of conventional urea usage by
 2023.
- It will also replace the usage of urea granules, one of

- the most widely used fertilisers in farmlands across the world.
- Conventional granular urea is one of the most important nitrogenous fertilisers in the country, with a high nitrogen content of 46 per cent, and is available at one of the lowest market prices.
- Urea forms 82 per cent of the total nitrogenous fertilisers consumed in India, with an annual consumption of 33.6 million tonnes in 2019-20.

Significance of Nano Urea:

- Increase the production: The new nano urea liquid will increase the production of crops with improved nutritional quality.
- Cost Efficient: It is cheaper than conventional urea.
- Reduce Environmental Pollution: It is expected to reduce the environmental pollution caused by the granular form, by reducing its excessive application that exacerbates soil, water and air pollution with climate change problems.

News Source: The Indian Express



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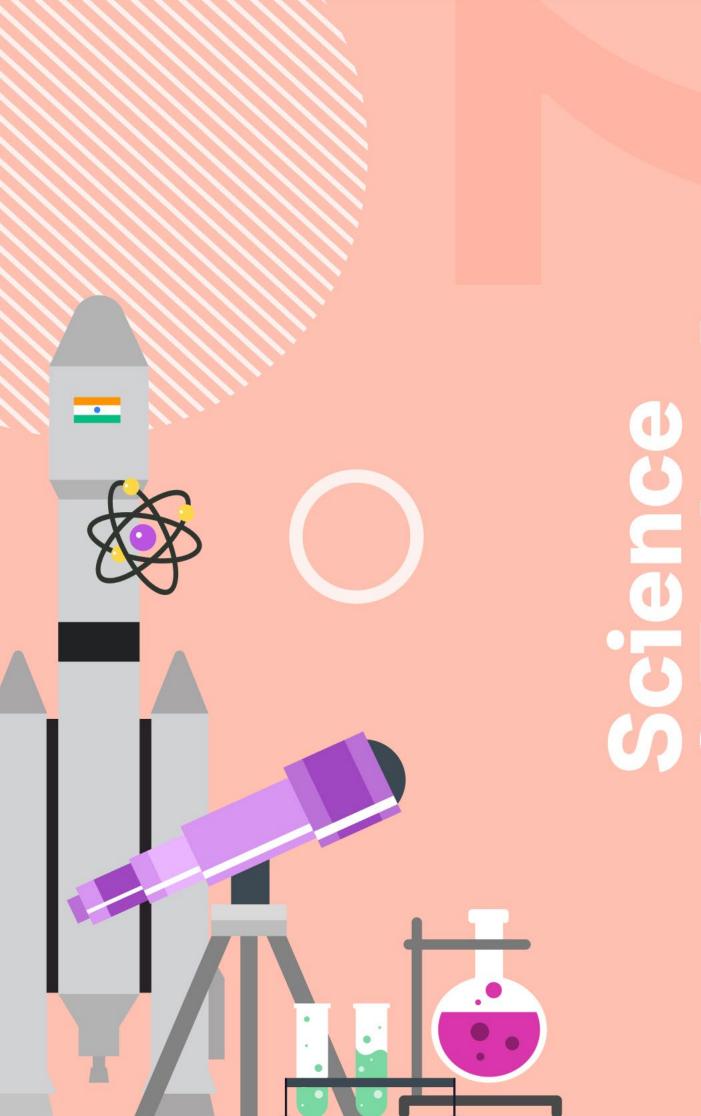
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RFID TECHNOLOGY VS BARCODES

Why in the News?

 Baggage tags equipped with radio-frequency identification (RFID) will soon be available at Delhi's Indira Gandhi International Airport, marking a first of its kind for the country.





Image Source: The Indian Express

Key Points:

About

Radio Frequency Identification

- Radio Frequency Identification (RFID) is a technology that uses radio waves to passively identify a tagged object.
- » Radio waves communicate information/identity of objects or people to nearby readers – devices that can be hand-held or built into fixed positions like poles or buildings.
- It's a wireless tracking system that consists of tags and readers.
- The tags can **carry encrypted information**, serial numbers and short descriptions.
- There are also high-memory tags like the ones designed for use in the aviation industry.
- While a casual data theft is not possible, hackers can use 'side-channel attacks' to extract the cryptographic information.
- » But that hack is **not easy to pull off** given that tag manufacturers continue to improve security features.
- Components:
- » Transponder, receiver, and transmitter are the three components of an RFID system.

· Challanges:

- » RFID's accuracy may be compromised if the tags are applied to metals or liquid. RFID frequencies can be transmitted over greater distances than barcode frequencies.
- There is also concern that RFID technology raises data protection issues, resulting in personal information becoming accessible without consent.
- Batteries are being used to power active RFID tags.
 It also utilises its own power supply to send the response to the reader.
- The Low Frequency, High Frequency, and Ultra-High Frequency bands are used by RFID systems.

What are the different kinds of RFID?

Passive tags, semi-passive tags, and active tags are the three types of RFID tags that are commercially available.

- Passive Tags: There is no power supply for passive tags. They acquire their power from the readers' incoming radio waves.
- » Passive RFID tags do not have a battery and are powered by the reader.
- Semi-passive tags: These comprise an internal circuit with a power source, but rely on the radio waves received from the reader to transmit the response.
- Active Tag: The internal circuit of active tags is powered by a power source.

What is a barcode?

- A barcode is a printed series of parallel bars or lines of varying width used for entering data into a computer system.
- » For Example: QR code.
- The bars are **black on a white background** and vary in width and quantity depending on the application.
- The bars represent the binary digits zero and one, which represent the digits zero to nine processed by a digital computer.
- These barcodes are scanned using special optical scanners known as barcode readers, which come in a variety of shapes and sizes.
- The majority of these codes use only two different widths of bars, however some use four. The numbers that make up a barcode are also printed at the bottom.

RFID Technology

RFID **uses radio waves** to communicate data from RFID chips to readers.

RFID tags are sometimes placed in plastic labels or into the object itself, making them **more durable** than barcodes.

RFID is more complicated and difficult to replicate or counterfeit.

RFID tags need not be in line of sight for use.

RFID tags are expensive.

News Source: The Indian Express

8,

Barcodes

Barcodes **use light to read the black-and-white pattern** printed on the sticky tag.

Barcodes are more susceptible to wear and breakage, which can affect their readability.

Barcodes are **simple** and easy to copy or counterfeit.

Barcodes **must be a line of sight** for use.

Barcodes are economical vis-i-vis RFID tags

D2M TECHNOLOGY

Why in the News?

 The Department of Telecommunications (DoT) is exploring the feasibility of 'direct-to-mobile' (D2M) broadcasting technology that allows broadcasting video directly to mobile phones, without needing an active internet connection.

Key Points:

About

Direct-to-Mobile Broadcasting

- D2M technology is based on the convergence of broadband and broadcast, using which mobile phones can receive terrestrial digital TV.
- It would be similar to how people listen to FM radio on their phones, where a receiver within the phone can tap into radio frequencies.
- Using D2M, multimedia content can also be beamed to phones directly.

Utility:

- · It can possibly be used to:
- » Impart citizen centric information.

- Counter fake news.
- Provide assistance to impacted people in Disaster Management.
- » Stream videos without any buffering in internet deprived areas.
- » Decongest mobile spectrum which will reduce call drops, increase data speeds.

Challenges:

- A mass roll out of the D2M technology will entail changes in infrastructure and some regulatory changes.
- Bringing key stakeholders like mobile operators onboard will be the biggest challenge in launching D2M technology on a wide scale.

News Source: The Indian Express

FAST RADIO BURST

Why in the News?

 Astronomers have detected a mysterious, repeating fast radio burst emanating from a dwarf galaxy located 3 billion light-years away.

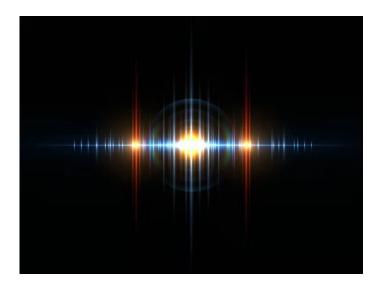


Image Source: Down to Earth

Key Points:

About

Fast Radio Burst

- FRBs are high-energy phenomena, emitting electromagnetic energy in the form of bursts of radio pulses.
- These last for an interval ranging from a mere fraction of a millisecond to a few milliseconds.
- In each pulse, the source can emit as much energy as the sun does in a month.
- FRBs are triggered by explosive events in the universe, such as a supernova or the collision of two compact objects like a neutron star and a black hole.
- Such bursts typically occur as a transient flash only once, never to be seen again.
- FRBs were **first discovered in 2007** and there are still many gaps in information regarding them.

Possible Origin:

- Many theories have suggested that FRBs are caused by neutron stars, which are the corpses of stars which died in explosions called supernovas.
- The latest studies, published in a recent edition of the journal Nature have now confirmed that FRBs are in fact generated by a rare type of neutron star known as a 'magnetar'.
- A defining property of these bursts is their dispersion:
- » The bursts produce a spectrum of radio waves, and as the waves travel through matter, they spread out – or disperse – with bursts at higher radio frequencies arriving at telescopes earlier than those at lower frequencies.

Magnetars:

- A magnetar is a rare compact type of neutron star.
- They are highly dense and have high rotation speeds i.e. 0.3 to 12.0 seconds.
- Magnetars are formed when massive stars with masses around 10-25 times the mass of the Sun – collapse and shrink to form very compact objects called neutron stars.
- » A subset of these neutron stars are called magnetars which possess intense magnetic fields.
- Magnetars have high magnetic fields in the range of 10¹⁵ gauss and they emit energy in the range given by luminosities of 10³⁷- 10⁴⁰ joules per second.
- They emit violent flares which not only help us understand the physics of magnetars but are also helpful in understanding fast radio bursts.

