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POLITY

Statutory, regulatory and various quasi-judidal bodies

1. Set up police complaints bodies: NHRC

- » Prelims: National Human Rights Commission (NHRC)
- » Mains: Police Reforms; Prakash Singh vs Union of India case

Context:

 Recommendations from the National Human Rights Commission's (NHRC) core advisory group on the criminal justice system.

Details:

- National Human Rights Commission (NHRC) has asked the Union Home Ministry and the State Governments to set up police complaints authorities at the State/UT and district levels as per the judgment in the Prakash Singh vs Union of India, 2006 case.
 - * According to data provided by the Home Ministry to the LokSabha, only 16 States and UTs had implemented police complaints boards as per the Prakash Singh judgment.
- The NHRC group has asked the MHA and the Law Ministry to consider implementing the recommendations of the 113th report of the Law Commission to add Section 114 B to the Indian Evidence Act. This would ensure that if a person sustains injuries in custody, it is presumed that the injuries were inflicted by the police. This could act as a strong deterrence against police violence.
- The group also recommended making the legal framework technology-friendly to speed up the criminal justice system.
- The group also recommended installing CCTV cameras with night vision and involving trained social workers and law students with police stations as part of community policing.

Indian Constitution - amendments, significant provisions and basic structure

2. Reservation on quota

- » Prelims: Article 14, 15 and 16
- » Mains: Affirmative action; Determination of reservation quota

Background:

 The Madras High Court has declared the Tamil Nadu government law providing separate reservation of 10.5% of jobs in public services and seats in educational institutions for the Vanniyar community as being unconstitutional.

* The concerned state government law had provided for an internal reservation among the backward communities itself. It had divided the 'Most Backward Classes/ Denotified Communities' category into three parts and 10.5% of the backward community seats were specified as exclusive to the Vanniyakula Kshatriya and its various sub-castes.

Reasons for the court's judgment:

- The Bench ruled that the Act was unconstitutional mainly on the ground that the Assembly had no legislative competence to pass the law on the date of the enactment. The 102nd Amendment to the Constitution was in force in February 2021 according to which only the President was empowered to notify the backward classes list for each State. This observation was upheld by the Supreme Court in the Maratha reservation case.
- Also the bench held that the separate reservation for one caste amounted to discrimination against all the other castes in the same MBC category.
- The bench also noted that the State had no quantifiable data to show the relative backwardness of the Vanniyars as compared to the other MBCs to justify the exclusive treatment for the community. In the absence of such quantifiable data the bench held that the legislation seemed based solely on the ground of caste and hence goes against well grounded principles set out for affirmative action in the Indian Constitution.
- The judgment also notes that any law making changes to the distribution of quotas under various categories would require an amendment to the State's 1994 Act protecting the overall reservation level. As that Act contains quotas allotted to the SC, ST, BC and MBC/DNC categories, any change would require an amendment to that law, as well as the President's assent. These steps have not been taken up while passing the concerned state law.

Statutory, regulatory and various quast = fudidal bodies

3. CBI, ED chiefs can now have five-year terms

- » Prelims: Appointment procedure of CBI and ED directors;
- » Mains: Central Vigilance Commission

(Amendment) Ordinance, 2021

Context

 The Indian President has promulgated two ordinances that would allow the Union Government to extend the tenures of the directors of the Central Bureau of Investigation (CBI) and the Enforcement Directorate (ED).

Supreme Court Order:

- The one year extension provided by the central government to the current ED director was challenged in the Supreme Court recently.
- The SC bench had asked the government not to provide any more extension, while observing that any extension of tenure during superannuation has to be for a short period and held that such extensions could be given only in rare and exceptional circumstances to facilitate an ongoing g investigation.

Details:

- The directors of the CBI and the ED currently have fixed two-year tenure. The newly promulgated ordinances allows for the provision of three annual extensions, thus it allows for extension of tenure from the current two years to up to five years.
- The ordinance amends the Delhi Special Police Establishment Act, 1946 to change the tenure of the post of CBI Director and amends the Central Vigilance Commission Act, 2003 to change the tenure of the post of ED Director.
 - * The Central Vigilance Commission (Amendment) Ordinance, 2021 states that the period for which the Director of Enforcement holds the office, may in the public interest and on the recommendation of the Committee which recommends names to the post be extended up to one year at a time. The ordinance mentions that the reasons for the extension need to be recorded in writing.
 - * The ordinance also explicitly mentions that no such extension shall be possible after the completion of a period of five years in total.

Concerns expressed by opposition:

- The opposition has criticized the government's move to take the ordinance route repeatedly. This they claim makes the Parliament redundant and results in subverting democracy.
 - * Ordinances are laws that are promulgated by the President of India on the recommendation of the Union Cabinet. They can only be issued when Parliament is not in session.
 - * Article 123 of the Indian Constitution provides for the power of the President to

promulgate Ordinances.

Structure, organization and functioning of the Judiciany

4. A routine matter or a punishment post?

- » Prelims: Appointment of High Court Judges and Transfer
- » Mains: opaqueness in the functioning of the collegium

Context

• The Supreme Court collegium's recommendation to transfer the Chief Justice of the Madras High Court, Sanjib Banerjee, to the Meghalaya High Court, as well as the senior-most judge of the Allahabad High Court, MunishwarNath Bhandari, to the Madras High Court, has drawn sharp criticism from various quarters of the legal fraternity.

Transfer of High court Judge

Article 222 of the Constitution provides for the transfer of a judge (including Chief Justice) from one High Court to any other High Court.

 The President may, after consultation with the Chief Justice of India, transfer a Judge from one High Court to any other High Court.

Explaining why such a power would be required, Dr. B R Ambedkar had in a speech given in the Constituent Assembly said

- "It might be necessary that one judge may be transferred from one High Court to another in order to strengthen the High Court elsewhere by importing better talents which may not be locally available.
- Secondly, it might be desirable to import a new Chief Justice because it might be desirable to have a man unaffected by local politics or local jealousies"

Locus Standi

- K. Ashok Reddy vs Government of India (1994)
- Only the transferred judge and no one else is entitled to file a case challenging the transfer and that even the aggrieved judge concerned could question the transfer order only on limited grounds such as the proposal not having emanated from the Chief Justice of India (CJI).
- There is nothing in Article 222 to require the consent of a Judge/Chief Justice for his first or even a subsequent transfer.

* In that verdict, the apex court had also said, the consent of the Chief Justice or a judge of the High Court was not necessary either for transferring them at the first instance or even subsequently.

Public Interest

- Further, it was made clear that any transfer made on the recommendation of the CJI was not punitive and such transfer was not justiciable on any ground.
- Promotion of public interest by proper functioning of the High Courts and, for that reason, the transfer of any Judge/Chief Justice from one High Court to another must be the lodestar for the performance of this duty enjoined on the Chief Justice of India, as the head of the Indian Judiciary

What is the Supreme Court's view on the issue?

- 1. In Union of India vs. SankalchandHimatlalSheth (1977)
 - * a. The Supreme Court rejected the idea that High Court judges can be transferred only with their consent.
 - * b. It reasoned that the transfer of power can be exercised only in public interest.
 - * c. The President is under an obligation to consult the Chief Justice of India
 - * d. The Chief Justice of India had the right and duty to elicit and ascertain further facts from the judge concerned or others.
- 2. In S.P. Gupta vs. President of India (1981) 'Judges Transfer Case'
 - * a. The First Judges Case considered the validity of the transfer of two Chief Justices as well as a circular from the Law Minister proposing that additional judges in all High Courts may be asked for their consent to be appointed as permanent judges in any other High Court, and to name three preferences.
 - * b. This position was overruled in the 'Second Judges Case' (1993). The opinion of the Chief Justice of India was to have primacy. Since then, appointments have been made by the Collegium.

Issue Area

- Justice Banerjee was managing a larger High Court. His transfer to a northeastern State looks like a punishment as the reasons for the transfer of judges are withheld from public by the collegium.
 - * Withholding of reasoning also, naturally, gives rise to speculations and casts a

- shadow on the judge concerned as well as the integrity of the Collegium's decision.
- In In the case of Justice Banerjee, since the proposal came from the Supreme Court collegium, the Central government, which has to advise the President of India, is entitled to ask for relevant material before tendering any advice.
 - * If it is not satisfied, the Central government can ask the Supreme Court to reconsider its decision.
 - * However in the present case it looked like both the Government and the Judiciary had a common intention for the transfer and few also speculate that there could be an element of executive influence over decision-making
 - Recently, the Union Law Minister, KirenRijiju, said that the Chief Justice of India (CJI) will "create a new dawn in judiciary".
 - The CJI in turn said that Mr.Rijiju was "the only Law Minister or politician in recent times, who recognised our judicial hard work and appreciated us".
- Normally when proposals to transfer are made, a judge in the Supreme Court who comes from the State in which the transferee judge is holding office is also consulted.
 - * With regard to Justice Banerjee's transfer, there are four judges who are qualified to be called consultee judges.
 - * Why was consultation in the case of Justice Banerjee made only with the junior-most judge of the Supreme Court and not the senior judges?
- The frequency with which judges are transferred, sometimes with only months remaining before their retirement, has been another ground on which transfers are questioned.

Conclusion

 Lack of transparency and the absence of formal criteria has put the credibility of transfers in Question. Therefore the Collegium System in the Indian Judiciary should make its transfer policy public and resume the practice of giving reasons for transfers as opacity in decision-making only gives rise to speculation.

Structure, organization and functioning of the Judiciany

5. Govt. keeps no Net shutdown record

» Mains: Impact of internet shutdowns

Context:

 Report of the Parliamentary Standing Committee on Information and Technology on internet shutdowns in India.

Background:

- There has been an increasing trend of administrations resorting to internet shutdowns on the grounds of maintaining public safety or in a scenario of public emergency. Though some situations warrant such an approach in the interest of safety and security, the frequent and prolonged internet shutdowns are a cause of concern.
 - * A study by the advocacy group Access Now reports that India topped the list of countries that resorted to government-imposed Internet clampdown.
- A key concern is that the Net shutdowns have been reduced to a routine policing and administrative tool whereas it should be used only in exceptional and rare cases as stated by various rules and Supreme Court guidelines.

<u>Concerns with frequent and prolonged internet shutdowns:</u>

- Frequent and prolonged internet shutdowns amount to a violation of some human rights as noted by the Supreme Court in the Anuradha Bhasin vs Union of India case of 2020. The Supreme Court declared that freedom of speech and expression and freedom to practice any profession over the medium of the Internet enjoyed constitutional protection under Article 19(1)(a) and Article 19(1)(g).
- The absence of Internet and regular telecom services also has other adverse impacts.
 - * Internet/telecom shutdown cost the telecom operators substantial revenue losses. Apart from this, online trade, which is now heavily dependent on Internet banking, also tends to be adversely impacted.
- Also with increasing trends of telemedicine and e-education, internet shutdowns can impact critical social sectors as well.

Major findings of the report:

- The report points out that there are no verifiable and centralised records of Internet shutdowns in the country maintained by either the Union Home Ministry or the Department of Telecom.
- The report laments that the absence of such a database makes it nearly impossible to review whether the Internet shutdowns followed the

- laid-down rules or the Supreme Court guidelines on the issue.
- The report also points out the drawback of there being no coherent rules dictating internet shutdowns in India. Also, the grounds on which internet shutdowns are generally imposed like "public safety" and "public emergencies" are not clearly defined.
- The Parliamentary Standing Committee on Information and Technology has called for a detailed study on the economic impact of frequent and prolonged Internet shutdowns.

Recommendations:

- The importance of the Internet has only grown over time. Hence there is the need to maintain a delicate balance between the citizen's right to access the Internet and the State's duty to deal with a public emergency.
- Internet shutdowns even if used should be based on stated guidelines and should follow standard operating procedures. Such internet shutdowns need to be reviewed from time to time and the shutdown should be lifted as the situation improves.

Covernment polides and interventions for development in various sectors and issues arising out of their design and implementation

6. Why no special status to A.P., HC asks Centre

- » Prelims: Special category status criteria
- » Mains: objections in according the status to AP

Context:

 Recently, the Andhra Pradesh High Court has ordered the Centre to explain why it has not granted Andhra Pradesh Special Category Status (SCS).

What is Special Category Status to states?

- A Special Category Status (SCS) is a categorization provided by the Centre to states that confront physical and socioeconomic obstacles such as steep terrains, critical international boundaries, economic and infrastructure backwardness, and non-viable state finances.
- The Indian Constitution has no provision for designating any state as a Special Category Status (SCS) state.

Background

- The concept of special category status was initially proposed in 1969, when the fifth Finance Commission tried to grant preferential treatment to some impoverished states in the form of government support and tax cuts.
- Initially, three states were accorded special status: Assam, Nagaland, and Jammu and Kashmir.