Pulsars & FRBs:

- FRBs are most likely bright analogs of pulsars, which are spinning neutron stars with strong magnetic fields.
- The duration and radio frequency of FRBs are similar to the flashes from pulsars, but they are intrinsically billions times brighter.
- As a result, we can see them from the edge of the Universe. Pulsars, on the other hand, are detectable only within the Milky Way galaxy.

Significance:

 The unique properties of fast radio bursts and their host galaxies – combined with recent technological advancements like the CHIME telescope – have given researchers hope that these phenomena can be used to answer some long-standing questions about the universe.

News Source: The Hindu

WEB 5.0

Why in the News?

 FormerTwitterCEOJackDorseyrecentlyannounced his vision for a new decentralised web platform that is being called Web 5.0.

Key Points:

About

Web 5.0

• Web 5.0 is being developed by Dorsey's Bitcoin business unit, The Block Head (TBH).

- Web 5.0 is called "The Telepathic Web" or "The Symbionet Web".
- Aim: To build an extra decentralised web that puts users in control of their data and identity.
- **Simply put,** Web 5.0 is Web 2.0 plus Web 3.0 that will allow users to **'own their identity'** on the Internet and 'control their data'.

Web 5.0

Developed By: Dorsey's Bitcoin business unit, The Block Head (TBH)

- Web 5.0 is called "The Telepathic Web" or "The Symbionet Web".
 - O It is called telepathic because the chips in a user's brain could instruct devices on what action to take after reading emotional cues in terms of electric signals in the user's brain.
- It build an extra decentralised web that puts users in control of their data and identity.
- To access the decentralised Web 5.0, users will have a digital wallet that stores their identity, data and authorisations.
- Web 5.0 envisioned an Internet without the threat of censorship – from governments or big tech, and without fear of significant outages.

Web 3.0

Developed By: Gavin Wood

Next generation of the World Wide Web.

- It works on a decentralised **internet** to be run on **blockchain technology**.
- Web 3.0 will be driven by Artificial Intelligence and machine learning.
- In web3, users will have ownership stakes in platforms and applications unlike now where tech giants control the platforms.

Working of Web 3.0:

- Currently, if a seller has to make a business with the buyer, both the buyer and seller need to be registered on a "platform" like Amazon or Ebay.
- This "platform" currently authenticates that the buyer and seller are genuine parties to the transaction.
- Web3 tries to remove the role of the "platform".
- For the buyer and seller to be authenticated, the usual proofs aided by blockchain technology will be used in Web 3.0.

 Thus, Web3 enables peer-to-peer (seller to buyer) transactions by eliminating the role of the intermediary.

Significance of Web 3.0:

- In Web 2.0, most of the data in the internet and the internet traffic are handled by a few large companies creating issues of data privacy, data security and abuse of data.
- Web3 offers a solution to these problems.

 A decentralised internet based on blockchain will mean users get to be 'owners' as well.

Evolution of Internet:

Web 1.0:

- Web 1.0 is the world wide web or the internet that was invented in 1989.
- Web 1.0 was mostly static where users would go to a website and read and interact with static information.
- Users themselves could not create any content or post reviews on the internet.

Web 2.0:

- In Web 2.0, most of the data in the internet and the internet traffic are owned or handled by very few big companies.
- This has created issues related to data privacy, data security and abuse of such data.
- The differentiating characteristic of Web 2.0 compared to Web1.0 is that users can create content.
- » They can interact and contribute in the form of comments, registering likes, sharing and uploading their photos or videos and performing other such activities.

Blockchain Technology:

- Blockchain derives its name from the digital databases or ledgers where information is stored as "blocks" that are coupled together to form "chains".
- Every block in the chain contains information of transactions made and every new transaction's information is added to each participant's ledger.
- A decentralised framework makes the system and the information stored therein fraud-proof, transparent and credible.

• **Bitcoin** and other digital currencies such as **Ethereum** use blockchain technology to function.

World Wide Web:

- World Wide Web which is also known as a Web, is a collection of websites or web pages stored in web servers and connected to local computers through the internet.
- These websites contain text pages, digital images, audios, videos, etc.
- The Web is viewed through web browser software such as Google Chrome, Internet Explorer, Mozilla Firefox.
- The Web was invented in 1991 by Tim Berners-Lee, while consulting at CERN (European Organisation for Nuclear Research) in Switzerland.

News Source: The Hindu

GAIA SPACE MISSION

Why in the News?

 Recently, the **third dataset** released by the European Space Agency's Gaia mission has revealed the surprise phenomena of 'starquakes'.

Key Points:

Gaia Space Mission:

- Gaia is an **astronomical observatory mission** launched in **2013** from Kourou, French Guiana.
- Launching Agency: European Space Agency (ESA)
- Objective: To create the most accurate and complete 3D map of the Milky Way by surveying 1% or one billion of the galaxy's 100 billion stars.
- In the Gaia mission the following three techniques are used for observation: Astrometry, Photometry and Spectroscopy.

GAIA'S OBSERVING TECHNIQUES



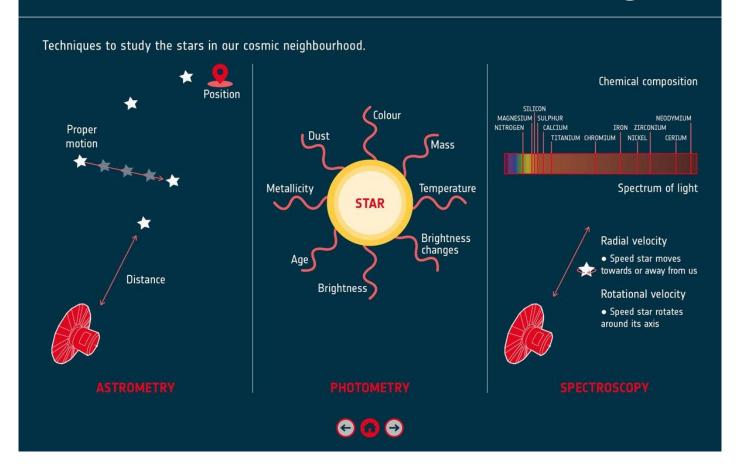


Image Source: European Space Agency

Key Findings of Third Dataset:

- **'Starquakes':** These are similar to earthquake-like movements but on the surface of stars.
- It contains improved information on nearly two billion celestial objects- including stars in the Milky Way, objects outside the galaxy and those inside our solar system.
- **Milky Way:** It contains the largest-ever three-dimensional map of stars in the Milky Way.
- » The map shows the chemical compositions as well as past and future movements of stars.
- Starquakes: One of the most surprising discoveries was that of more than 100,000 'starquakes'- which can be likened to tsunamis or massive vibrations on the surface of stars that can change their shape.
- Quasars: The new Gaia data has revealed the measurements of over a million confirmed quasars.
- » The discovery of new quasars is significant as it helps to measure the most distant stretches of our universe.
- Position of Stars: The data shows chemical components, colours, brightness, velocity, temperatures, and positions of millions of stars.

- » According to the ESA, astronomers hope to use the data to understand better how stars are born and die, and how the Milky Way evolved over billions of years.
- **Binary Systems:** The new data has revealed the position, distance, orbits, and masses of over 8,00,000 binary star systems.

Key Terms

Astrometry

 Astrometry is the science of measuring the movement and position of stars within the plane of the sky, photometry studies the colour, brightness and other derived properties of stars.

Spectroscopy

 Spectroscopy measures the radial velocity or the movement of stars towards or away from us by studying stellar spectra or the fingerprints of stars.

Quasars

· Quasars are extraordinarily active and bright

cores of galaxies powered by supermassive black holes

• These are the most luminous objects in the universe and are visible along its distant edges.

Binary Star Systems:

 These are two stars that orbit each other around a shared centre.

Significance of Gaia Mission:

- Understanding Galaxy Evolution: This information allows astronomers to reconstruct the galaxy's past and future evolution over billions of years.
- Tracing the Location of origin: The new set shows the radial velocity of 33 million stars, i.e. how fast are these stars moving towards, or away from us.

- » This can not only help scientists figure out the trajectory of the stars, but also their location of origin.
- Astronomers hope to use the data to understand better how stars are born and die, and how the Milky Way evolved over billions of years.

News Source: The Indian Express

GEOSPATIAL SELF CERTIFICATION PORTAL

Why in the News?

 Recently, the Department of Science and Technology (DST) has launched the Self Certification Portal for conveying adherence to provisions of Geospatial Guidelines by Individuals, companies, organizations, and government agencies.



Image Source: dst.gov.in

About the Self Certification Portal

4. Engaged in production or sales etc.

Purpose: This Portal facilitates entities engaged in map-related activities to certify themselves quickly and easily.

Developed by: The Portal has been developed by the Department of Science and Technology in collaboration with NIC.

- Other information regarding the portal: The selfcertification facility for entities in the portal is free and universal.
- Entities can be
- » Individuals or organisations
- » Govt or Private

- » Indian or Foreign
- » Engaged in production or sales etc.

The portal is built based on Geo-Spatial guidelines released by Govt of India in Feb 2021.

What is the significance of the Self Certification Portal?

- The portal will streamline the process of creation of Geospatial Data, Maps, products, solutions and services with a self-certification regime.
- The portal will cut down time spent on obtaining clearances and approvals drastically for Geospatial companies, researchers, academia, and innovators for carrying out Geospatial related activities.

- The portal will fast-track the Geospatial related activities in India.
- The liberalised Geospatial regime would play a pivotal role to modernise agriculture, manufacturing, construction, utilities, disaster management, urban development and governance.

News Source: PIB

THE INTERNATIONAL LIQUID-MIRROR TELESCOPE (ILMT)

Why in the News?

- Recently, India has set up its first-ever 'liquid mirror telescope' at Devasthal Observatory in Uttarakhand.
- » It became the **world's first liquid-mirro**r telescope to be commissioned for astronomy.



Image Source: Indian Express

About ILMT:

- Established on the campus owned by Aryabhatta Research Institute of Observational Sciences (ARIES). Nainital in Uttarakhand.
- It will hold the unique tag of being the maiden liquidtelescope globally to be designed exclusively for astronomical purposes.
- It will observe asteroids, supernovae, space debris and all other celestial objects from an altitude of 2,450 metres in the Himalayas.
- ILMT will be the third telescope to be operating from Devasthal after the 3.6-metre Devasthal Optical Telescope (DOT) — the largest in India commissioned

in 2016 — and the **1.3-metre Devasthal Fast Optical Telescope (DFOT)** inaugurated in 2010.

How is it different from a Conventional Telescope:

- A conventional telescope is steered to point towards the celestial source of interest in the sky for observations.
- The liquid-mirror telescopes, on the other hand, are stationary telescopes that image a strip of the sky which is at the zenith at a given point of time in the night.
- A liquid-mirror telescope will survey and capture any and all possible celestial objects — from stars, galaxies, supernovae explosions, asteroids to space debris.
- Conventional telescopes have highly polished glass mirrors — either single or a combination of curved ones — that are steered in a controlled fashion to focus on the targeted celestial object on specific nights. The light is then reflected to create images.
- The liquid-telescope is made up of mirrors with a reflective liquid, in this case, mercury — a metal which has a high light-reflecting capacity.

Countries involved in its development:

- India, Belgium, Canada, Poland and Uzbekistan are the main countries that have collaborated to set up the ILMT.
- The telescope was designed and built at the Advanced Mechanical and Optical Systems Corporation and the Centre Spatial de Liège in Belgium.

Significance of ILMT:

- It is estimated that the ILMT is capable of generating 10-15 GB/night.. This will be significant for the global scientific communities.
- The ILMT will deploy the latest computational tools, like Artificial Intelligence, Machine Learning and big data analytics to process and analyse the large data.
- Selected data can be used as a base data for carrying out further focused research using spectrographs, near-Infrared spectrograph mounted on the inhouse DOT.

News Source: The Indian Express

Securit Defence **M** 0

AGNI-IV MISSILE

Why in the News?

 Recently, India conducted a launch test of its nuclear-capable Agni-4 missile, reaffirming the credible minimum deterrence capability from APJ Abdul Kalam Island, Odisha.

Key Points:

About

Agni-4

- It is an **Intermediate Range Ballistic Missile** with a range of around 4,000 km.
- Developed by: the Defence Research and Development Organisation (DRDO).
- It can carry a 1,000-kg payload and can go as high as 900 km.
- It uses a two-stage rocket engine powered by solid propellants.
- Further, the Composite Rocket Motor which has been used for the first time in this missile is known to deliver excellent performance.
- Agni-4 falls under the Strategic Forces Command (SFC), which is operationally responsible for all of India's nuclear assets.

A Synoptic View: History of missile technology in India

- At the time of Independence, India did not have any indigenous missile capabilities.
- The Government created the **Special Weapon Development Team** in 1958.
- This was later expanded and called the **Defence** Research and **Development Laboratory (DRDL)**, which moved from Delhi to Hyderabad by 1962.
- In 1972, Project Devil, for the development of a medium range Surface-to-Surface Missile was initiated. A large number of infrastructure and test facilities were established during this period.
- The development of components / systems for Project Devil formed the technology base for the future IGMDP Programme.
- By 1982, DRDL was working on several missile technologies under the Integrated Guided Missiles Development Programme (IGMDP).

India's Missile Systems:

- The two most important India's Missile Systems are:
 Agni and Prithvi, both being used by the Strategic Forces Command.
- Agni (range around 5,000), is India's only contender for an inter-continental ballistic missile (ICBM), which is available with only a few countries.
- » **Prithvi,** although a short-range surface-to-surface missile with a 350 km range, has strategic uses.
- India also tested a anti-satellite system in April 2019. A modified anti-ballistic missile named Prithvi Defence Vehicle Mk 2 was used to hit a low-orbit satellite. It put India only behind the US, Russia and China in this capability.
- » Agni, Prithvi all are developed under Integrated guided missile development programme.

Significance:

 According to observers, Agni-4 test comes amidst the continuing military confrontation with China in eastern Ladakh, which has entered its third year now without showing any signs of de-escalation in the high-altitude region.

Variants of Agni

- Agni 1- covers a range of up to 1000 kms, Agni 2-2000 kms, Agni 3- 2500 kms, Agni 4 more than 3500 kms and can be fired from a mobile launcher.
- Agni 5, with a range of 5000-8000 kms, is marked as an inter-continental ballistic missile while Agni 6, ICBM with a range of 8000 kms to 10,000 kms is classified MIRVed Warhead.

What is the difference between 'Credible Minimum Deterrence' and 'Strategic Deterrence'?

- Credible Minimum Deterrence: It is a composite
 posturing adopted by some nuclear-armed states
 (especially India and Pakistan) to convey a nonaggressive and defensive nuclear posture by
 projecting a nuclear arsenal that fulfils the bare
 needs of defence and security.
- » Accordingly, it implies that the nuclear arsenals will be minimal enough to provide credible deterrence against adversaries.
- Strategic Deterrence: It has traditionally (especially during the Cold War) been associated with nuclear weapons - possession of capability to undertake unacceptable destruction and deterring the adversary by posturing the ability and intent to do so.

News Source: The Hindu

CORVETTE

Why in the News?

 The Defence Acquisition Council (DAC) has given the Acceptance of Necessity (AoN) for the procurement of next-generation Corvettes for the Indian Navy at an approximate cost of Rs 36,000 crore.

Key Points:

About

Corvette

- The word corvette is derived from French and Dutch origin.
- A Corvette is the **smallest class of naval ships** and it falls below the warship class of a frigate.
- These are highly agile ships and are categorised as missile boats, anti-submarine ships, coastal patrol crafts and fast attack naval vessels.
- During World War II, the term Corvette was used to describe vessels which had anti-submarine roles assigned to them.
- » Modern Corvettes can go up to 2,000 tons in displacement which helps in keeping them agile.

Kamorta Class Corvettes:

- The Indian Navy at present has the Kamorta Class Corvettes, which are also known as Project 28.
- These ships have an anti-submarine role and are manufactured at Garden Reach Shipbuilders and Engineers in Kolkata.
- The Four Kamorta Class Corvettes are INS Kamorta, INS Kadmatt, INS Kiltan and INS Kavaratti.
- These Kamorta Class Corvettes have a high degree of indigenous equipment being used on the platform.

News Source: The Indian Express

DEVELOPMENT OF BRAHMOS MISSILE

Why in the News?

 Recently, the BrahMos supersonic cruise missile marked the 21st anniversary of its first test from a land-based launcher in Chandipur, Odisha.



Image Source: The Indian Express

Key Points:

Background

India-Russia Collaboration:

- In the early 1990s, India's strategic leadership felt the need for cruise missiles — guided missiles that traverse the majority of their flight path at almost constant speed and deliver large warheads over long distances with high precision.
- The need was felt primarily following the use of cruise missiles in the Gulf War.
- An Inter-Governmental Agreement was signed with Russia in Moscow in 1998 which led to the formation of BrahMos Aerospace, a joint venture between DRDO and NPO Mashinostroyenia (NPOM), the Indian side holding 50.5% and the Russians 49.5%.
- In 1999, work on development of missiles began in the labs of DRDO and NPOM.
- The first successful test in 2001 was conducted from a specially designed land-based launcher.

Brahmos Missile:

- BrahMos is a **joint venture** between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya.
- The missile derives its name from the **Brahmaputra** and **Moskva** rivers.
- BrahMos is a two-stage missile with a solid propellant booster engine.
- First Stage: In the first stage, it brings the missile to supersonic speed and then gets separated.
- » Second Stage: In the liquid ramjet or the second stage it takes the missile closer to three times the speed of sound in cruise phase.
- The missile is capable of being launched from land, sea, sub-sea and air against surface and sea-based targets.
- The missile has a very low radar signature, making it stealthy, and can achieve a variety of trajectories.

- It works on the 'fire and forget' principle.
- It falls in the category of "standoff range weapons".
- "Standoff range weapons", are fired from a range far enough to allow the attacker to evade defensive counter-fire.
- The BrahMos has three times the speed, 2.5 times flight range and higher range compared to subsonic cruise missiles.

Status of Defence exports:

- In January 2022, the Philippines signed a \$374.96 million deal with BrahMos Aerospace
 Pvt. Ltd. for the supply of a shore-based anti-ship variant of the BrahMos supersonic cruise missile.
- From 2016-17 to 2018-19, the country's defence exports have increased from ₹1,521 crore to ₹10,745 crore, a **staggering 700% growth**.
- As per data given by the Government, defence exports for 2020-21 stood at ₹8434.84 crore and the export target for financial year 2021-22 was ₹10,000 crore.

News Source: The Indian Express

CRITICAL INFORMATION INFRASTRUCTURE

Why in the News?

 Recently, the Ministry of Electronics and IT (MeitY), has declared the IT resources of ICICI Bank, HDFC Bank and UPI managing entity NPCI as 'Critical Information Infrastructure'.