- From 1974-1979, five additional states were added to the special category. Himachal Pradesh, Manipur, Meghalaya, Sikkim, and Tripura are among them.
- With the inclusion of Arunachal Pradesh and Mizoram in 1990, the number of states expanded to ten. Uttarakhand was granted special category status in 2001.

Criteria for special category status:

- · Hilly and difficult terrain
- Low population density or sizeable share of tribal population
- Strategic location along borders with neighbouring countries
- Economic and infrastructural backwardness
- Non-viable nature of state finances

Benefits states confer with special category status:

- The central government bears 90% of the state spending on all centrally sponsored initiatives and foreign help, while the remaining 10% is handed to the state as a loan at 0% interest.
- Preferential treatment when it comes to receiving central funds.
- Excise duty reduction to encourage industries to the state.
- These states can take advantage of debtswapping and debt-relief programmes.
- If a special category state has unspent money at the end of a fiscal year, it does not lapse and is carried forward to the next fiscal year.

What does The 14th Finance Commission say about the Special Category status?

- The recommendations of the 14th Finance Commission were implemented following the dissolution of the Planning Commission and the founding of NITI Aayog.
- After its proposals were implemented in 2015, the 14th Finance Commission effectively removed the idea of special category status.

Parillament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these

7. The need for a proper Pre- Legislative Consultation Policy

- » Prelims: National Commission to Review the Working of the Constitution recommendations
- » Mains:Importance of Pre-Legislative Consultation Policy

Pre-Legislative Consultation Policy:

- The Pre-Legislative Consultation Policy was adopted in 2014. It was formulated based on the broad recommendations of the National Commission to Review the Working of the Constitution (2002).
- The policy mandates a host of rules for the prelegislative process.
 - * Whenever the Government intends to make any new law (bills, rules, regulations, etc.), it must place a draft version of the proposed bill in the public domain for at least 30 days.
 - * Along with the draft, a note explaining the law in simple language and justifying the proposal, its financial implication, impact on the environment and fundamental rights, a study on the social and financial costs of the bill, etc. should also be provided.
 - * The respective departments should upload the summary of all the feedback that they receive on the circulated draft.

Significance:

- The Pre-Legislative Consultation Policy provides a forum for citizens and relevant stakeholders to interact with the policymakers.
- Public consultations enhance transparency, increase accountability and could result in the building of an informed Government where citizens are treated as partners and not as subjects.
- Thus the Pre-Legislative Consultation Policy helps create an institutionalised space for public participation in lawmaking processes.

Concerns:

- Despite explicit rules laid out under the Pre-Legislative Consultation Policy, a large number of bills introduced in Parliament have been presented without any prior consultation. Also, of the few bills that have been placed in the public domain for comment, the majority of them did not adhere to the 30-day deadline.
- The absence of a statutory or constitutional right to pre-legislative consultation seems to be the major reason behind the lax implementation of the policy.

Structure, organization and functioning of the Judiciary

8. National Court of Appeal

» Mains: Pendency of Cases; Judicial Reforms

Context:

 Recently, the Chief Justice of India urged the Government to seriously consider Attorney General's suggestion to restructure the judiciary to include four National Courts of Appeals.

- * The National Court of Appeal (NCA) would act as an intermediate forum between the Supreme Court and the various High Courts of India.
 - » They would absorb ordinary appeals from the High Courts, not involving constitutional questions of law, and decide them finally.
- In this context, the article analyzes arguments both in favour of and against the setting up of the National Courts of Appeals.

Background:

Working of the Supreme Court:

- Broadly, the Constitution prescribes to the Supreme Court two types of jurisdiction: an original jurisdiction and an appellate jurisdiction. India's Supreme Court acts as a final court of appeal.
- Notably, judges of the Supreme Court are having to spend a lot of time on deciding on the admissibility of fresh cases. Being tasked with the filtering process is a waste of the time, experience and wisdom of a Supreme Court judge. This process also drastically reduces the time available with these judges to take up the admitted cases. Owing to time and volume constraints, the quality of judgments could suffer.
- There seems to be a relative paucity of Constitution Benches to decide major questions of law. Also cases of importance are being dealt with by just a couple of judges, for lack of Constitution Benches.
 - * Larger Benches bring more judicial thinking to an issue, a balancing of different points of view and greater authority to the ruling of the court.
 - * Article 145(3) of the Constitution mandates a minimum of five judges for the purpose of deciding any case involving a substantial question of constitutional law.
- The immense workload on the Supreme Court could impede its mandate to function not just as an appellate court tasked with checking if the lower court has erred but also the unique mandate of the Supreme Court to focus on examining questions of law of general public importance and settling questions of constitutional significance.

Arguments in favour:

 The NCA, which would be headquartered in New Delhi, and which would have different regional benches, would relieve the Supreme Court of the weight of hearing regular civil and criminal appeals. The appellate body would be able to reduce the number of appeals the Supreme Court deals with.

- The installation of Appellate Courts would help ease the burden of the Supreme Court and thus help reduce pendency.
- The setting up of appellate courts in different parts of the country would make the higher judiciary accessible to citizens from remote locations as well. Hence it would help improve access to justice.
 - * A vastly disproportionate percentage of appeals to the Supreme Court come from Delhi and its neighbouring States indicating that the Supreme Court seems out of reach for people from other areas.
- The intermediate courts of appeal with senior judges can ensure adequate time and consideration for each case.
- It would allow the Supreme Court to decide the weighty issues under the Constitution and other laws, with appropriate judge strength, and give the judges the time and opportunity to do their best in such cases.
- In 2020, Attorney General K.K. Venugopal recommended the establishment of a National Court of Appeal to adjudicate on appeals from lower courts.
 - Venugopal conceded that a Constitutional amendment would be required to bring this into effect.
 - * In the past, various Law Commissions as well as specific SC benches have supported the setting up of a National Court of Appeal with regional benches.

Arguments against:

- The installation of an appellate court could be impractical.
- Some experts point out that the installation of an appellate court would only add another layer of judiciary to the existing structure. Instead they argue for strengthening of the existing lower judiciary in terms of ensuring adequate human resources and infrastructure.
- In 2014, Attorney General MukulRohatgi rejected the notion of a court of appeal.
 - * With more than two crore cases pending in the lower courts, he emphasized the problem is at the level of the lower courts and not the SC.
 - * He also argued that setting up a court of appeal would only add to "lawyers' pockets."

Examples

- 2014, Ireland established a new Court of Appeal (CoA) following a referendum held in 2013.
 - * Its main function was to hear appeals both Civil and Criminal – from the High Court

- and the Circuit Court. The CoA would hear the vast majority of appeals which were formerly heard by the Supreme Court.
- In South Africa, the Supreme Court of Appeals (SCA) succeeded the Appellate Division (AD) in 1996; the SCA is second only to the Constitutional Court.
- In England and Wales, the Court of Appeals is the highest court below the Supreme Court of the United Kingdom.

Conclusion

- The SC and central government must view the current state of the judiciary as a crisis of enormous proportions and take the muchneeded step of establishing a National Court of Appeal with regional benches.
- As far as regular matters are concerned, the SC should step in only when a case involves a substantial question of law or violates citizens' fundamental rights. Doing so will be the true essence of its 'supreme' role as the upholder of the Constitution of India.

Covernment polides and interventions for development in various sectors and issues arising out of their design and implementation

9. Haryana law on local hiring causes concern

- » Prelims: Article 16 of Constitution
- » Mains: The insider versus outsider debate

Context:

 The Haryana Government's law to reserve 75% jobs for locals has been notified recently.

Provisions of the law:

- The law requires firms with 10 or more employees to reserve 75% of all jobs offering a salary of less than ₹30,000 a month for eligible candidates of State domicile.
- The law applies to private companies, societies, trusts, and partnership firms, among others, located in the state.
- There would be a penalty for non-compliance.
- An exemption can be claimed by employers when enough local candidates are not available with the desired skills, qualifications, and proficiency. However, an officer of the rank of deputy commissioner or higher will evaluate such a claim.

Concerns:

Against constitutional provisions:

 Haryana's law goes against the provisions of the Indian Constitution, especially Article 19(1)(g) and Article 16(2).

- * Article 19(1)(g) of the Constitution enables an Indian citizen to practise any profession, or to carry on any occupation, trade or business.
- * Article 16(2) of the Constitution states that no citizen shall, on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for, or discriminated against in respect of, any employment or office under the State.

Reduced talent pool:

 Haryana currently does not have enough captive supply of skilled labour and the proposed law by disallowing the influx of talent from other parts of the country will lead to a depleted pool of skilled labour in technology sectors such as IT and IT-enabled services (ITeS).

Lead to 'unease' of doing business:

- The new law adversely impacts the freedom of the companies to take business decisions. Curbs of any kind ultimately affect business freedom and could impact its productivity and competitiveness and its ability to flourish.
 - * The industry needs the most efficient workforce to stay competitive in a globalised world.
- Also, provisions like the need to take permission from notified authorities to employ outsiders beyond a certain threshold might lead to the inspector raj like regime.
- This could disincentivize new investments in the state.

Shifting of investment:

- This could trigger an exodus of large domestic and multinational investors across sectors such as auto and information technology that rely on highly skilled manpower, from hubs such as Gurugram.
 - * Notably in recent times, large firms, particularly in e-commerce, IT &ITeS and new manufacturing sectors, had chosen Gurugram as a hub for their businesses.
- The shifting of companies to other states will adversely impact not only the state's revenue sources (through corporate tax) but also the employment opportunities available to the workforce. This does not augur well for economic recovery in the post-pandemic phase.

Impact on unity of the nation:

- The clamour for preserving economic activity for 'sons of the soil' has become a recurrent theme in many Indian states.
 - * Andhra Pradesh had passed a similar law in 2019, and the Madhya Pradesh CM has promised to reserve 70% private sector jobs

for the locals.

- Rising unemployment could spur more States to follow suit. Such a trend threatens to unleash a sort of 'work visa' regime for Indians within the country.
- Such laws also damage crucial workplace diversity.
- Such laws rupture the social fabric given their push for insularity.

Recommendations:

 Giving reservations in jobs is only a temporary solution, the need of the hour is to focus on better job creation and skill development. The state governments should focus on ensuring adequate investments in education, health and skill development.

- Instead of compelling firms to hire locals, the State can consider giving a 25% subsidy to firms as an incentive for hiring locals.
- The government can come up with certain incentives for companies that are investing money in training the local youths. Such incentives could be in the form of capital for better skill development, lower electricity charges, better infrastructure facilities, etc.
- Even if the state decides to go ahead with the local reservation provision, the government should consider lowering the salary ceiling to Rs. 15,000 a month on a 'cost to company' basis and raise it in tandem with efforts to improve skill sets in the State.
- Also, the reservation, if implemented should begin from 20%-25% to allow for sufficient time for the creation of a talent pool within the state as technical and specialised skill sets will take time to inculcate among the State's youth.

ECONOMY

Infrastructurer Energy, Ports, Roads, Aliports, Railwaysets

1. International Conference on Hydrogen Energy

» Mains: Significance of hydrogen as a fuel of the future

Context:

 The 1st International Conference on Hydrogen Energy - Policies, Infrastructure Development and Challenges was organized by Central Board of Irrigation and Power (CBIP) with the support of Ministry of New & Renewable Energy, Central Electricity Authority and NTPC

<u>Details</u>

- The conference was organized with the aim to bring all the key stakeholders on the same platform to discuss all facets of Hydrogen Energy in India.
- The objective was to frame a proper policy for the promotion of hydrogen energy and infrastructure development

Importance of Hydrogen

- Hydrogen is found mainly in water and Organic compounds.
- Hydrogen can be produced via water electrolysis, splitting water molecules (H2O) into hydrogen (H2) and oxygen (O2) with the use of power.
- If produced from renewable sources, hydrogen can be renewable and completely CO2, free.
- Like electricity, hydrogen can be channeled anywhere it is needed.
- Unlike electricity, hydrogen is suitable for longterm energy storage.
- Renewable hydrogen is a determining factor in fighting climate change

Indian Economy and issues relating to growth and development - Financial Sector

2. RBI Integrated Ombudsman Scheme

- » Mains: Initiatives in the financial sector
- The Banking Ombudsman Scheme (BOS) was first introduced in 2006
 - * The BOS was introduced under Section 35 A of the Banking Regulation Act, 1949 by RBI
 - * The Banking Ombudsman is a senior official appointed by RBI to redress customer complaints against deficiency in certain banking services covered under the grounds of complaint specified under Clause 8 of the Banking Ombudsman Scheme 2006

- At present, there are separate Ombudsmen for, the integrated ombudsman scheme amalgamates it.
 - * banking ombudsman scheme of 2006,
 - * ombudsman scheme for NBFCs of 2018 and
 - * Ombudsman scheme of digital transactions of 2019.
- The unified ombudsman scheme will provide redress of customer complaints involving deficiency in services rendered by RBI regulated entities viz. banks, NBFCs and pre-paid instrument players if the grievance is not resolved to the satisfaction of the customers or not replied within a period of 30 days.
- The integrated scheme makes it a "One Nation One Ombudsman' approach and jurisdiction neutral.