Ministry of Electronics and Information Technology Government of India

Image Source: The Indian Express

Key Points:

About

Critical Information Infrastructure(CII):

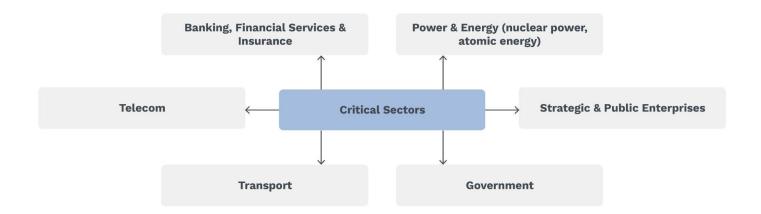
- As per, the Information Technology Act of 2000, 'Critical Information Infrastructure' means a computer resource, the incapacitation or destruction of which, shall have debilitating impact on national security, economy, public health or safety.
- Under the Act, the government has the power to declare any data, database, IT network or communications infrastructure as CII to protect that digital asset.
- Any person who secures access or attempts to secure access to a protected system in violation of the law can be punished with a jail term of up to 10 years.

Why is CII classification and protection necessary?

- IT resources form the backbone of countless critical operations in a country's infrastructure, and given their interconnectedness, disruptions can have a cascading effect across sectors.
- An information technology failure at a power grid can lead to prolonged outages crippling other sectors like healthcare, banking services.
- Therefore, the world over governments have been moving with alacrity to protect their critical information infrastructure.

How are CIIs protected in India?

- National Critical Information Infrastructure Protection Centre (NCIIPC)
- It was created in 2014 and acts as the nodal agency for taking all measures to protect the nation's critical information infrastructure.
- » Mandate: To guard Clls from "unauthorised access, modification, use, disclosure, disruption, incapacitation or distraction".
- » It will monitor and forecast national-level threats to CII for policy guidance, expertise sharing and situational awareness for early warning or alerts.



Significance of Designating IT resources as Critical Information Infrastructure:

• The Computer resources relating to the Core Banking Solution, Real Time Gross Settlement and National Electronic Fund Transfer comprising Structured Financial Messaging Server, being Critical Information Infrastructure of the ICICI Bank, and the computer resources of its associated dependencies to be protected systems shall be protected as per, the "Information Technology Act of 2000 Act,".

News Source: The Indian Express

VERTICAL LAUNCH SHORT RANGE SURFACE TO AIR MISSILE SYSTEM

Why in the news?

 Recently, India has successfully flight-tested the Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) from a ship at Integrated Test Range (ITR), Chandipur, off the coast of Odisha.

Key Points:

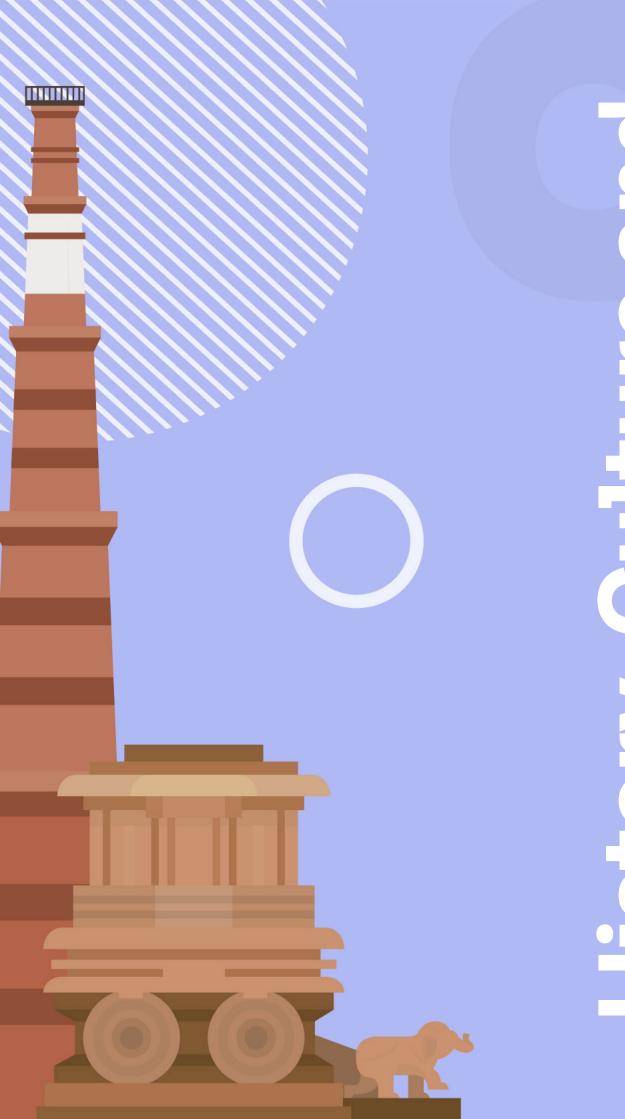


Image Source: Indian Express

About Vertical Launch Short Range Surface to Air Missile (VL-SRSAM):

- It is a ship-borne weapon system, meant for neutralising various aerial threats at close ranges, including sea-skimming targets.
- Range: 40 km to 50 km and at an altitude of around
 15 km.
- Developed by: Defence Research and Development Organisation (DRDO)
- The weapon system will prove to be a forcemultiplier for the Indian Navy.
- Two key features of the VL-SRSAM are cruciform wings and thrust vectoring.
- VL-SRSAM is a canisterised system, which means it is stored and operated from specially designed compartments.
- In the canister, the inside environment is controlled, thus making its transport and storage easier and improving the shelf life of weapons.

News Source: PIB



EXCAVATIONS OF IRON IN TAMIL NADU

Why in the News?

- Recently, archaeological excavations in Mayiladumparai (Tamil Nadu) have found that the date of iron artefacts unearthed back to 4200 years ago.
- » Before this, the earliest evidence of iron use was from 1900-2000 BCE for the country.



Image Source: the print

Key Points:

- The recent excavated finds in Tamil Nadu pushed evidence of iron being used in India back to 4,200 years ago.
- The latest evidence dates the findings from Tamil Nadu to 2172 BCE.
- Site: The excavations are from Mayiladumparai near Krishnagiri in Tamil Nadu.
- » Mayiladumparai is a site of historical importance dating between the Microlithic (30,000 BCE) and Early Historic (600 BCE) ages.
- Method: The carbon-dating method was used to confirm the dating.

Earlier evidence of Iron in India:

 The earliest evidence of iron, before the above excavation, was from 1900-2000 BCE. In Tamil Nadu, it was 1500 BCE.

Other important findings:

- The other important finding is the evidence that the late Neolithic phase in Tamil Nadu has been identified to have begun before 2200 BCE.
- Archaeologists also found that black and redware pottery was introduced in the late Neolithic phase itself.
- » Earlier it was believed that this occurred in the Iron Age.

Historical Significance of Iron:

- Invention of iron technology led to the production of agricultural tools and weapons.
- It was essential for economic and cultural progress.
- Iron tools became important as they were used to clear the dense forests so that agriculture could be practised..
- With the latest evidence tracing Iron Age to 2000 BCE from 1500 BC, it can be assumed that our cultural seeds were laid in 2000 BCE.
- And the benefit of socio-economic changes and massive production triggered by the iron technology gave its first fruit around 600 BCE — the Tamil Brahmi scripts.
- Significantly, this dating has narrowed the gap between the Indus civilization and Tamilagam/South India's Sangam Age.

News Source: The Hindu

SANT KABIR

Why in the News?

 Recently, President Ram Nath Kovind inaugurated the Sant Kabir Academy and Research Centre Swadesh Darshan Yojana and paid tribute to the Bhakti saint, Kabir at Maghar (Uttar Pradesh).



Image Source: Indian Express

Kabir and his life

- Most historians agree on the following facts about Kabir.
- He was **born in Varanasi** and lived between the **years 1398 and 1448**, or till the year 1518 according to popular belief.
- He was from a community of 'lower caste' weavers
 of the Julaha caste, a group that had recently
 converted to Islam.
- He learned the art of weaving, likely studied meditative and devotional practices under the

- guidance of a Hindu guru and grew to become an eminent teacher and poet-singer.
- Kabir's beliefs were deeply radical, and he was known for his intense and outspoken voice which he used to attack the dominant religions and entrenched caste systems of the time.
- He composed his verses orally and is generally assumed to be illiterate.
- He is also believed to be (but not on strong historical grounds) a disciple of the famous guru Ramananda, a 14th century Vaishnava poet-saint.

Kabir and his compositions

- Kabir's compositions can be classified into three literary forms:
- » Dohas (short two liners),
- » Ramanas (rhymed 4 liners),
- » sung compositions of varying length, known as padas (verses) and sabdas (words).
- Kabir's works had a great influence on the Bhakti Movement- Kabir Granthawali, Anurag Sagar, Bijak and Sakhi Granth.

The Bhakti movement and the Nirguni tradition

- The Bhakti movement, which began in the 7th century in South India, had begun to spread across north India in the 14th and the 15th centuries.
- The movement was characterized by popular poetsaints who sang devotional songs to God in vernacular languages, with many preaching for abolishing the Varna system and some kind of Hindu-Muslim unity. They emphasised an intense emotional attachment with God.
- One school within the Bhakti movement was the Nirguni tradition and Sant Kabir was a prominent member of it.
- » In this tradition, God was understood to be a universal and formless being.

How did Kabir critique religion and caste?

• Kabir is in modern times portrayed as a figure that synthesized Islam and Hinduism.