How to file a complaint against any RBI regulated entity under the new scheme?

- Customer can file their complaints/grievance on the complaint management system -https:// cms.rbi.org.in.
- Customers will be able to file complaints, submit documents, track status, and give feedback through a single email address.
- Additionally, a call centre with a toll-free number
 14448 can be used to file a complaint and is being operationalised in Hindi, English and eight regional languages.
- RBI says the scope to cover other Indian languages will be done in due course.

Significance

- According to RBI, it will no longer be necessary for the complainant to identify under which scheme he/she file complaint with the ombudsman.
 - * The scheme includes a wider definition of deficiency of services which ensures complaints will not go unaddressed or rejected simply on account of "not covered under the grounds listed in the scheme".
- Additionally, in semi-urban and rural India where lackofnetworkconnectivity too poses a challenge in the form of rejected payments, a grievance redressal mechanism will promote customer confidence in the country's digital infrastructure, especially among the marginalised and the rural populace.
- The existing ombudsman schemes are being integrated into a single scheme which will offer the benefit of a single platform to customers for getting speedy resolution of their grievances

Indian Economy and issues relating to growth and development - Financial sector

3. Gilts for all

- » Prelims: Retail direct scheme
- » Mains: Measures to mainstream participation of retail investors

Context:

Retail Direct Scheme for investors in government securities

Retail Direct Scheme

- Small investors can now purchase and sell government securities (G-Secs) or bonds through the Retail Direct Scheme.
- The securities can be purchased directly rather than through a middleman such as a mutual fund.
- Investors who want to register a Retail Direct Gilt account with the RBI directly can do so using an internet portal created specifically for the programme.
- Net banking or the UPI platform can be used to make payments. The securities would be auctioned in the "non-competitive" portion of primary auctions of Government Securities and Treasury Bills by retail participants.
- The government's ability to tap individual investors may also free up space for corporations to suck up capital from institutional investors.

Aims and Objectives:

- To help broaden the investor base and provide retail investors with enhanced access to the government securities market — both primary and secondary.
- To place India among a select few countries which have similar facilities.
- To facilitate smooth completion of the Government borrowing programme in 2021-22.

Concerns of Retail Direct Scheme

- As the borrower, the government provides a sovereign guarantee for the money, ensuring that there is no chance of default.
- In addition, depending on current interest rate patterns, government securities may offer superior interest rates than bank fixed deposits.
- The RBI underlined that the adjudication of outstanding complaints, appeals, and enforcement of the awards passed "will continue to be regulated by the terms of the various Ombudsman Schemes" despite the repeal of the three previous schemes.

Indusive Growth and issues arising from it

4. All India Survey on Domestic Workers

» Mains: Issues faced by domestic workers

Context:

 Union Minister flags off the first-ever All India Survey on Domestic Workers.

Background:

- Domestic workers (DWs) constitute a significant portion of total employment in the informal sector.
- But there is a lack of adequate data on their conditions of work and other details.
- Hence, the survey is being conducted to fill this information gap.
- This is expected to help in data-driven policy and last-mile delivery of services.

Details of the survey:

- The survey is being conducted by the Labour Bureau, Chandigarh.
- The All India Survey on Domestic Workers (DWs) is aimed to estimate the number and proportion of domestic workers at National and State levels, percentage distribution of domestic workers with respect to Live-in/Live-out, formal/Informal Employment, Migrant/Non-Migrant, their wages and other socio-economic characteristics.
- Objectives of the survey:
 - * Estimate the number/proportion of DWs at National and State levels.
 - * Household Estimates of Live-in/Live-out DWs.
 - * Average number of DWs engaged by different types of households.
- The survey will collect information such as household characteristics, demographic characteristics, information on DWs like age of entry, social group, migrant status, education, work details like duration of work, remuneration, distance travelled, etc.
- It will also collect information on employers such as preferences of DW regarding gender, marital status, etc.
- An estimated 1.5 lakh households will be covered under the survey encompassing 742 districts in all states/UTs.

Indian Agriaultural Sector

5. National Milk Day

» Prelims: White revolution

Context:

 An eventful celebration of National Milk Day was organised by the Department of Animal Husbandry and Dairying, Government of India in association with the National Dairy Development Board and other institutions created by Dr. Varghese Kurian.

Background of National Milk Day:

- To pay tribute to Dr. Varghese Kurian on his birth anniversary, every year the 26th day of November is celebrated as National Milk Day. This year marks the centenary year of the birth of the Milk Man of India, Dr. Kurian.
- Dr. Kurian is regarded as the Father of the White Revolution in India.
- He is known for his indomitable contributions as a social entrepreneur who pioneered revolutionary changes in the field of agriculture and the dairy industry.
- Operation Flood, under the vision of Dr. Kurian, was the biggest dairy development program in the world that resulted in enhanced milk production in India. It opened broader avenues for dairy farming and generated employment for poor farmers. Therefore, it brought an achievement that was not merely by mass production but production by masses.
- He laid the foundation of 30 institutions run by farmers and workers and played a pivotal role in the success of Amul Brand. It was the relentless effort of Dr. Kurian because of which India became the largest producer of milk in 1998 leaving behind the US.

Indian Economy and issues relating to growth and development - Financial sector

6. 'India now ahead of China in financial inclusion metrics'

» Mains: Significance of financial inclusion; measures being taken to promote financial inclusion in India

Context:

 State Bank of India (SBI) research report on financial inclusion metrics in India.

Details:

 Major financial inclusion metrics like number of bank branches, number of banking outlets in villages/Banking Correspondents, no. of operating bank accounts, number of persons with deposit accounts at banks, mobile and Internet banking (digital) transactions have

- registered impressive improvements over the last five years.
- India's performance in some of these metrics has been better compared with emerging economy peers and even some of the advanced economies, as per the report.
- Notably, almost two-thirds of the newly opened no-frills bank accounts are operational in rural and semi-urban areas.
- Highlighting the social significance of financial inclusion, the report notes that States with higher financial inclusion/more bank accounts have also seen a perceptible decline in crime along with a meaningful drop in consumption of alcohol and tobaccos.

Additional information:

- The Cash to GDP in % terms stands at 14.3% as of March 2021. This is higher than the predemonetisation phase where it stood at 11.9% in March 2016.
 - * One of the stated objectives for demonetisation was the push for digital payments in order to reduce the currency to GDP ratio.
- India's cash to GDP ratio is very high vis-a-vis other nations. This is an indicator of the Indian economy's high dependence on cash.

Indian Economy and issues relating to growth and development - Financial sector

7. How has RBI tweaked Prompt Corrective Action norms for banks?

- » Prelims: Prompt Corrective action framework
- » Mains: Initiatives taken to address the NPA issue in Indian banks and their effectiveness

Context:

- The Reserve Bank of India recently issued a notification revising norms for commercial banks to be placed under the Prompt Corrective Action (PCA) framework.
 - * The new framework takes effect from January 1, 2022.

Prompt Corrective Action:

- The PCA framework was first notified in 2002.
 Several banks have been placed under the framework since then.
- The objective of the framework is to enable supervisory intervention at appropriate time and require the supervised entity to initiate and implement remedial measures in a timely manner so as to restore its financial health.
- The PCA framework is envisaged as also a tool to ensure effective market discipline.

- Banks would be evaluated on the basis of capital, asset quality, profitability and leverage.
- The PCA framework has different risk thresholds with increasing restrictions on banks if they are unable to arrest their financial deterioration.
 RBI can impose curbs on dividend distribution/ remittance of profits, branch expansion and on capital expenditure.
- In 2021, UCO Bank, IDBI Bank and Indian Overseas Bank exited the framework on improved performance. Only Central Bank of India remains under the PCA framework now.

Details:

- The new revision removes return on assets as an indicator to qualify for PCA. Hence Capital, Asset Quality and Leverage will be the key areas for monitoring in the revised framework. Indicators to be tracked for Capital, Asset Quality and Leverage would be CRAR/ Common Equity Tier I Ratio, Net NPA Ratio and Tier I Leverage Ratio
- The new version excludes Small Finance Banks and Payment Banks in addition to the Regional Rural Banks from the purview of the PCA framework.
- The PCA Framework would apply to all banks operating in India including foreign banks operating through branches or subsidiaries based on breach of risk thresholds of identified indicators.
- As per the new framework, the exit of bank from the PCA would be based on four continuous quarterly results of the Audited Annual Financial Statement apart from Supervisory Comfort of RBI, including an assessment on sustainability of profitability of the bank.

Indian Economy and issues relating to growth and development

8. A tax burden that attacks the federal rights of States

- » Prelims: Cess and Surcharge- differences
- The Government reduced excise duty on petrol and diesel on the eve of Deepavali. This reduction for petrol was ₹5 and duty on diesel came down by ₹10.
 - * Constitution permits the use of Cess and Surcharge to meet an extraordinary situation.
 - * The surcharge is an additional charge or tax over and above the existing tax while the cess is a form of tax levied by the government on tax with a specific purpose.

Concerns

 Some states have been critical of the Centre's usage of these provisions. For example, the Centre has been levying around ₹31 and ₹33 as

- additional cess on petrol and diesel, respectively, till the beginning of November.
- They highlight that in some cases, they are manifold higher than the basic taxes which is a misuse of the provisions of the Constitution.
- Since these additional charges are not part of the divisible pool, it undermines the fiscal federalism as enumerated in the Constitution and the autonomy of the states.
- Article 271 which was supposed to be used as a saving clause is being misused by the Centre.

Revenue Data

- According to the data released by Petroleum Planning and Analysis Cell (PPAC), the Centre has collected around ₹3.72 lakh crore in 2020-21 as revenue from petroleum products. Of this, only around ₹18,000 crores are collected as Basic Excise Duty. Around ₹2.3 lakh crore is collected as cess and the rest ₹1.2 lakh crore is collected as special additional excise duty.
 - * The divisible pool of 41% as decided by the Finance Commission applies only to the ₹18,000 crores.
- Even after the implementation of GST, States had retained the right to decide on the taxes on petroleum products and alcohol. With the usage of these additional taxes, the Centre has been unilaterally taking away the tax revenues which should be shared with the states.
 - * The need to alleviate the stress caused by the pandemic has increased the financial burden on the States. States need assistance to offer financial and social security to people.

Relevance of RNR

- A key aspect of GST implementation was that it would be a Revenue-Neutral Rate (RNR) to ensure that the State's revenues would not be diminished.
- Pre-GST, the average tax on goods was 16%. It is 11.3% at present. States are criticising that most essential items are more expensive than the pre-GST price and that the reforms have not benefited the consumers.
- States would have received at least ₹3-lakh crore additionally if the pre-GST rates were maintained.
 A detailed study must be conducted on why the States are losing their revenue streams.
- States are also apprehensive about the National Monetisation Pipeline and other neoliberal policies due to the mistrust which is increasing.

Entities that Gain

 The initiatives to aid the recovery process post COVID such as the reductions in corporate tax have increased the revenue shortages for the Centre and hence the States. The Centre, in turn, has been compensating for this by charging additional taxes on petrol and diesel.

Conclusion:

 The Centre should communicate and alleviate the concerns of the states to ensure that the principles of fiscal federalism are respected and taxes are decided democratically for States or the Country to thrive.

Infrastructures Energy, Ports, Roads, Aliports, Raflwaysets

9. PM to inaugurate Kashi Corridor Project

» Prelims: Ahilyabai Holkar; Kashi Vishwanath Corridor Project

Context:

• Prime Minister Narendra Modi will inaugurate the Kashi Vishwanath Corridor Project.

Details:

- The Kashi Corridor project is significant for Uttar Pradesh's cultural politics.
- The project incorporates the idea of Ahalya Bai Holkar, the Holkar queen of Indore, who built a sequence of temples that lead up to the Ganga ghat.
- Kashi Corridor Project comprises the following components:
 - * A 320-meter-long and 20-meter-wide paved pathway that connects the temple to the ghats.
 - * A museum, a library, a pilgrim facilitation centre, and a salvation home.

Ahilya bai Holkar

- At the early age of eight, Ahilyabai got married to Khanderao Holkar in 1733.
- In the battle of Kumbher in 1754, her husband was killed, leaving her a widow at the age of 29.
- After that, for the sake of the administration of the kingdom and the lives of her people, she resolved to take matters into her own hands.
- In 1767, she assumed the crown and became the ruler of Indore.
- In the 18th century, Ahilyabai Holkar supported industrialization while spreading the concept of dharma.

Development Work by Ahilyabai Holkar

- Ahilyabai is known for constructing multiple forts and roads in the Malwa area, as well as supporting festivals and donating to various Hindu temples.
- Her benevolence was reflected in the construction of temples, ghats, wells, tanks,

- and rest houses that spanned the length of the nation.
- In the capital of her kingdom, Maheshwar, the queen also built a textile industry.

Indian Agricultural Sector

10. <u>T.N. seeks time for farmers to insure samba</u>, thaladi crop

» Prelims: Samba or thaladi paddy

Context:

 The Tamil Nadu government has asked the Union government to extend the deadline for paying premiums for samba or thaladi paddy crop insurance.

Details:

Samba

- Samba rice is a kind of rice that is cultivated in Tamil Nadu, India, and Sri Lanka.
- It features a short ovular grain compared to basmati rice's large grain.
- Samba rice has a peculiar flavour that might be characterised as more "starchy" or "corny."
- The mallas of India harvest all of the Samba rice grain locally.
- The most costly sub-variety, Seeraga Samba, has the tiniest grain.

Thaladi

- The sowing season for Thaladi runs from October through November.
- The crop lasts between 115 and 120 days.
- Varieties with a medium and long duration are seeded.
- Thanjavur, Nagapattinam, Tiruvarur, Tiruchirapalli, Perambalur, and Karur are the districts where cultivation takes place.

Indian Agricultural Sector

11. The defeat of hubris, a confrontation on hold

» Mains: Repeal of farm laws; Concerns associated the farm laws

Context:

Repeal of the three farm laws by the Union government.

Laws to be repealed

 The Farmers Produce Trade and Commerce (Promotion and Facilitation) Act, 2020, which is aimed at allowing trade in agricultural produce outside the existing APMC (Agricultural Produce Market Committee) mandis;

- The Farmers (Empowerment and Protection)
 Agreement on Price Assurance and Farm Services
 Act, 2020, which seeks to provide a framework
 for contract farming;
- The Essential Commodities (Amendment) Act, 2020, which is aimed at removing commodities such as cereals, pulses, oilseeds, edible oils, onion and potato from the list of essential commodities.

Repealing a law

- It is one of the ways to nullify a law.
- A law is repealed when the Parliament believes the law is not a necessity.
- Legislations can also come with a "sunset" clause.
 - * A sunset clause or provision is a measure within a law, regulation or statute that provides that the law shall cease to have effect after a specific date, unless the law is extended by legislative action. This way, unwanted laws will not accumulate.
 - » For example, the anti-terror legislation Terrorist and Disruptive Activities (Prevention) Act 1987, commonly known as TADA, had a sunset clause, and was allowed to lapse in 1995.
 - * For laws that do not have a sunset clause, Parliament has to pass another legislation to repeal the law.

Process to repeal a law

Constitutional Provision

245. Extent of laws made by Parliament and by the Legislatures of States.

- Parliament may make laws for the whole or any part of the territory of India, and the Legislature of a State may make laws for the whole or any part of the State.
- It is from this article Parliament draws the power to repeal a law.

A law can be repealed either in its entirety, in part, or even just to the extent that it is in contravention of other laws.

Either by use of an ordinance, or through legislation

- In case an ordinance is used, it would need to be replaced by a law passed by Parliament. If the ordinance lapses because it is not approved by Parliament, the repealed law can be revived.
- The government can also bring legislation to repeal the farm laws. It will have to be passed by both Houses of Parliament, and receive the President's assent before it comes into effect.

- * All three farm laws can be repealed through a single legislation.
- * Usually, Bills titled Repealing and Amendment are introduced for this purpose.

What was the status of the three laws until the repeal?

• The Supreme Court stayed the implementation of the three laws on January 12 2021.

Issues with farm laws

- It was a long-held constitutional consensus in India that agricultural marketing was the legislative arena of State governments.
 - * The consensus was broken, when the Union government took upon itself the task of legislating on agricultural marketing and passed the farm laws.
 - » Federal principles were violated as the Union government invoked Entry 33 of the Concurrent List to intervene into matters in Entry 14, Entry 26 and Entry 27 of the State List.
 - » The farm laws even interfered with Entry 28 of the State List, which was not subject to Entry 33 of the Concurrent List.
 - » Thus, to begin with, the farm laws were reasonably and justifiably argued to be unconstitutional.
 - * The grievance redress mechanisms for contract farming also came up for criticism.
 - » It replaced the jurisdiction of civil courts with a bureaucratic procedure under the authority of the Sub-Divisional Magistrate, a government employee, which had raised fears among the farmers that it may benefit corporate sponsors more than the contracting farmers.
 - * The farm laws also looked like they encouraged the participation of larger corporate players in agricultural markets rather than farmer-friendly organisations, such as cooperatives or Farmer Producer Companies (FPC).
 - » Especially in the case of the amendment of the Essential Commodities Act, there was reasonable suspicion that a handful of corporate players were to substantially benefit from investments in logistics,

storage and warehousing.

- * The laws were introduced to reform the agricultural sector in accordance with the principles of a market economy.
 - » It could have reshaped the country's food procurement and distribution mechanisms. However, the farmers felt it would benefit big companies at the cost of farmers and customers.
 - » Farmers feared that the existing APMC mandis, where they sell their produce, mostly wheat and paddy, would be shut down once private players started trading in agri-produce outside the mandi premises, and that once the APMC mandi system became redundant, procurement based on minimum support prices (MSP) too would come to an end.
- * The fears were further aggravated by the manner in which these laws were brought about, through ordinances, and passed in Parliament without much deliberations, or consultations with the States and the stakeholders.

Unanswered questions

- One, mandi taxes were used to invest in rural infrastructure in States such as Punjab. If mandis are weakened, what would substitute for such investments?
- Two, even if private markets emerged, how would they address the structural problem of poor farm-gate aggregation of the produce of small and marginal farmers?

Way forward

- Consultative decision making would always be more sustainable and easier to enforce.
- Further moves on agriculture sector reforms must also draw lessons from the making of laws, and now the repeal, of the three farm laws.
- Therefore in the future, the government should rebuild trust among the stakeholders to plant the seeds of reforms.

Issues Related to Direct and Indirect Farm Subsidies

12. Reforming the fertilizer sector

- » Prelims: Government initiatives in the fertilizer sector
- » Mains: Concerns associated with fertilizer subsidy in India; Recommendations

Context:

 This article discusses multiple goals of fertilizer policy and four key areas India needs to work on.

What is a Fertiliser Subsidy?

- Farmers purchase fertilisers at MRPs (Maximum Retail Prices) that are lower than their regular supply-and-demand market rates or the cost of production/importation.
- Non-urea fertiliser MRPs are deregulated or set by the firms.
- The Centre, on the other hand, pays a fixed pertonne subsidy to guarantee that these nutrients are priced at "reasonable levels."

Background:

- Since 1991, when economic reforms began in India, several attempts have been made to reform the fertilizer sector to keep a check on the rising fertilizer subsidy bill.
- The Government of India established the "Central Fertilizer Pool" in 1944 to ensure equitable distribution of all fertilizers at fair prices all over the country.
- For 2021-22, the Union Budget has estimated fertilizer subsidy to reach a much higher level due to the recent upsurge in the prices of energy, the international prices of urea and other fertilizers, and India's dependence on imports.

Government Measures:

- 1. Nutrient Based Subsidy (NBS): The government introduced the Nutrient Based Subsidy (NBS) in 2010. It aims to address the growing imbalance in fertilizer use in many States, which is skewed towards urea (N). The Centre announces Nutrient Based Subsidy (NBS) rates for P&K (Phosphatic&Potassic) fertilisers every year.
- 2. Di-Ammonium Phosphate (DAP) Subsidy: Recently, the government had increased subsidies by 140% on DAP because of the surge in global prices.
- 3. Urea Subsidy: In the case of urea, the government has fixed the maximum retail prices (MRP) of urea. The difference between the MRP and the cost of production is reimbursed to manufacturers in the form of a subsidy.

Challenges in Fertilizer Subsidy:

- Policy Change: Farmers tended to move towards balanced use, but policy and price changes reversed the favourable trend a couple of times in the last three decades.
- Improper Use: The almost freezing of the MRP of urea in different time periods and its rising sale led to an increase in an indiscriminate and imbalanced use of fertilizers.
- EnvironmentImpact:Concerned with the adverse environmental impact of certain chemical fertilizers, some sections of society suggest the use of organic fertilizers and biofertilizers instead.

- Inter-State Disparities: There are also implications
 of inter-State disparities in fertilizer subsidy due
 to high variations in subsidy content, which is
 highly biased towards urea and thus nitrogen.
 As a result, the magnitude of fertilizer subsidy
 among the major States ranges in the ratio of 8:1.
- International Prices: The international prices of fertilizers are volatile and almost directly proportional to energy prices. These extraordinary price rises are on account of a sharp upsurge in international energy prices and supply constraints in major producing countries due to robust domestic demand, production cuts and export restrictions.
- Fiscal Concerns: In order to minimise the impact of the rise in prices on farmers, the bulk of the price rise is absorbed by the government through enhanced fertilizer subsidy. This is likely to create serious fiscal challenges.

The way forward

In order to address the multiple goals of fertilizer policy, we need to simultaneously work on four key policy areas.

- Self-Reliance: We need to be self-reliant and not depend on the import of fertilizers. In this way, we can escape the vagaries of high volatility in international prices.
- Expanding Nutrient Based Subsidy (NBS)
 Programme: The present system of keeping the price of urea fixed and absorbing all the price increases in subsidy needs to be replaced by the distribution of price change. We need to extend the Nutrient Based Subsidy (NBS) model to urea and allow for price rationalisation of urea compared to non-nitrogenous fertilizers and prices of crops.
- Alternative sources of nutrition: There is a strong desire to shift towards the use of non-chemical fertilizers as well as a demand for bringing parity in prices and subsidies given to chemical fertilizers with organic and biofertilizers. This also provides the scope to use a large biomass of crop that goes waste and enhance the value of livestock by-products. We need to scale up and improve innovations to develop alternative fertilizers.
- Improving fertilizer efficiency: India should pay attention to improving fertilizer efficiency through need-based use rather than scattering fertilizer in the field.

Conclusion:

 Fertilizer Subsidy changes will go a long way in enhancing the productivity of agriculture, mitigating climate change, providing an alternative to chemical fertilizers and balancing the fiscal impact of fertilizer subsidy on the Union Budgets in the years to come. Indian Economy and issues relating to growth and development

13. Over-valued unicorns in a distressed economy

- » Prelims: Unicorns; IPO types
- » Mains: Rapid growth of unicorns in India; Concerns over the failure of unicorns

Context:

 This article talks about the recent failure of the biggest-ever Initial Public Offering (IPO) and the status of unicorns in India.

What is an Initial Public Offering (IPO)?

- Primary and Secondary Market:
 - * The "Primary Market" and the "Secondary Market" are represented by the capital market.
 - * New issuers (primary market) and stock (secondary market) are two interrelated and inseparable components of the capital market.
- Initial Public Offering (IPO):
 - * An Initial Public Offering (IPO) is the process through which a private company becomes public by selling its stock to the general public.
 - * It might be a startup or an existing business that decides to go public by listing on a stock exchange.
 - * A corporation that sells its stock to the public is not obligated to reimburse the funds invested by the public.

Unicorns in India

- What is a Unicorn?
 - * Any privately owned firm with a market capitalization of more than \$1 billion is referred to as a unicorn.
 - * It denotes new entities dedicated to offering creative solutions and new business models, among other things.
 - * According to RBI reports, India is currently third on the global list of nations with the most unicorns, after only the United States and China.

• Origin:

- * In his 1997 book 'The Innovator's Dilemma', Clayton M. Christensen popularised the concept of disruptive innovations, and the 'unicorn' has since become a buzzword for describing start-ups.
- * The concept was that small businesses with little resources might disrupt technology by establishing a completely new way of doing things.

- · Characteristics of Unicorn:
 - * In the venture capital sector, a unicorn is a startup with a valuation of \$1 billion or more.
 - * Only a privately owned startup has the potential to become a unicorn.
 - * Unicorns are known for their disruptive innovation, high technology, new ideas, and customer focus.