- He did not only target the rituals and practices of both Hinduism and Islam, but also dismissed the sacred authority of their religious books, the Vedas and the Quran.
- Kabir did use the name Rama in his poems, but he clarified that he was not referring to the avatar of Vishnu, but a formless and general Hindu name for the divine.
- He even combined Allah and Ram.
- In many of his verses, Kabir proclaimed that people of all castes have the right to salvation through the bhakti tradition.
- He sought to eradicate caste distinctions and attempted to create an egalitarian society, by stressing the notion that a Bhakt (devotee) was neither a Brahmin nor an 'untouchable' but just a Bhakt.

What is Kabir Panth?

- Kabir's own humble origins and his radical message of egalitarianism fostered a community of his followers called the **Kabir Panth**.
- Kabir Panth is a sect in northern and central India, many of their members are from the Dalit community.
- Historians estimate that it was established in India between 1600 and 1650, one or two centuries after his death.

Kabir and Guru Granth Sahib

- Several of Kabir's verses and songs form a vital part of the Guru Granth Sahib. Compiled in 1604, the text is the oldest written collection of Kabir's work.
- The fifth Sikh guru, Guru Arjan Dev collected major part oF Kabir's work.

Kabir and his death

- After his death, both Hindu and Muslim communities almost came to blows over the right to claim his body.
- · It was eventually resolved peacefully.

News Source: The Indian Express



WORLD ENVIRONMENT DAY

Why in the News?

 World Environment Day is celebrated on June 5 every year to raise awareness about degrading environmental conditions and to encourage people globally to take positive environmental actions.

Key Points:

About

World Environment Day 2022

- World Environment Day was established in 1972 by the UN General Assembly at the time of the Stockholm Conference.
- The First World Environment Day was celebrated in 1974.
- In the year 2022, **Sweden** is the **host** of World Environment Day.
- The theme of World Environment Day this year is 'Only One Earth' which focuses on living sustainably in harmony with nature.

News Source: The Indian Express

BLACK DEATH

Why in the News?

 Recently, scientists claim that Black Death, a bacterial plague that wiped out half of the continent's population in the 14th century, might have first emerged in China.

Key Points:

About:

Black Death

- The term Black Death refers to the bubonic plague that spread across Western Asia, Northern Africa, the Middle East and Europe in 1346-53.
- Most Scholars agree that the Black Death, which killed millions, was caused by bacterium Yersinia pestis.

How did researchers pinpoint the Black Death's origin?

 In the late 19th century, excavations of two Christian cemeteries near Lake Issyk-Kul in Kyrgyzstan unearthed a settlement of a trading community that had been affected by an unknown disease in 1338-1339.

- Historian Philip Slavin, one of the researchers involved in the present study, examined the tombstones, on which Syriac inscriptions stated that the victims died of an unknown epidemic.
- The researchers then extracted DNA from the teeth of seven people that were buried at the cemetery and found genetic traces of Y. pestis bacterium.
- The extracted DNA was compared with bacterial DNA collected from other plague victims in Europe.
- The researchers found that the strain of Y. pestis that caused the epidemic in the settlements near Lake Issyk-Kul was the direct ancestor of the strain that caused the Black Death, according to the Wall Street Journal.

Significance of Discovery:

- The geographical origin point of the plague has been debated for centuries. Some historians have argued that the plague originated in China, and spread across Europe by Italian merchants who first entered the continent in trading caravans through Crimea.
- According to Historian Mary Fisselt, if the latest research is correct, it would mean that the plague spread through trading routes and not, as some historians have argued, through warfare a century prior.

News Source: The Indian Express

COVID-19'S ORIGINS

Why in the News?

- A panel of experts known as the Scientific Advisory Group for the Origins of Novel Pathogens (SAGO) appointed by the World Health Organisation (WHO) to investigate the origins of the Covid-19 pandemic has published its first report.
- Further, the SAGO Panel has been mandated to draw up a framework for investigating future outbreaks more effectively.

Key Points:

About

SAGO Panel Findings: Covid 19 Origin

- The new WHO report says a zoonotic origin is the most likely explanation for the emergence of the novel coronavirus.
- However, it says that neither the original animal source, the intermediate host, nor the moment the virus crossed over into humans, has been identified.

- » That is chiefly because a lot of data is missing, the report says, particularly from China.
- It called for a number of studies to be carried out both in China and globally to shed further light on the pandemic's origins.
- These include additional studies on the first human cases in China, as well as efforts to trace whether the virus was circulating in China – and elsewhere – before the first cases were found.

Can the lab leak theory be true?

 The panel also said that no further information has been provided on whether the coronavirus may have reached humans via a laboratory incident, meaning more data and investigations remained important.

News Source: The Indian Express

SPORTS CODE

Why in the News?

 Recently, The Union Sports Ministry has reportedly set June 30, 2022 as the deadline for all federations to comply with provisions of its sports code.

Key Points:

About:

- It is a set of regulations passed by the government in 2011, which enunciated the 'basic universal principles of good governance, ethics and fair play.'
- The Sports Code seeks to put restrictions on the age and tenure of the office-bearers of federations apart from envisaging transparent functioning along with free and fair elections.
- The Centre government is responsible for ensuring that all federations are compliant with the Sports Code.

JAN SAMARTH PORTAL

Why in the News?

 Recently, the Prime Minister launched the national portal for credit-linked government schemes - Jan Samarth Portal.

Key Points:

Jan Samarth Portal

 It is a one-stop digital portal linking government credit schemes that directly connects beneficiaries to lenders.

- Purpose: To encourage inclusive growth and development of various sectors by guiding and providing them with the right type of government benefits through simple and easy digital processes.
- The portal ensures end-to-end coverage of all the linked schemes.

News Source: The Indian Express

LIFE MOVEMENT

Why in the News?

 Recently, the Prime Minister launched the 'Lifestyle for the Environment (LiFE) Movement', via video conferencing on the occasion of World Environment Day.

Key Points:

About

LiFE Movement

- The Concept of LiFE was introduced by the Prime Minister during the 26th United Nations Climate Change Conference of the Parties (COP26) in Glasgow last year.
- LiFE promotes an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption'.
- It plans to create and nurture a global network of individuals, namely 'Pro-Planet People' (P3)
- » P3 will have a shared commitment to adopt and promote environmentally friendly lifestyles.
- The Mission envisions replacing the prevalent 'useand-dispose' economy with a 'circular economy'.
- "Use and Dispose' economy is governed by mindless and destructive consumption whereas the circular economy is defined by mindful and deliberate utilisation.

News Source: The Indian Express

BLACK SWAN EVENT

Why in the News?

According to a study by the Reserve Bank of India (RBI), the possibility of capital outflows to the tune of \$100 billion from India may happen in case of a major global risk scenario or a "black swan" event.



Image Source: Business Standard

Key Points:

About

Black Swan Event

- The black swan theory was put forward by author and investor Nassim Nicholas Taleb in 2001
- A black swan is a rare, unpredictable event that comes as a surprise and has a significant impact on society or the World.
- » Example: Brexit, 9/11 Terror attack, Fall of the Soviet Union
- These events are said to have three distinguishing characteristics:
- » they are extremely rare and outside the realm of regular expectations;
- » they have a severe impact after they hit; and
- » they seem probable in hindsight when plausible explanations appear.

News Source: The Indian Express

LAMDA

Why in the News?

 Recently, Google engineer Blake Lemoine claimed that LaMDA, a language model created by Google Al, had become sentient and begun reasoning like a human being.



Key Points:

About

Language Models for Dialog Applications (LaMDA)

- LaMDA is a machine-learning language model created by Google as a chatbot that is supposed to mimic humans in conversation.
- Like BERT, GPT-3 and other language models, it is built on Transformer, a neural network architecture that Google invented and open-sourced in 2017.
- It is designed to be able to engage in **free-flowing** conversations about a virtually endless number of topics.

What is Sentience?

- Sentience is derived from Latin sentientem (a feeling).
- The Merriam Webster dictionary defines it as "feeling or sensation as distinguished from perception and thought."
- Sentience is different from intelligence and also includes feeling and emotions.

News Source: The Indian Express

UTRICULARIA FURCELLATA: A RARE PLANT SPECIES

Why in the News?

 A very rare carnivorous plant species called Utricularia Furcellata has been found in the western Himalayan region for the first time.



Image Source: ANI News

About Utricularia Furcellata:

- It is a **carnivorous plant** belongs to a genus which is commonly known as **bladderworts.**
- It was detected in Uttarakhand's Mandal valley, Chamoli district. This plant was last seen in the country in Meghalaya state in 1986.
- **Feature:** It uses one of the most sophisticated and developed plant structures for trap and the targets range from protozoa to insects, mosquito larvae and even young tadpoles.
- Habitat: These plants are found mostly in fresh water and wet soil.

News Source: The Hindu

NATIONAL INITIATIVE FOR PROMOTING UPSKILLING OF NIRMAN WORKERS (NIPUN)

Why in the News?

 Recently, the Ministry of Housing and Urban Affairs has launched An Innovative project called "National Initiative for Promoting Upskilling of Nirman workers (NIPUN).

About NIPUN initiative:

- The project NIPUN is an initiative of the MoHUA under its flagship scheme of the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM).
- It seeks to train over 1 lakh construction workers, through fresh skilling and upskilling programmes.
- The National Skill Development Corporation (NSDC), the nodal agency under the Ministry of Skill Development & Entrepreneurship (MSDE).
- The courses are aligned with National Skills Qualifications Framework (NSQF) and will be imparted at accredited and affiliated training centres.
- It will also facilitate and support convergence with related line ministries.
- NSDC will be responsible for the overall execution of training, monitoring and candidate tracking.
- It will provide trainees with 'Kaushal Bima', a threeyear accidental insurance with coverage of 2 lakh rupees.