Reasons behind the rapid growth of unicorns in India

- Fintech leads: Digital payment has recently grown in vast popularity. The fintech industry, which has contributed the most to the unicorn list, reflects this increase in digital payment.
- Investors' push for Get Big Fast (GBF) strategy:
 With startups, several investors and venture
 capital companies have embraced the GBF
 (Get Big Fast) strategy. Under this approach,
 businesses strive to develop quickly by raising
 significant amounts of money and lowering
 prices in order to outperform their competitors
 in the market.
- Company buyouts: Many startups become unicorns as a result of buyouts from major public corporations who prefer to focus on acquisitions to grow their business rather than investing in internal growth.
- No plans for IPO: Funding rounds are a common way for startups to raise financing and increase their total valuation. IPOs also include the danger of a company's value being devalued if the public market believes it is worth less than it is.
- Easy access to technology: With easy access to tech-savvy customers, companies can grow their businesses beyond their wildest dreams. As a result, technological advancements might be seen as another driving element behind the rise of unicorns in India.

Concerns with Failures of Unicorns:

- Edtech Companies: The novel coronavirus pandemic has turned out to be a boon in disguise for EdTech companies, since it is this external environment that is propelling the sector forward by four to five years. Due to the abundance of liquidity, EdTech companies with reasonable business ideas are highly priced.
- Technology firms: Technology companies try to persuade clients who have lived in a certain way to modify their behaviour. Consumers will begin to use such services only once this path of behavioural transformation has begun.
- Behavioural changes: Inducing such changes is costly for new businesses since they must incentivize clients. Firms spend a lot of money to offer huge discounts to clients in the hopes that people would become so used to these platforms that they will continue to use them even if the prices are raised.

 Consumption of Services: It appears that corporations and valuation experts overestimate the Indian economy's potential to consume services by assuming exponential demand growth over longer time periods.

Case Study: Paytm IPO

 Recently, the largest-ever initial public offering (IPO) in India collapsed on the stock exchange, with shares trading for less than 27% of the IPO price. In his own estimate of the company, valuation specialist Aswath Damodaran termed it "India's leading cash burning machine."

Conclusion:

 We are witnessing the emergence of new unicorns every month, which is the result of exaggerated valuations in order to tap more investors and burn more capital. These values are completely based on future earnings, with no gains to display in the short term.

Indian Economy and issues relating to growth and development

14. <u>Pointers that India is witnessing a K- shaped</u> recovery

- » Prelims: K and V shaped economic recovery
- » Mains: Concerns associated with K shaped economic recovery; Measures to be taken to counter the concerns

Context

• An assessment of the type of economic recovery after the ravages of the pandemic.

V-Shaped Recovery: Characteristics

- It is a type of economic recession and recovery that resembles a "V" shape. It depicts the shape of a chart of economic measures when examining recessions and recoveries.
- This type of recovery involves a sharp rise back to an earlier peak after a sharp decline in these metrics. A V-shaped recovery is the quickest and one of the most ideal.
- In this type of recovery, the economy falls quickly but also recovers quickly—it doesn't remain stagnant for very long. For example, the recoveries that followed the recessions of 1920-21 and 1953 in the U.S.

The V-Shaped vs K-shaped debate:

- There has been great discussions and speculations about the economic recovery for quite a while, ever since the pandemic.
- However, experts are divided on the type where for some it is more K-shaped than V-shaped, with various groups and industries recovering much quicker than others.

• It is also corroborated by the fact that the pandemic distinctly affected different sectors.

Impacts of Regressive Taxation:

- The decision to lower the corporate tax rate to provide for an ecosystem for economic growth has resulted in recovery in some sectors.
- The high excise duties and tax rates on fuels and consumer items has led to inflation and created more problems for the lower and middle class.
- The combined effects of these policies indicate that a K-shaped recovery could be visible, if at all.

Job loss and MGNREGA:

- The pandemic resulted in huge unemployment in the informal economy and led to further destitution in the country.
- The 34% cut in the allocation for MGNREGA in the Union Budget in 2021 has aggravated the situation.
- The delay in payments reduces the chances of timely purchase of essentials adding salt to the wounds.

Government stimulus and economic growth:

- There is a direct relationship between government stimulus and economic growth and the money multiplier effect shows this phenomenon.
- Providing disposable income to those who have more tendency to spend than save will lead to growth in the economy.
- The Government needs to increase progressive taxes and reduce regressive taxes to ease the financial pressure on lower-income households.

Way forward:

- We can observe how the financial situation got worsened due to the rising prices of essential goods affecting the lives of the majority of the population.
- Therefore, the right economic policies coupled with social security measures will lead to such a recovery which will not benefit only a fraction of the society but the masses and make these V vs K-shaped recovery debates insignificant.

Indusive Growth and issues arising from it

15. Over 50% of Bihar population multidimensionally poor: NITI

» Prelims: Multi Dimensional Poverty Index-Parameters

Context

 Over 50% of Bihar's population is classified as multidimensionally poor, according to the government think tank NITI Aayog's Multidimensional Poverty Index (MPI).

Details:

National Multidimensional Poverty Index (MPI) Report on Bihar:

- In Bihar, 50% of the population was classified as "multidimensionally poor."
- Among all the States and Union Territories, Bihar has the highest percentage of people living in poverty.
- Bihar has the highest poverty rate at 51.91 percent, followed by Jharkhand (42.16 percent), Uttar Pradesh (37.79 percent), Madhya Pradesh (36.65 percent), and Meghalaya (32.67 percent).

Other States

- Kerala has the lowest rate of poverty (0.71 percent), followed by Puducherry (1.72 percent), Lakshadweep (1.82 percent), Goa (3.76 percent), and Sikkim (3.82 percent).
- Tamil Nadu (4.89 percent), Andaman & Nicobar Islands (4.30 percent), Delhi (4.79 percent), Punjab (5.59 percent), Himachal Pradesh (7.62 percent), and Mizoram (9.8%) are among the states and union territories where fewer than 10% of the population is impoverished.

Additional Information

National Multidimensional Poverty Index

- A national Multidimensional Poverty Index is a poverty metric that is adapted to each country's specific circumstances.
- NitiAayog, an Indian think tank, produces the National Multidimensional Poverty Index (MPI).
- The Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) created rigorous methods for it.

What is multidimensional poverty?

 Multidimensional poverty refers to the multiple deprivations that poor people face on a daily basis, such as poor health, a lack of education, insufficient living standards, disempowerment, low employment quality, the fear of violence, and living in ecologically hazardous places, to name a few. In order to formulate policies aiming at alleviating poverty and hardship in a nation, a multidimensional measure of poverty might include a variety of indicators that represent the complexity of this phenomenon.

Infrastructures Energy, Ports, Roads, Aliports, Rallwaysets

16. 'Jaitapur would be the world's most powerful nuclear plant'

- » Prelims: Nuclear power plants in India
- » Mains: Significance of Nuclear power in India; Challenges/concerns

Context:

 The French company EDF and Nuclear Power Corporation of India Limited (NPCIL) are working together to take the Jaitapur project off the ground.

Background:

- EDF, a French corporation, recently submitted a binding offer for the Jaitapur project to NPCIL.
- This initiative is an important aspect of India's and France's strategic cooperation.

Significance of the Project for India:

- The Jaitapur project would be the most powerful nuclear power plant in the world.
- Six cutting-edge European Pressurised Water (EPR) Reactors with a total installed capacity of 9.6 GWe will generate low-carbon electricity.
- Electricity would be provided to seven crore households.
- Thousands of local employment would be created, directly benefiting Maharashtra.
- This project will represent India and France's strong relationship and commitment to a lowcarbon future.

Advantages of French Investment in India:

- In line with Government Initiatives: The funds will be used to support the Make in India and Skill India programmes. Through the Government of India's Smart Cities programme, the French Development Agency (FDA) is also working to promote clean transportation in India.
- Boost to Industrial Sector: India and France hope to urge India's industrial sector to participate actively in the project for the industrial advantage. In this spirit, France is implementing a plan based on extensive research to find Indian firms that may be chosen as suppliers.
- Contribution in Electric Vehicles: The French companies present in the Indian market are important in terms of production of electrical batteries.

 Boost to Diverse Sectors: France encourages contributions to ongoing transformation in the areas of environmental transition, manufacturing facility modernization, and technical innovation. Renewable energy, agro-business, and healthcare are additional areas of focus for France.

Agriculture Related Developments

17. What will a legal guarantee of MSP involve?

- » Prelims: MSP system in India
- » Mains: Arguments for and against legal guarantee for MSP

Context:

 After the repeal of three farm laws, farmers are seeking a legal guarantee of Minimum Support Price (MSP).

Minimum Support Price (MSP):

What is Minimum Support Price (MSP)?

- MSP stands for Minimum Support Price, which is the price that the government sets for agricultural products that it buys directly from farmers.
- In the case of agricultural products, the MSP rate serves as a guarantee to the farmer of a minimum profit for the crop in the event that the open market price is lower than the cost spent.

How many crops does the minimum support price cover?

- Every year, the Central Government establishes a minimum support price (MSP) for 23 crops using a formula based on one-and-a-half time's production costs.
- Factors that are considered before recommending MSP are:
 - * Cost of production,
 - Overall demand-supply situations,
 - * Domestic and international prices,
 - * Inter-crop price parity,
 - * Terms of trade between agriculture and non-agriculture sector.

Critical Analysis of the Legal Backing of MSP:

Arguments in Favour of the Legal Backing of MSP:

- MSP's legal status will ensure that all farmers are protected against price rise.
- It will ensure that farmers' food is purchased at the declared MSP, either directly or through private players.
- MSP will be required to cover all crops and all producers in order to guarantee the Right to MSP.

Arguments Against the Legal Backing of MSP:

- "Economic theory as well as experience implies that the price level that is not supported by demand and supply cannot be sustained by legal methods," writes NITI Aayog's agricultural economist Ramesh Chand in a policy study.
- If MSP becomes a legal right, procurement will skyrocket in terms of volume.
- It may result in the formation of a vast black market in which small dealers buy grains from farmers in unofficial ways.
- Legalizing MSP will have an influence on the country's macroeconomic prospects by raising the chance of an unexpected surge in inflation.
- MSP is classified as a bad subsidy by the WTO since it has an impact on the market. India's subsidising programmes will spark outrage among developed countries.
- The Centre indicates that states are allowed to guarantee MSP rates if they desire, but it also provides two instances of policies that have failed.
 - * One example is the sugar industry, where private mills failed to make full payments to farmers, resulting in thousands of crores in unpaid dues that had been accumulating for years.
 - * Another example is a 2018 Maharashtra legislation modification that penalizes traders who buy crops below MSP with severe fines and prison sentences.

Conclusion:

- The MSP framework has never helped the majority of Indian farmers.
- According to the Shanta Kumar Committee study from 2015, just 6% of Indian farmers are successful in selling their products at MSP.
- MSP for all crops Kharif and Rabi has decreased on average over the previous decade, according to MSP statistics.
- Farmers want the government to ensure an MSP when working with private actors since they have been suffering for decades owing to a lack of MSP rules.

International Trade and Commerce

18. <u>U.S.-India Trade Policy Forum</u>

- » Prelims: Totalization agreement, GSP system
- » Mains: Potential of economic relation between India and the U.S.; Challenges and significance of the Trade Policy Forum in addressing the challenges

Context:

- The U.S. Trade Representative held bilateral meetings with Commerce and Industry Minister and relaunched the U.S.-India Trade Policy Forum (TPF).
 - * The Trade Policy Forum was convened after a gap of four years.

Trade Policy Forum

- In 2005, U.S. President George W. Bush and Indian Prime Minister Dr.Manmohan Singh created a program called the Trade Policy Forum.
- It is run by a representative from each nation.
- The goal of the program is to increase bilateral trade which is a two-way trade deal and the flow of investments.

Objectives

- Facilitating trade and investment flows between the United States and India;
- Developing and implementing trade policies through transparent procedures that comply with international obligations
- Fostering an environment conducive to technological collaboration and innovation; and
- Promoting inclusive economic growth and job creation in the United States and India.

Background:

Vicious cycle of bilateral economic ties:

- There have been many setbacks in the economic relationship between the two countries.
 - * The U.S.'s move to raise import tariffs and the withdrawal of benefits to Indian exporters under the U.S.'s Generalized System of Preferences (GSP) triggered retaliatory trade measures from India.
 - * Some prominent American businesses (Harley-Davidson and Ford) have left India.

- * India and the U.S. are pursuing cases at WTO against each other's trade policies.
- * Both countries have blamed each other over issues of restricted market access, trade and non-trade barriers, high tariffs on imports, Intellectual Property rights infringement, etc.
- Despite many efforts towards a free-trade agreement, the two sides have failed to even reach a mini-trade deal.

Details:

Working groups:

- The India-US Trade Policy Forum has five focus groups – agriculture, investment, innovation and creativity (intellectual property rights), services, and tariff and non-tariff barriers.
 - * The two sides have decided to activate working groups of the Trade Policy Forum (TPF)
- These working groups will meet frequently and address issues of mutual concern like outstanding market access issues in a mutually beneficial manner.
 - * India is seeking U.S. market access for its mangoes, grapes, and pomegranates, pomegranate arils, water buffalo meat and wild-caught shrimp, while the U.S. is seeking similar access in the Indian market to cherries, pork/pork products, dried grains and alfalfa hay for animal feed.
- They will also work towards targeted tariff reductions.
- The TPF working groups would work towards developing plans of action for making substantive progress by March 2022.

Totalization agreement:

- The Forum acknowledged the importance of urgently negotiating a Social Security Totalization Agreement and would be pursuing efforts for reaching such an agreement.
- The absence of such an agreement particularly affects Indian IT workers in the U.S., who lose billions of dollars in U.S. social security contributions that they cannot repatriate back to India.
- The agreement would allow workers from both countries to move their retirement savings between the two countries.

Multilateral engagement:

- India and the U.S. would involve in collaboration and constructive engagement in multilateral trade bodies, like the WTO and the G20 for achieving a shared vision of a transparent, rulesbased global trading system among market economies and democracies.
 - * India's proposal on IPR waivers for the COVID-19 vaccine and medicines will be discussed in the upcoming WTO ministerial.
- The Forum also decided to find mutually agreeable solutions to outstanding WTO disputes between the two countries.

GSP issue:

 Indian has sought restoration of the GSP (Generalized System of Preferences) benefits to which the U.S. has promised suitable consideration.

Significance of TPF framework:

- Reviving the U.S.-India Trade Policy Forum is a chance to break the vicious cycle in economic ties between India and the U.S.
- The TPF approach of targeting easily achievable targets first and setting time limits will help streamline the process of negotiations between the two sides.
- The TPF will act as a starting point for the United States and India to integrate their economies across sectors to harness the untapped potential of the bilateral relationship. Given the complementarities of the two economies, a robust trade relationship between the two countries will help them reap rich economic dividends.
- Apart from the obvious bilateral benefits, an enhanced trade relationship between the two countries will help rebuild critical supply chains in a post-pandemic world. The integration in areas such as health, medical devices and pharma is an effort in this direction.

Way forward:

 Toensure a robust and sustainable trade partnership, the trade policy forum should thus resolve the pending issues in an amicable manner.

INTERNATIONAL RELATIONS

Effect of polities and polities of developed and developing countries on India's interests

1. Pentagon rattled by China's military push

» Mains: China's growing military capabilities-Concerns, implications for India and necessary strategy to counter the threat

Context:

 U.S. defence establishment has expressed concerns over China's growing military capabilities.

Details:

- Chinese military capabilities are expanding rapidly not only in traditional domains of land, sea and air but also in the new domains of space and cyberspace.
- China has also been expanding its nuclear arsenal.
- It has made rapid advances in missile technologies. There is available evidence of China increasing its fleet of land-based intercontinental ballistic missiles, or ICBMs.
- China recently tested a hypersonic weapon capable of partially orbiting Earth before reentering the atmosphere and gliding on a manoeuvrable path to its target. This weapon system would be capable of evading the most advanced missile defence systems including that of the U.S.

Concerns for the U.S.:

- China's growing military capability could end American predominance not only in the Asia-Pacific but also lead to a potential shift in the global balance of power that has favoured the U.S. for decades.
- Growing Chinese military prowess could push realignment in the region more favourable to China and complicate U.S. alliances in Asia.

Reactions from the U.S.:

- Given the rapid gains being made by China, the U.S. administration is attempting to reorient all aspects of U.S. foreign and defence policy. The Biden administration is expected to review the nuclear weapons policy, global troop basing and overall defence strategy.
- There have been calls by Pentagon officials and defence hawks for rebuilding the U.S. nuclear arsenal.

Miscellancous

2. Rezang la Memorial

» Prelims: Rezang la

Context:

- Commemorating the unfettered bravery of the soldiers in the battle of Rezang La, the Defence Minister dedicated the memorial to the nation.
- This memorial is situated at the Chushul border in Ladakh.

Turning the pages of history:

- November 18 marks the 59th anniversary of the Battle of Rezang La in which troops from the 13 Kumaon Regiment defeated several waves of the Chinese Army at a height of over 16,000 feet.
- Rezang Lais a mountain pass on the Line of Actual Control. The battle took its advent at the strategic village of Chushul and SpanggurLake.
- The 13th battalion of the KUMAON regiment was responsible for the defence of Chushul. The first onslaught by the Chinese failed and this was followed by a more intense second attack to occupy Rezang la.
- The Indian platoons fought with all weapons they possessed. The Kumaonis were geared up and with enchanted spirit headed towards a hand to hand fight.
- 109 soldiers died with the weapons intact in their hands and remained frozen. This exemplifies the indomitable patriotism of our gallant soldiers towards the motherland. Even though dead their patriotic souls resurrected to protect the borders from the divine kingdom. This memorial will stand as an embodiment of the gallantry of the Kumaonis that we all must cherish.



Bilateral, regional and global groupings and agreements involving India and/or affeating India's Interests

3. ASEM Summit

» Prelims: ASEM- Members and mandate

Context:

 The Vice President of India addressed the plenary session of the ASEM Summit and emphasized the importance of reforming the UNSC and other International Organizations restoring multilateralism.

About the ASEM Summit:

- The ASEM summit is an Asian-European political dialogue that aims to increase the level of cooperation between the partners.
- It was established in the year 1996 in Bangkok, Thailand having 15 member states of the EU and European Commission and 7 member states of the ASEAN along with China, Japan and South Korea.
- It is a biennial event with its firm objective of enhancing the collaboration between Europe and Asia in the areas of economics, politics, finance, education and culture.
- The 13th ASEM dialogue involved 21 countries from Asia and the ASEAN secretariat along with the EU and its 27 member states and Norway, Switzerland and the UK. It was an overall grouping of 51 member countries.
- India joined the ASEM group in 2006 and hosted the 11th ASEM Foreign Ministers' Meeting in 2013 at Delhi. Since then India has been actively involved in raising concerns in the multilateral platform and also provided proper solutions.
- The theme for the year 2021 is "Strengthening multilateralism for shared growth" and was hosted by Cambodia as the current chair of the group.

Priority areas discussed in the Summit:

- The agenda for 2021 will focus on strengthening multilateralism
- Improving post-pandemic socio-economic conditions
- Developing the resolution process of regional and global issues that are of common interest

Important International Institutions, agendes and fora-their Structure, Mandate

4. It's time to engage in 'lawfare'

- » Prelims: ICJ; Non-refoulement and measures to be adopted by India
- » Mains: International law and its applications

Context:

- International law encompasses a wide range of security challenges from terrorism to marine security.
- The UN Charter recognises the maintenance of "international peace and security" as a primary goal of the organisation in Article 1(1).

<u>Instances where India has ably used international</u> <u>law for its national security objectives:</u>

- The Kulbhushan Jadhav case when it dragged Pakistan to the International Court of Justice.
- In developing international law to counter terrorism.

<u>India's failure to fully appreciate the usage of</u> international law

- India did not use its right to self-defense in response to the Pulwama attack. Instead, India used a contentious policy known as "non-military pre-emptive action."
- After the Pulwama attack, instead of suspending the Most Favoured Nation (MFN) obligation towards Pakistan along security lines, India used Section 8A(1) of the Customs Tariff Act, 1975, to increase customs duties on all Pakistani products to 200%.
 - * Under international law contained in the General Agreements on Tariffs and Trade, countries can deviate from their MFN obligations on grounds of national security.
- India claims it is not a signatory to the Refugee Convention and hence wants to expel the Rohingya refugees. In international refugee law, one of the exceptions to the non-refoulement principle is national security.
 - * Non-refoulement is a principle of international law that forbids a government from returning refugees to countries where they face a clear threat of persecution because of their race, religion, nationality, political beliefs, or other factors.
 - * If India wants to expel the Rohingyas, it should build a case along similar lines, demonstrating how they pose a national security risk.
- India has seldom utilised international law to exert pressure on the Taliban rule in order to advance India's interests.
 - * For example, India may have argued that SAARC could temporarily suspend Afghanistan's membership based on its implicit powers under international law.

Reasons for international law remaining at the margins of foreign policymaking in India:

- Absence of International Lawyers: There is marginal involvement of international lawyers in foreign policymaking.
- Lack of Expertise: Apart from the External Affairs Ministry, there are several other Ministries like Commerce and Finance that also deal with different facets of international law. They have negligible expertise in international law.
- Systemic neglect of the study of international law: Institutions created to undertake cutting-edge research in this discipline have institutionalised mediocrity and university centres mandated to develop the stream suffer from uninspiring leadership and systemic apathy.
- Domain Experts failed to popularise International Law: Many of the outstanding international law scholars that India has produced prefer to converse with domain experts only. Thus, they have failed in popularising international law among the larger public.

Conclusion:

- If India aspires to become a global power, it must employ 'lawfare,' or the utilization of the law as a national security weapon.
- India should spend heavily on international law capacity building in order to mainstream international law in foreign policymaking.

India and its Neighborhood-Relations

5. Caught in the crossfire

- » Prelims: Sir Creek
- » Mains: Issues between India and Pakistan

Context:

 An Indian fisherman was killed in firing by the Pakistan Maritime Security Agency (PMSA) off the Gujarat coast.

Background

- According to the National Fish workers Forum, there are 558 Indian fishermen in Pakistani jails, and 74 from Pakistan in Indian prisons.
- Consular access to those in prison is difficult.
- In 2007, both countries formed a joint judicial committee comprising eight retired judges to facilitate the exchange of civilian prisoners.
- The mechanism has been defunct since 2013, and attempts to revive it in 2018 did not bear fruit.
- There are frequent conflicts over fishing rights along the International Maritime Boundary Line between India-Pakistan.

Concerns of Fishermen

- Fishermen often get caught in the fluctuating fate of the bilateral relations between the two countries, which is currently at a low.
- It is a tragedy that ordinary people could end up in a foreign prison while trying to earn their livelihood.
- Even fishermen venturing near the India-Sri Lanka maritime border often fall victim though both countries maintain cordial bilateral ties.
- Pakistan has aggressively sponsored violence in India, and terrorists trained by its agencies sailed in a hijacked Indian fishing boat in 2008 to Mumbai.
- Many Indian villages along the borders with Myanmar and Bangladesh are also theatres of conflict, as communities often find it difficult to reconcile with international borders that divide their traditional spheres of economic and social activities.

Conclusion

- This is a humanitarian issue, and India and Pakistan must work together to resolve it.
- Furthermore, both countries must avoid escalating tensions as a result of the recent occurrence.

Bilateral, regional and global groupings and agreements involving India and/or affeating India's Interests

6. NAM at 60 marks an age of Indian alignment

- » Prelims: Non Aligned Movement
- » Mains: Achievements and failures of NAM

Context:

 60th anniversary of the Non-Aligned Movement (NAM) and Nehru's contributions to the field of foreign affairs.

Background

- The Congress of Vienna (1814–1815) was an international diplomatic conference to reconstruct the European political order after the downfall of the French Emperor Napoleon I.
 - * It recognized the concept of not aligning a country's policy with others.
- In 1946, when Nehru formed the national government, he stated, "we propose... to keep away from the power politics of groups aligned against one another... it is for One World that free India will work."
- The Cold War which was all about power rivalries, military alliance, balance of power and ideological conflict was opposed by Nehru.

NAM thus became a cost-effective means of promoting India's diplomatic presence and the best means of securing economic assistance from abroad.

NAM

 Non-alignment was about retaining the independence of judgment and freedom of political action.

Achievements of NAM

- The Geneva Conference of 1954 was an international meeting in Geneva, Switzerland involving multiple countries to negotiate on Korean War and the First Indochina War.
 - * India played a significant role at the conference.
- India was against colonialism and racism, NAM further helped many African states to achieve independence after 1960.
- During the 1970s and 1980s, the Movement of Non-Aligned Countries played a key role in the struggle for the establishment of a new international economic order that allowed all the peoples of the world to make use of their wealth and natural resources and provided a wide platform for a fundamental change in international economic relations and the economic emancipation of the countries of the South.
- It advanced the process of democratization of international relations.

NAM's failures

- One of the principles of NAM was to respect sovereign domestic jurisdiction.
 - * This had created many alignments among the countries, lack of uniform structure, leading to ignoring some of the human rights violations committed by member countries.
- NAM could not stop the arms race and bring an end to Nuclear Proliferation.
- It could not prevent regional confrontations.
- Other failures were lack of collective action and collective self-reliance, and the nonestablishment of an equitable international economic or information order.