News Source: PIB

RAMSAY HUNT SYNDROME

Why in the News?

 Recently, Pop singer Justin Bieber has been diagnosed with Ramsay Hunt Syndrome.

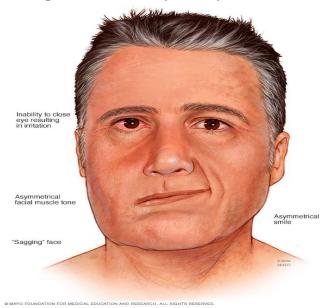


Image Source: mayoclinic.org

Key Points:

About Ramsay Hunt Syndrome:

- Ramsay Hunt Syndrome is a neurological disease in which a virus – Varicella Zoster – causes inflammation of the nerves involved in facial movements.
- **Symptoms:** The symptoms include painful, red rash and blisters in and around the ear, and facial paralysis on the same side.
- Causes: The Varicella Zoster Virus (VZV) is the same virus that causes chickenpox and shingles.
- The virus can stay dormant in a person's body and can reawaken to attack the nerves.
- » VZV can get reactivated due to weakening of the immune system.
- Transmission: The disease is not contagious but can lead to chickenpox in those not vaccinated for the disease.
- Treatment: It is treated using anti-viral drugs, steroids and physiotherapy.
- Facial exercises are very important. The disease is reversible. Patients get cured within 15 days to three months of starting the treatment.

News Source: The Indian Express

WEST SETI POWER PROJECT

Why in the News?

 India will be taking over an ambitious hydropower project (West Seti) in Nepal, nearly four years after China withdrew from it, ending a six-year engagement between 2012 and 2018.

Key Points:

About West Seti Project:

- It is a proposed 750-megawatt West Seti Hydropower Project project is being planned on the Seti river in the western end of Nepal near Dadheldhura.
- The government has remodelled the project as West Seti and Seti River (SR-6), a joint project, has the capacity to generate 1200 MW of electricity.

India-Nepal power relations:

- The Mahakali treaty was signed in 1995 to produce 6480 MW.
- Upper Karnali project for which the multinational GMR signed the contract, has not made any headway for years.
- **900 MW Arun Three projects** in eastern Nepal's SankhuwaSabha is set for completion by 2023.



News Source: The Hindu

LAKE SAWA

Why in the News?

- This year, for the first time in its centuries-long history, Iraq Lake Sawa dried up.
- A combination of mismanagement by local investors, government neglect and climate change has ground down its azure shores to chunks of salt.



Sawa Lake

- Sawa Lake is an endorheic basin located in the Iraqi governorate of Muthanna near to the Euphrates River
- This lake has no inlet or outlet, but it draws water from the Euphrates through a system of joint cracks and fissures which transport water to aquifers beneath it.
- The water's level fluctuates during dry and wet seasons.
- · Sawa Lake is characterised by an arid climate.
- Because of its saline water, no plants grow in the lake or on its shores. Fish and algae are the most important aquatic organisms.

What is an Endorheic lake?

 The lakes which do not have a natural outflow and lose water solely by evaporation or underground seepage or both are termed as endorheic lakes.

News Source: The Indian Express

NATIONAL E-VIDHAN APPLICATION (NEVA) SYSTEM

Why in the News?

- Recently, a delegation of MLAs from Gujarat visited the Uttar Pradesh Legislative Assembly to learn about the novel e-Vidhan system for paperless proceedings that has been recently adopted by the UP state assembly.
- » Nagaland became the first state to implement NeVA, in March this year.



Image Source: neva.gov.in

What is the National e-Vidhan Application (NeVA) system?

- It is a system for **digitising the legislative bodies** of all Indian states and the Parliament through a single platform.
- This has been developed to make all the work and data related to legislative bodies available online for the use of both citizens and the members of Assemblies.
- It includes a website and a mobile app.
- Nodal Ministry: The Ministry of Parliamentary Affairs (MoPA) is the 'Nodal Ministry' for its implementation in all the 31 States/UTs with Legislatures.

Why is NeVA being introduced?

- This has been done for streamlining information related to various state assemblies.
- To eliminate the use of paper in day-to-day functioning.

Challenges: The International Parliamentary Union, in a 2018 report outlined some challenges in this regard.

- Access to devices, as well as reliable internet and electricity, can be a problem for legislators representing rural constituencies.
- Lack of training and heightened concerns over security are some of the issues in the road to digitisation.

Significance:

 A digital platform gives the necessary technological boost to the parliamentary system, and also works to connect all the democratic units of the country.

News Source: The Hindu

SELA MACAQUE

Why in the News?

- Recently, a new species of old world monkey recorded from **Arunachal Pradesh** has been named after a strategic mountain pass **Sela Pass**.
- » It was identified and analysed by a team of experts from the Zoological Survey of India (ZSI) and the University of Calcutta

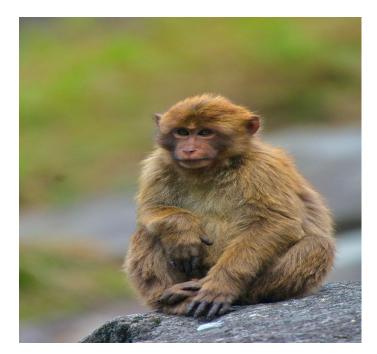


Image Source: The Hindu

Key Points:

About Sela Macaque:

- Sela macaque belongs to the sinica species-group of Macaca.
- Location: The species was found in western and central Arunachal Pradesh.
- Characteristics: Sela macaques are genetically related to Arunachal macaques. The two share physical features such as a heavy build and long dorsal body hair.
- » Other features of the species include brown collar hair and muzzle, thick brown hair around the neck, and the absence of chin whiskers.
- Sela macaque is a major cause of crop loss in the West Kameng district of the State.

News Source: The Hindu

BHARAT GAURAV TRAIN

Why in the News?

 The 'Bharat Gaurav' train service from Coimbatore to Shirdi, a first of its kind in the country, was inaugurated recently at the Coimbatore North Railway Station.



Key Points:

- Objective: To showcase India's rich cultural heritage and magnificent historical places to the people of India and the world.
- **Aim:** Leverage the core strengths of the professionals of the tourism sector to run theme-based trains to tap India's vast tourist potential.
- Bharat Gaurav Scheme guidelines apply to already running tourist circuit trains by IRCTC as well such as Buddhist Circuit Tourist Train.
- Bharat Gaurav express trains are operated by private players, who have the right to use the rail infrastructure provided by the Indian Railways.

News Source: The Hindu



T d

SANT TUKARAM

Why in the News?

 The Prime Minister inaugurated the Sant Tukaram Shila Mandir in Dehu in Maharashtra's Pune district.



Image Source: HindustanTimes

Key Points:

About

Sant Tukaram

- Sant Tukaram was a **Warkari saint** and a poet known for his devotional songs and **abhanga poetry.**
- He preached about a society without caste and turned away from rituals, which led to a social movement.
- His poetry refers to earlier Bhakti saints Namdev, Dnyaneshwar, Kabir, and Eknath, who influenced his spiritual growth.
- Sant Tukaram is credited with starting the Wari pilgrimage, where devotees of Lord Vitohba, an avatar of Lord Vishnu, walk from Dehu (also the birthplace of the saint) to the Shri Vitthal-Rukmini Mandir in Pandharpur over 21 days.

Why Shila is significant to Sant Tukaram?

· Shila has great significance in the story of Sant

Tukaram. The Bhakti saint sat on this rock for 13 days when the authenticity of his abhangas was questioned.

 The Shila is placed on the Dehu Sansthan temple premise, which is the point from where the annual pilgrimage to Pandharpur has been taking off for centuries.

News Source: The Indian Express

GUSTAVO PETRO

Why in the News?

 Former rebel fighter Gustavo Petro secured 50.5% of the vote in the second round of Colombia's presidential election, putting himself in line to become the first leftist President of the country.



Image Source:BBC

Key Points:

About

Gustavo Petro

- Born into a modest family on Colombia's Caribbean coast, Petro embraced leftist politics as a teenager after the 1973 coup d'etat in Chile.
- He joined the M-19 urban guerrilla group as a 17-year-old, but insisted afterwards that his role in Colombia's decades of civil war was as an organiser, never a fighter.
- He was freed and the M-19 signed a peace deal with the government in 1990. He has since served as a lower house legislator, senator and mayor.

News Source: The Indian Express

Places in News



DONBAS REGION

Why in the News?

 Recently, the Ukrainian President Zelensky outlined that Ukraine's battle against Russian troops in the eastern region of the Donbass will determine the course of the war.

Key Points:

About

Donbas Region

 Donbas is a small region in eastern Ukraine adjoining the Russian border. Donetsk and Luhansk regions are collectively known as the Donbas.

- In Donbas, ethnic Ukrainians make up a majority, while ethnic Russians are the largest minority.
- » But over **70% of the population**, across the ethnic divisions, **speak Russian**.
- After Russia annexed the Crimean Peninsula in 2014, the Russian-backed separatists in the Donbas – broke away from Ukrainian government control in 2014 and held a referendum to declare independence from Ukraine.
- Since then, the Donbas region within Ukraine has been witnessing skirmishes between the rebels and Ukrainian forces.
- Donbas region proclaimed themselves independent as "people's republics", until now recognized by Russia.



Image Source: BBC

News Source: The Indian Express

TUNISIA

Why in the News?