Phases of NAM

- Phase 1
 - * The first phase of Indian foreign policy lasted from independence in 1947 to the end of the Second Indo-Pakistani (Kashmir) War in 1965.
 - * India's first Prime Minister Jawaharlal Nehru was the key political figure of this period.

Phase 2

- * In 1964 Jawaharlal Nehru died and his daughter Indira Gandhi took office as prime minister.
- * Indira Gandhi leaned towards the Soviet Union as a key international partner and in doing so distanced herself even further from the USA.
- · Phase III: After the Cold War
 - * The end of the Cold War and the collapse of the Soviet Union changed the environment of India's foreign policy drastically.
 - * On a global scale, India moved closer to Washington's side.

Currently, India is inclined to greater alignment with the United States whether under the nebulous rubric of the Indo-Pacific or otherwise.

Conclusion

Every international organisation has a shelf life, though many survive for years in semi-neglect.

- The League of Nations was given the coup de grâce after seven years of inactivity.
- The Commonwealth will last only as long as the British find it useful.
- Looks like Brazil-Russia-India-China-South Africa (BRICS) has no future given the state of India-China relations.
- The South Asian Association for Regional Cooperation (SAARC) has faded into oblivion.

The call for the dissolution of the Non-Aligned Movement gained currency with the end of the Cold War. However, in order to continue and be effective, the organization should be reshaped and reformed to address global challenges.

Effect of polities and polities of developed and developing countries on India's interests/diaspora

7. Reading the forecast from China's sixth plenum

» Mains: New domestic developments in China and the corresponding implications for India; Strategy for India to counter it

Context:

 The Sixth Plenary Session or Plenum of the 19th Central Committee of the Chinese Communist Party (CCP).

What is a plenum?

- A plenum is a meeting attended by all full and alternate members of the Communist Party's Central
- Those attending hold the country's most important offices and include members of the party leadership, ministers, regional party chiefs,

senior generals and the executives of stateowned conglomerates.

Why are the plenums important?

- The plenums are a key venue for the party to display unity among the party leadership and indicate the direction of key policies.
- The meeting serves as a precursor for the introduction of important laws, regulations and economic plans, and discussions that continue beyond the plenum will almost certainly lead to the introduction of new policies.

Examples:

- At the conclave in 1978 overseen by Deng Xiaoping, China's economic reforms were initiated.
- At a plenum in 2013, China unwrapped its boldest set of economic and social reforms, relaxing its one-child policy and further freeing up markets.
- At the plenum in 2018, the party approved a plan to remove presidential term limits which meant Xi could stay in office until he dies.

Historic Resolution

It is a document that aims to consolidate the party's achievements and provides an ideological roadmap for its continued rule. It is only the third such resolution to be issued in the party's 100-year history.

- First by Mao Zedong in 1945 (Resolution of Certain Questions in the History of our Party).
- Second by Deng Xiaoping in 1981 (Resolution of Certain Questions in the History of our Party since the Founding of the People's Republic of China).
- Third by Xi titled 'Resolution of the CCP Central Committee on the Major Achievements and Historical Experience of the Party's Century of Struggle'.

Why does it matter?

Interpreting the contents of the 'historical resolution', the elevation of Xi Jinping and bringing him on par with Mao Zedong, and ahead of Deng Xiaoping, as the leader of China, to rule for life has huge ramifications.

- Xi Jinping's 'Thought on Socialism with Chinese Characteristics for a New Era' now appears to rank alongside Mao Zedong Thought, and eclipses 'Deng Xiaoping Theory'.
 - * He is on a mission to redistribute the nation's wealth to build a fairer Marxist society.
 - * The "common prosperity" campaign wiped about \$1 trillion off the value of Chinese stocks globally in July 2021, and impacted the business of everyone from delivery drivers and after-school teachers to tech giants and celebrities, with major fallout for global investors.

 With a historical resolution under his belt, Xi would be emboldened to execute more economic reforms.

Time for the West to ponder

- Having been crowned as the unchallenged leader, with no term limits, the leadership could provoke erratic behaviour.
 - * This is likely to occur if there are domestic issues arising in China because of an economic downturn after almost three decades of continuous growth.
 - * The unprovoked incidents of aggression that took place in Ladakh, may not be the right example but they can be a reminder of what can happen.
- Over centralisation of power can, no doubt, result in new fragilities, but the current policy followed by the West of 'strategic confrontation and economic decoupling' may not yield the kind of results they seek.
- The CPC further has wider support from the people in China than most governments headed by dictators who have seized power through various means, and also possibly more than many ruling parties in quite a few democracies.
- The reasons for the trust in the party is historical reasons of humiliation at the hands of the west prior to independence and ideological promise of 'Common Prosperity'
 - * The west, therefore, should avoid heavy criticism and its approach has to be nuanced if not there is a possibility where the Chinese people are likely to be reminded of their humiliation in the past and this would only bolster grass-roots support for the Communist Party leadership.
- Information collected from various studies also points out that a lack of liberalised policies has not undermined faith in the Beijing government among ordinary Chinese citizens.
 - * This is something that the rest of the world needs to ponder over.
 - * Consequently, the West may be making a grave mistake in believing that a mere lack of political freedoms as understood in democracies automatically translates into opposition to the leadership.

Strategy for India

- As America seeks to counter a rising China, America is drawing India closer, the question India should answer is
 - * whether it has to hold to its present position to defend against Chinese aggression with the help of the USA or
 - * take an independent stand against China's misadventure

- Many countries from Asia have an option of leaning towards India or China.
- With the exception of Pakistan and Cambodia (which are near-client states of China), other countries may not have any specific liking towards China but are compelled by circumstances to lean more towards China than India.

Conclusion

 Therefore, India should take a hard look as to whether it should devise a different strategy to subserve India's best interests.

Effect of polities and polities of developed and developing countries on India's interests/diagram

8. <u>Sri Lankan fishermen seek India's action over disputes</u>

» Mains: Major irritants in the relationship between China and the U.S.; Implications for India

Context:

• The virtual meeting between President Biden and China's leader, Xi Jinping.

<u>Issues</u>

- At the top of the policy agenda that is causing bilateral friction is trade.
 - * The US-China trade war, which began in 2018 under former US President Donald Trump, has resulted in both nations paying higher taxes to bring in goods from the opposing country.
 - * Escalating import tariffs have caused supply chain disruptions that are affecting businesses and individuals worldwide.
 - * At the summit, economic issues took a back seat to geopolitics.
- The USA raised concerns about human rights abuses in Xinjiang, Tibet and Hong Kong.
 - * China accused the US of meddling in its domestic affairs.
- The US had problems with China's "unfair trade and economic policies" harming American workers and the need to protect American workers and industries.
- China responded by saying that the US has to stop "abusing the concept of national security to oppress Chinese companies".

On Taiwan

- China sees Taiwan as a breakaway province to be reunified with the mainland one day.
- The US recognises and has formal ties with China.
 But it has also pledged to help Taiwan defend itself in the event of an attack.
- The Chinese side indicated that the USA is playing with fire.

* Such comments signal that China will respond robustly to any western moves seen as strengthening Taiwanese independence, for example through direct arms sales to Taipei.

However, the summit meeting yielded no major breakthroughs.

Concerns

- Over the last two decades, summits between both countries resulted in the issuance of joint statements. The virtual meeting had no such statement release.
- Nor did the meeting end with any agreement to have groups of officials from both sides hold further talks on strategic nuclear issues and conflicts in cyberspace.
- Instead, countries issued their own statements, which looked like catalogues of mutual grievances that offered little room for compromise.

Conclusion

 Both sides will have to be even-handed in managing their conflicts on trade and regional tensions or else risk these issues spilling over into the global arena and disrupting the fragile ongoing recovery in economic growth and public health.

India and its Neighborhood - Relations

9. Will Pak. law on KulbhushanJadhav help India's position?

- » Prelims: Vienna Convention; International Court of Justice
- » Mains: India- Pakistan relationship- Irritants

Context:

 Pakistan's Parliament passed the International Court of Justice (Review and Reconsideration) Bill, 2021, granting the right of appeal to Kulbhushan Jadhay.

Background:

- The International Court of Justice (Review and Reconsideration) Bill, 2021, granted the right of appeal to Kulbhushan Jadhav, former Indian Navy officer on death row on espionage and other charges.
- India expressed misgivings about the law, saying it still does not fulfil the terms laid down by the International Court of Justice (ICJ) which included the provision that India be allowed consular access to Jadhav.

Kulbhushan Jadhav Case

- · When was he Arrested?
 - * KulbhushanJadhav was arrested in 2016 and charged with espionage and sabotage against Pakistan's security installations.

- * The case received attention as it came soon after the 2016 Pathankot terror strike that India blamed on Pakistan-based terrorists.
- · India's arguments at the ICJ
 - * In 2017 Jadhav was sentenced to death by a military court in Pakistan for alleged acts of sabotage. India moved the ICJ and pointed out that Pakistan had failed to provide consular access to Jadhav.
 - * India had argued at the ICJ in 2017 that Jadhav had been denied his rights under the Vienna Convention and Pakistan had "failed to inform" New Delhi about his arrest.
 - * The law passed by Pakistan's parliament is being presented as proof of Islamabad complying with the ICJ ruling.
- What did the ICJ rule?
 - * In its observations of 2017, the ICJ asked Pakistan to take "all measures at its disposal" to ensure that Jadhav is not executed pending its final decision.
 - * It observed that Pakistan had violated Article 36 of the Vienna Convention by not allowing India consular access to Jadhav and by denying his right to a proper legal representation

<u>Arguments Against the Recent Law</u>

- The law will end up as mere paperwork if Pakistan fails to provide verifiable legal access to Jadhav. India has already expressed its misgivings.
- The law is a repeat of the International Court of Justice (Review and Reconsideration) Ordinance, 2020, that Delhi had rejected as inadequate
- India said the ordinance did not "create the machinery of an effective review and reconsideration" as mandated by the ICJ.

Conclusion

- Pakistan predicted that India would return to the ICJ to bring a contempt notice against Pakistan, and that this law would pre-empt such a move.
- Pakistan is expected to claim that it has not only complied with the ICJ's decision, but has also made it law.
- The bill is also an attempt to resolve a domestic political spat in Pakistan.

Effect of polities and polities of developed and developing countries on India's interests/diaspora

10. Keeping a close eye on China's nuclear capabilities

- » Prelims: Low yield nuclear weapons; No First Use
- Mains: China's increasing military capabilities visà-vis nuclear weapons; Security implications for India

Context:

 China Military Power Report (CMPR) recently released by the Pentagon.

Details:

- The Pentagon report notes with concern the increasing military capabilities of the People's Republic of China (PRC).
- The report highlights in particular a transformation in both the quantity and the quality of China's nuclear arsenal. The report notes fundamental changes in the quantitative strength and atomic yield of nuclear arsenal, enhanced delivery capabilities (missile) and nuclear posture of China.

Rising number of nuclear war heads:

 China's nuclear arsenal is set to increase. As per the report, by 2027, China could have around 700 nuclear weapons consisting of varying yields.

Tactical low yield nuclear weapons:

 China seems to be prioritizing low-yield nuclear weapons. Low-yield weapons are weapons meant for battlefield use during conventional military operations and against conventional targets such as concentrations of armoured, artillery and infantry forces. The increasing preference of low yield nuclear weapons seems to be indicative of China's use of nuclear weapons for tactical rather than strategic purposes. This gives rise to speculation that China plans to use its nuclear weapons not just for deterrence but intends to use them in the battlefield if necessary.

Increasing delivery capabilities:

- China has been notably developing long range nuclear weapon delivery capable missiles like the Intermediate-Range Ballistic Missile Dong-Feng-26 (DF-26) ballistic missile and the JL-2 Submarine Launched Ballistic Missiles (SLBMs) with a range of 7,200 kilometres.
- Such long range capacity missiles would allow China to strike any target across continental Asia.
- Notably, China has even deployed these missile systems in key areas.

Concerns over the nuclear posture:

- China has adopted a Launch on Warning (LoW) nuclear posture.
 - * Launch on warning (LOW) or fire on warning is a strategy of nuclear weapon retaliation. This military strategy allows high-level commanders to launch a retaliatory nuclear-weapons strike against an opponent as soon as satellites and other warning sensors detect an incoming enemy missile.
- This marks a higher alert posture. The Launch on warning nuclear posture not only risks reducing the threshold for nuclear use in the form of

pre-emption but it could also sow the seeds of miscalculation and unintended nuclear use.