 President Kais Saied is set to approve a draft constitution that proposes to drop Islam as Tunisia's State religion.

Key Points:

About

Tunisia

- Tunisia is bounded by Algeria to the west and southwest, by Libya to the southeast, and by the Mediterranean Sea to the east and north.
- The highest mountain, Mount Chambi (Al-Shaʿnabī), located near the centre of the Algerian border.
- Tunisia is situated in the warm temperate zone between latitudes 37° and 30° N.
- The population of Tunisia is essentially Arab Berber.

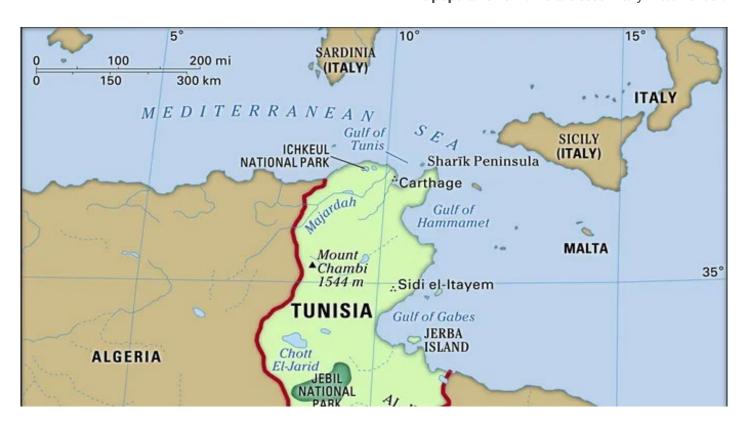


Image Source: Britannica

News Source: The Hindu

EL SALVADOR

Why in the News?

 The recent crash in the price of Bitcoin and other cryptocurrencies has put El Salvador's government in trouble.



Image Source: WorldAtlas

Key Points:

About

El Salvador

- El Salvador is bounded by Honduras to the north and east, by the Pacific Ocean to the south, and by Guatemala to the northwest.
- It is the only Central American country that lacks a Caribbean coast.
- Spanish is the official language of El Salvador.
- The majority of the people are mestizos.
- The U.S. dollar is El Salvador's official currency.
- Cerro El Pital the highest point of El Salvador, is situated on the Honduras border.

News Source: The Hindu

SNAKE ISLAND

Why in the News?

Recently, Ukraine has caused "significant losses" to the Russian military in airstrikes on Zmiinyi Island, also known as Snake Island, in the Black Sea.



Key Points:

About Snake Islands:

Image Source: BBC

- Zmiinyi Island, also known as Snake or Serpent Island, is a small piece of rock less than 700 metres from end to end has been described as being "X-shaped".
- It is located 35 km from the coast in the Black Sea.

to the east of the mouth of the Danube and roughly southwest of the port city of Odessa.

About Black Sea:

- It is bounded by Ukraine to the north and northwest, Russia and Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west.
- It links to the Sea of Marmara through the Bosphorus and then to the Aegean through the Dardanelles.

News Source: The Indian Express

LIBYA

Why in the News?

A recent UNSC report has alleged that the Turkish government is deploying Syrian fighters to Libya.



Image Source: Britannica

Key Points:

- Libya is located in North Africa and is bounded by the Mediterranean Sea, Egypt, Sudan, Niger, Chad, Tunisia and Algeria.
- Climate: Hot arid which is exacerbated by Ghibli (a hot arid wind that blows from the south over the entire country).
- Geographical features: Nafūsah Plateau and the Al-Jifarah Plain in the northwest, the Akhdar Mountains (Green Mountains) in the northeast, and the Saharan plateau.

News Source: Economic Times

HANS ISLAND

Why in the News?

• Recently, Denmark and Canada have struck a deal to settle an almost 50-year old row over Hans Island.



Image Source: BBC

Key Points:

- Hans Island is a small, uninhabited island lying in the Nares Strait with 18 km distance from both Canada's Ellesmere Island and Greenland, an autonomous territory of Denmark.
- » Nares Strait is a cold channel connecting Baffin Bay in the Atlantic Ocean with Lincoln Sea in the Arctic Ocean.
- Under the UN Convention on the Law of the sea, the territorial limits of a nation are 12 nautical miles.
- Greenland and Canada have the longest maritime boundary of 2,697 km (1,676 miles).

News Source: Indian Express

PRACTICE PRELIMS

1. With reference to the 'Radio Frequency Identification', consider the following statements:

- It is a wireless tracking system that consists of tags and readers.
- 2. The tags can carry encrypted information, serial numbers and short descriptions.

Which of the statements given above is/are correct?

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

2. In which of the following areas 'direct-to-mobile' (D2M) broadcasting technology can be used?

- 1. Counter fake news
- Provide assistance to impacted people in Disaster Management
- 3. Reduce call drops

Select the correct answer using the code given below:

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

3. Which of the following is/are member(s) of the Gulf Cooperation Council (GCC)?

- 1. Saudi Arabia
- 2. Oman
- 3. Qatar
- 4. Iran
- 5. Bahrain
- 6. Kuwait

Select the correct answer using the code given below:

- (a) 1, 2, 3 and 4 only
- (b) 2, 5 and 6 only
- (c) 2, 4, 5 and 6 only
- (d) 1,2,3,5 and 6 only

4. The term 'Blue Helmets' often seen in news is related with:

- (a) UN
- (b) WHO

- (c) UNICEF
- (d) ICJ

'The Dag Hammarskjöld Medal' is awarded in the field of:

- (a) Civil Aviation
- (b) Military
- (c) Astronomy
- (d) Medical Science

6. With reference to 'Initial Public Offering', consider the following statements:

- It refers to the process of offering shares of a private corporation to the public in a new stock issuance.
- IPOs provide companies with an opportunity to obtain capital by offering shares through the primary market.

Which of the statements given above is/are correct?

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

7. With reference to 'Rajya Sabha Polls', consider the following statements:

- 1. Voting is by single transferable vote, as the election is held on the principle of proportional representation.
- 2. The retiring members are eligible for re-election and renomination any number of times.

Which of the statements given above is/are correct?

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

8. With reference to 'Bad Bank', consider the following statements:

- 1. A Bad bank is a financial entity set up to buy nonperforming assets (NPAs) from banks.
- 2. The Bad bank is involved in lending and taking deposits.

Which of the statements given above is/are not correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

- (d) Neither 1 nor 2
- 9. With reference to the 'Fast Radio Burst', consider the following statements:
 - 1. FRBs are triggered by explosive events in the universe, such as a supernova.
 - These are high-energy phenomena, emitting electromagnetic energy in the form of bursts of radio pulses.

Which of the statements given above is/are correct?

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

10. With reference to the 'Western Sahara region', consider the following statements:

- It is bordered by Morocco in the North, Algeria in a small northeastern patch, and Mauritania in the East and South.
- 2. It has a long coast with the Atlantic Ocean in the West and Northwest.
- 3. It is a region rich in phosphates and has a lucrative fishing industry on its Atlantic coast.

Which of the statements given above is/are correct?

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

11. 'Common Security and Defence Policy' is a framework of:

- (a) EU
- (b) BRICS
- (c) G-7
- (d) G-20

12. Consider the following statements:

- Web 1.0 was mostly static where users would go to a website and read and interact with static information.
- 2. In Web 2.0, most of the data in the internet and the internet traffic are owned or handled by very few big companies.
- 3. Web 3. 0 enables peer-to-peer (seller to buyer) transactions by eliminating the role of the intermediary.

Select the correct answer using the code given below:

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

13. The theme of World Environment Day for 2022 is:

- (a) Only One Earth
- (b) Make Planet Green
- (c) Ecosystem Restoration
- (d) Time for Nature

14. Consider the following pairs:

Zonal Council Headquarters

1. Northern Prayagraj

2. Central Kolkata

3. Western Mumbai

4. Southern Chennai

Which of the given above pairs is/are correctly matched?

- (a) Only 1 Pair
- (b) Only 2 Pairs
- (c) Only 3 Pairs
- (d) None of the above

15. 'Gaia Space Mission' is launched by:

- (a) NASA
- (b) European Space Agency
- (c) ISRO
- (d) Roskosmos

16. Which of the following is/are the reason(s) for Current Account Deficit(CAD)?

- 1. Exchange rate
- 2. Consumer spending level
- 3. Capital inflow
- 4. Inflation level
- 5. Prevailing interest rate

Select the correct answer using the codes given below:

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

17. Which of the following countries borders Afghanistan?

- 1. Tajikistan
- 2. Turkmenistan
- 3. Uzbekistan
- 4. Iran

Select the correct answer using the codes given below:

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

18. With reference to the 'Legislative Council', consider the following statements:

- 1. It's one-third of members retire at the expiration of every second year.
- A Money Bill can be introduced only in the assembly and not in the council.

Which of the statements given above is/are correct?

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

19. With reference to 'LiFE', consider the following statements:

- The Concept of LiFE was introduced by the Prime Minister during the 25th United Nations Climate Change Conference of the Parties (COP25).
- It envisions replacing the prevalent 'use-anddispose' economy with a 'circular economy'.

Which of the statements given above is/are not correct?

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

20. Which of the following islands are present in the Aegean Sea?

- 1. Sporades
- 2. Cyclades
- 3. Saronic Islands

Select the correct answer using the code given below:

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

21. The term 'Polisario Front' is often seen in news is related to:

- (a) Politico-Military group
- (b) Cyclone Formation
- (c) Asteroid
- (d) Bose-Einstein Condensate

22. Which of the following crops are entitled for Minimum Support Price?

- Flax
- 2. Peanut
- 3. Maize
- 4. Bajra

Select the correct answer using the code given below:

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

23. With reference to 'Inter-State Council', consider the following statements:

- An Inter-State Council is constituted under Article 263 by the President of India.
- 2. The Prime Minister is the chairman of the Inter-State Council.

Which of the statements given above is/are correct?

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

24. Which of the following is/are the consequences of Higher Current Account Deficit?

- Higher CAD shows a country's economy has become uncompetitive.
- 2. Investors may withdraw their investments.

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 2 only

- (c) Both 1 and 2
- (d) Neither 1 nor 2

25. With reference to the 'Anti-defection law', consider the following statements:

- 1. The Anti-defection law came into force through the 52nd Amendment of the Constitution.
- 2. It is applicable to Rajya Sabha MPs, who have no mandate to vote out a government.

Which of the statements given above is/are correct?

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

26. Which of the following is/are the focus area(s) of the Partnership for Global Infrastructure and Investment(PGII) Initiative?

- 1. Global Infrastructure
- 2. Climate action and clean energy
- 3. Digital information and communications technology (ICT) networks

Select the correct answer using the codes given below:

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

27. Which of the following statements explains the term 'carbon bombs'?

- (a) These are Natural gas present beneath the Earth surface yet to be discovered.
- (b) These are oil or gas projects that will result in at least a billion tonnes of CO2 emissions over its lifetime.
- (c) These are oil resources found beneath permafrost.
- (d) These are nuclear radiation that receive less attention from the international community.

28. With reference to Utricularia Furcellata, consider the following statements;

- 1. It is a very rare carnivorous plant species found in the western Himalayans.
- These plants are found mostly in salt water and dry soil.

Which of the statements given above is/are correct?

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

29. Which of the following is/are the applications of drones in the agriculture sector?

- 1. Monitoring of Soil Health and Crops
- 2. Digitising land records
- 3. Spraying fertilisers and pesticides

Select the correct answer using the code given below:

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

30. With reference to 'Open Network for Digital Commerce (ONDC)', consider the following statements:

- 1. In ONDC's network-centric model, buyers and sellers can transact no matter what platform they use through an open network.
- 2. It was incubated by the Department for Promotion of Industry and Internal Trade (DPIIT) at the Quality Council of India.

Which of the statements given above is/are correct?

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

31. Snake island is situated in:

- (a) Russia
- (b) China
- (c) Japan
- (d) Ukraine

32. With reference to the 'Azooxanthellate Corals', consider the following statements:

- 1. Azooxanthellate corals do not contain zooxanthellae.
- 2. They can only be found in shallow waters.

Which of the statements given above is/are correct?

(a) 1 only

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

33. Which of the following country/countries share a border with the Persian Gulf?

- 1. Saudi Arabia
- 2. Pakistan
- 3. Oman
- 4. Syria
- 5. Bahrain

Select the correct answer using the code given below:

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

34. With reference to 'Ramsay Hunt Syndrome', consider the following statements:

- Ramsay Hunt Syndrome is a neurological disease caused by varicella zoster virus.
- 2. It causes inflammation of the nerves involved in the arm or leg.

Which of the statements given above is/are correct?

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

35. With reference to the 'Agnipath scheme', consider the following statements:

- The youth selected under this scheme will be known as Agniveers.
- 2. Only twenty-five per cent of total annual recruits will be allowed to continue for another fifteen years under permanent commission.

Which of the statements given above is/are correct?

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

36. With reference to the 'West Nile Virus', consider the following statements:

 The West Nile Virus is a mosquito-borne, singlestranded RNA virus. 2. Yellow fever mosquitoes act as the principal vectors for transmission.

Which of the statements given above is/are correct?

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

37. Which of the following is/are the benefits of liquid nano urea?

- 1. Increases the production
- 2. Reduce environmental pollution
- 3. Higher shelf life

Select the correct answer from the codes given below:

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

38. With reference to India's 'International Liquid Mirror Telescope (LMT)', consider the following statements:

- 1. It became the world's first liquid-mirror telescope to be commissioned for astronomy.
- 2. It will observe asteroids, supernovae, space debris and all other celestial objects.

Which of the statements given above is/are correct?

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

39. With reference to the 'Fishing cat', consider the following statements:

- World's first fishing cat census has been conducted in Chilika lake
- 2. They are traditionally found in South and South-East Asian river basins.
- 3. It is listed as 'Endangered' on the International Union for Conservation of Nature (IUCN)'s Red List.

Which of the statements given above is/are correct?

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

(d) 1, 2 and 3

40. With reference to 'Electric Vertical Take off and Landing(eVTOL) aircraft', consider the following statements:

- 1. It uses distributed electric propulsion technology which means integrating a complex propulsion system with the airframe.
- 2. It requires a runway to land or takeoff.

Which of the statements given above is/are correct?

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

41. Which of the following organisations is associated with the 'Environmental Performance Index' (EPI)?

- (a) World Bank(WB)
- (b) World Economic Forum (WEF)
- (c) International Monetary Fund (IMF)
- (d) United Nations Development Programme (UNDP)

42. With reference to 'Unified Payments Interface (UPI)', consider the following statements:

- 1. It is managed by the National Payments Corporation of India (NPCI).
- 2. UPI transactions attract zero-Merchant Discount Rate (MDR).
- 3. It caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience.

Which of the statements given above is/are incorrect?

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

43. Consider the following statements:

- He was from a community of 'lower caste' weavers of the Julaha caste.
- His compositions can be classified as Dohas, Ramanas and padas.
- 3. He was a Bhakti saint (Nirguni tradition).

Which of the following personalities is being referred to in the statements above?

- (a) Sant Tukaram Maharaj
- (b) Kabir
- (c) Vallabhacharya
- (d) Nimbarka

44. With reference to Kaziranga National Park (KNP), consider the following statements:

- 1. It was inscribed on the World Heritage List in 1985.
- 2. It has the largest population of one-horned rhinoceros in the world.
- 3. In 2016, the Government of India declared it a Tiger Reserve.

Which of the statements given above is/are correct?

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

45. With reference to the '5G Technology', consider the following statements:

- 1. 5G is the next-generation cellular technology that will provide faster communication with ultra-low latency.
- 2. The 5G data speeds are expected to be in the range of 2-20 Gigabit per second (Gbps).

Which of the statements given above is/are correct?

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

46. With reference to the 'World Trade Organisation (WTO)', consider the following statements:

- 1. It is the only international organisation that deals with the rules of trade between countries.
- 2. The Uruguay Round (1986-94) of the GATT led to the creation of the WTO.
- 3. India is a founder member of the 1947 GATT and its successor, the WTO.

Which of the statements given above is/are correct?

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

47. Which of the following is/are member(s) of the G7?

- 1. Australia
- 2. Canada
- 3. Russia
- 4. France
- 5. Germany

Select the correct answer using the code given below:

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

48. With reference to the 'Financial Action Task Force (FATF)', consider the following statements:

- The FATF was established at the G20 Summit of 1989 in Paris, France.
- 2. It has 39 members including two regional organisations, the European Commission and Gulf Cooperation Council.
- 3. It aimed to combat money laundering, terrorist financing, and other related threats to the

integrity of the international financial system

Which of the statements given above is/are correct?

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

49. Which of the following is/are part of Pacific Islands Countries?

- (a) Fiji, Kiribati, Solomon Islands, Seychelles
- (b) Comoros, Tonga, Papua new guinea, Solomon islands
- (c) Tuvalu, Fiji, Tonga, Papua news Guinea
- (d) Maldives, Comoros, Seychelles, Kiribati

50. Which of the following ministries has released the '4th State Food Safety Index'?

- (a) Ministry of Health and Family Welfare
- (b) Ministry of Home Affairs
- (c) Ministry of Agriculture & Farmers Welfare
- (d) Ministry of Commerce and Industry

Answer Box:

1 (c)	6 (c)	11 (a)	16 (d)	21 (a)	26 (d)	31 (d)	36 (a)	41 (b)	46 (d)
2 (d)	7 (c)	12 (c)	17 (d)	22 (c)	27 (b)	32 (a)	37 (d)	42 (d)	47 (b)
3 (d)	8 (b)	13 (a)	18 (c)	23 (c)	28 (a)	33 (c)	38 (c)	43 (b)	48 (c)
4 (a)	9 (c)	14 (b)	19 (a)	24 (c)	29 (d)	34 (a)	39 (d)	44 (a)	49 (c)
5 (b)	10 (d)	15 (b)	20 (d)	25 (c)	30 (c)	35 (c)	40 (a)	45 (c)	50 (a)

PRACTICE MAINS

- India and Africa have been historically connected during different eras through culture, economics, and politics. Comment
- 2. Discuss the significance and challenges involved in giving Minimum Support Price to farmers.
- 3. Examine the significance of the Montreux Convention, in the light of the ongoing conflict between Turkey & Greece over Aegean Sea.
- 4. What prompted India to initiate talks with the Taliban Regime? Outline the significance of Indian Delegation Visit to Afghanistan.
- 5. Examine the role of Rajyasabha in keeping alive the spirit of federalism in Indian democracy.

- 6. The creation of a bad bank to tackle Non-Performing Assets (NPAs) is a step in the right direction, if backed by long due governance reforms in Public Sector Banks. Comment
- 7. Discuss the significance of the International Liquid Mirror Telescope (ILMT).
- 8. The US surpassed China to become India's top trading partner in 2021-22'. In the light of the statement discuss the associated Challenges of India-US Trade Ties.
- 9. What are India's challenges in achieving sustainable development goals?
- 10. Discuss the issues related to persons with disabilities (PwD). What Measures have been taken by the government for disabled community.