Security implications for India:

- China's nuclear competition with the United States will have a cascading effect for the Indo-Pacific region and also India which happens to share an increasingly frosty relationship with China amid the border tensions along the LAC.
- The increasing size of Chinese nuclear weapons and the development of potent missile defences like the HQ-19 interceptors, specifically designed and developed to execute mid-course interception of medium-range ballistic missiles, threatens the survivability of the Indian nuclear arsenal in case of a nuclear war between India and China.
- China's adoption of a Launch on Warning (LoW) nuclear posture reduces the decision time for any Indian retaliatory nuclear strike in the heat of a war or crisis and places pressure on India to pursue its own LoW instead of the present No First Use (NFU) policy. Also the adoption of a reversible No First Use (NFU) policy by China risks degrading an Indian retaliatory strike if China chooses to resort to First Use (FU) of nuclear weapons. China with its large and tactical low yield nuclear weapon systems could decapitate India's nuclear forces.
- China has been slowly but surely developing SSBNs/nuclear-powered ballistic-missile submarines and increasingly deploying them in the Indian Ocean region. These SSBNs are capable of carrying nuclear warheads and this could leave India exposed to a Chinese atomic pincer from the maritime domain in addition to the continental domain.

Recommendations:

 Given the rising threat posed by Chinese nuclear weapons, Indian will have to re-evaluate the quantitative nuclear balance and India's nuclear posture vis-à-vis China.

Effect of polities and polities of developed and developing countries on India's interests/diaspora

11. Coups upend West Asia's nascent democracies

» Mains: Implications of Arab spring for India; Way forward for India to deal with the new developments in West Asia

Context:

 As recent developments in Tunisia and Sudan again entrench autocracy, there are fears that the beacon of reform could be extinguished across the region.

Arab Spring Uprisings

- · Arab Spring Uprisings and coup in Tunisia
 - * The public rejection of the political and economic situation that has prevailed across the Arab world, from Morocco to Yemen, is known as the 'Arab Spring'.
 - * Tunisia's revolution began in 2010 and ended in 2014, when the country adopted a democratic constitution.
 - * Recently, the country's President conducted a "constitutional coup" by suspending the country's Constitution and democratic institutions.
 - * Tunisia's political system has swung from crisis to crisis in recent years, owing to the country's dire economic situation and mishandling of the new coronavirus outbreak.
- Significance of Arab Spring Uprisings
 - Millions of people in neighbouring Arab nations were inspired by the Arab Spring uprisings.
 - * As a result, the demonstrations quickly extended to neighbouring Gulf nations such as Algeria, Libya, Jordan, Egypt, Syria, Iraq, Bahrain, Yemen, and others.
 - * In an often autocratic Arab world, this has given the region a new shape: a surge of rallies for democratic reforms.
 - * Changesinpolicytowardtheneighbourhood and outside are also possible as a result of the regime shift.
 - * The demonstrations sparked a wave of uprisings across the Arab world, with people protesting dictatorship, corruption, and poverty.
 - * Many long-standing autocrats were deposed as a result of the Arab Spring. However, the movement's legacy appears to have been mixed during the last 10 years.

Arab Spring and India

- Implications for India
 - * India and the West Asian area have long had historical and cultural ties. West Asia, in particular, is a crucial area for India.
 - * For ages, there have been people-to-people relations between India and West Asia.
 - * In light of India's expanding global stature, the majority of nations in the area urge it to take a more aggressive role. India's significant interests in the area would oblige it to take the initiative rather than sit on the sidelines.

* India will need to devise a well-considered plan for the area.

Way Forward for India:

Political

- . Declare a clearly articulated "Look West Policy"
- · Appoint a special envoy for West Asia
- · Upgrade bilateral relationships
- · Cooperate on multilateral formats like GCC, Arab League

Security

- · Forging new cooperative security architecture
- · Build out of area capabilities such as Naval capacities
- Be prepared for a fundamentalist backlash like rise of extremism

Econom

- Diversifying India's trade relations
- Need for enhancing investment
- Cooperation in small and medium enterprise (SME)

Energy

- Change into a partnership of criss-cross investments in India
- · Look for opportunities for joint ventures in West Asia
- Structured India-GCC energy cooperation dialogue
- Formulating India's energy policy towards the region.

Soft Power

- Establishing Indian educational, technical and vocational institutions
- Establishing India Culture Centres
- An annual India-West Asia dialogue
- Building academic linkages

Misællaneous

12. A food crisis of the government's own making

» Mains: Organic agriculture- viability and other challenges

Context:

· Sri Lanka's ban on imports of chemical fertilizers.

Organic Agriculture: Viable vs Sustainable

- In the first half of 2021, the island nation of Sri Lanka banned the import of chemical fertilizers to give a spurt to organic agriculture in the nation.
- There is no doubt that organic farming and products are beneficial for the environment and human beings alike.
- The concern regardings its viability for the mass production of food grains is a big question for the economies around the world.

 Scientific evidence-based consensus for a reduced yield in the case of organic agriculture, to the tune of almost 35%, is alarming given the condition of food security.

Self-inflicted damage:

- While the push towards the organic culture is the need of the hour, the cost-benefit analysis should be done based on the scientific assessment of socio-economic impacts.
- The mid-season implementation of this policy, no plan for substitutes, even the incapacity to correctly assess the reduction in crop yield shows the unthoughtful and hasty decision being imposed on the poor farmers.
- There are high chances that an already debtridden nation will further deteriorate its conditions if it goes for 100% organic agriculture, which is unviable and unsustainable if we can say so.

Looming food crisis:

- The pandemic has affected the purchasing power of poor farmers and consumers alike.
- Shortage of food items and the rising cost of agriculture inputs will create a crisis even bigger than COVID itself.

Way forward:

 A balance needs to be achieved between our aim of ecological sustainability and the right to food. Therefore, any decision of this magnitude needs to be well-calibrated before a top-down approach is applied.

India and its Neighborhood - Relations

13. <u>India, Bangladesh to deepen ties as partners, says Goyal</u>

- » Prelims: Comprehensive Economic Partnership Agreement (CEPA)
- » Mains: India Bangladesh economic ties-Potential, significance and recommendations to deepen this relationship

Context:

 Indian Commerce and Industry Minister's speech at the Bangladesh International Investment summit.

India-Bangladesh economic ties:

Present status:

- Bangladesh is India's biggest trade partner in South Asia with a volume of over \$10 billion and India is the second biggest trade partner of Bangladesh.
- Bilateral trade and economic engagement between India and Bangladesh has grown steadily over the last decade. Cooperation in the

power sector has become one of the hallmarks of India- Bangladesh relations.

Measures being taken to further deepen economic engagement:

- Meetings of various institutional mechanisms are being conducted regularly to promote bilateral trade and economic engagement.
 - * Secretary level meetings of Commerce and shipping ministries.
 - * In order to promote cooperation on bilateral trade, an India-Bangladesh CEO's Forum was launched in 2020 to provide policy level inputs in various areas of trade and investment and also to facilitate exchanges among the business communities of both the countries. The India-Bangladesh CEO Forum will meet soon for the first time. This is expected to promote mutual investments.
 - * Meeting of the India-Bangladesh Textile Industry Forum was held in 2020 to enhance linkages and collaboration in the textile sector.
- The two countries are working towards a Comprehensive Economic Partnership Agreement (CEPA).
- On the infrastructure front, the connectivity between the two neighbours has been strengthened over time via roadways, railways, waterways and airways. The land customs stations (LCS) have been upgraded to integrated check posts (ICP).
- Indian companies have a notable presence in Bangladesh. Currently around 350 Indian companies are registered in Bangladesh. India is also developing two Indian economic zones at Mirsarai and Mongla in Bangladesh.

Recommendations:

- Focus on areas of technology, connectivity, entrepreneurship, health and tourism would help further strengthen bilateral economic ties between the two countries.
 - * Improving physical connectivity through rail, road infrastructure would be an imperative for expanding and realising the potential for bilateral trade and investments.
- Enhanced co-operation and collaboration between the two countries and treating each other as partners rather than competitors will only help the two countries complement each other's capabilities and capacities.

Conclusion:

 A robust economic relationship between the two nations would not only reap rich economic dividends for the two nations but it would also bring in an era of economic prosperity in South Asia. Effect of policies and polities of developed and developing countries on India's interests

14. Reversing follies in a haunted battleground

» Mains: Institutionalised Neutrality; Taliban in Kabul and its Geopolitical implications for India

Context

 The article explains the idea of Institutionalised Neutrality in the context of Afghanistan and its geopolitical significance.

Background:

- 'Amir' Abdur Rahman Khan warned his country against Tsarist incursions in the 1880s.
- As per the Anglo-Russian Convention of 1907, the two imperial powers pledged not to make any changes to Afghanistan's political status.
- 'Afghanistan is of little or no strategic relevance to the United States,' determined the Joint Chiefs of Staff in Washington in 1953.
- 'Instead of asking for weaponry, Afghanistan should settle the Pashtunistan problem with Pakistan,' Secretary of State J.F. Dulles urged a high-ranking Afghan diplomat in 1954.
- 'Show me a way out of Afghanistan,' Soviet President Leonid Brezhnev asked Prime Minister Indira Gandhi in 1982; her response was simple: 'The way out is the same as the way in.'
- The Treaty of Rawalpindi, signed in August 1919, recognised Afghanistan as a fully autonomous state, and the Amir agreed to recognise the Durand Line and renounce the British payment.

Significant Aspects of Afghanistan's Geopolitics:

- New Geopolitical Realities and China as the New Player in the Great Game
 - * New geopolitical realities are altering global politics, with China becoming more assertive and influential in South Asia, Southeast Asia, and Africa.
 - * It is posing a challenge to the unilateral world that the US has ruled since the conclusion of the Cold War for more than two decades.
 - * Similarly, the United States is attempting to regain its worldwide hegemony.
- New Strategy, New Alignment of the Regional Players
 - * Afghanistan has long been vulnerable to undesired foreign influences, particularly from opportunistic neighbours.
 - * Each of them maintains connections to client networks capable of fragmenting and incapacitating an emerging Afghanistan.
 - * Each nation has its own set of interests and plans for gaining maximum strength in the area, and each country is critical to the conclusion of the Afghan situation.

- China's Policy Contrasts the US Policy in Afghanistan
 - * Apart from major collaboration in other areas like climate change, it looks doubtful that they would conduct a war to offset each other's impact due to their economic interdependence.
 - * However, there's a chance they'll engage in strategic manoeuvring, with the US attempting to restrict Chinese influence in the area and the Chinese attempting to limit US control in Afghanistan.
- India is the Answer to China, not Pakistan
 - * India, like the United States, has a lot invested in the area and would be uncomfortable with the political solution that China offers Pakistan.
 - * In an ideal world, India would like the Chinese to solve the Afghan crisis without the help of Pakistan, which has already been exposed for its ties to rebel organisations operating in the region.
- Geographic Strategic Points: Wakhan corridor, Durand Line
 - * The Wakhan corridor, which runs through China's Pamir Mountains, is the clearest indication of the two countries' desire to avoid an armed clash.
 - * China's border might play an important role as an energy corridor in the future.
 - * On the Durand Line, a creative approach with some type of formal but soft boundary that accommodates the area's history, topography, and population appears to be the best option.

Idea of Institutionalised Neutrality:

What does Institutionalised Neutrality mean?

- The principle of institutional neutrality requires schools to refrain from taking a political or ideological stance, allowing for a nonpartisan pursuit of the facts wherever they may lead.
- It is intended to create an environment in which no one feels compelled to conform to their own political convictions.

Institutionalised Neutrality in Afghanistan:

- Audrey K. Cronin, an American scholar, studied recent cases of 'Neutralization as a Sustainable Approach' in 2016 and concluded that, in the case of Afghanistan, such an approach could be negotiated by the US, China, Iran, Russia, Saudi Arabia, the Central Asian republics, and the North Atlantic Treaty Organization (NATO).
- A proposal for 'Neutralization' as a concept and an attainable objective must be considered both in terms of philosophy and practicality.
- The notion of externally guaranteed institutionalised neutrality was floated, but the Mujahideen were not enthusiastic.
- It was viewed as a potential solution for reducing or eliminating conflict between competing countries, as well as preventing Afghanistan from becoming a geopolitical hub for contending powers and a source of extremism and terrorism.
- In the near future, and given domestic cohesiveness, it does not appear that the Taliban leadership will break from it for ideological or practical reasons.

Essential ingredients of such Neutralisation would be:

- A formal Afghan declaration in constitutional terms;
- A legally binding declaration by each and every immediate and proximate neighbour;
- A United Nations Security Council declaration calling on the P5 and interested powers to refrain from any form of power politics in Afghanistan;
- A United Nations General Assembly resolution recognising Afghanistan as a neutral state.

Indian Perspective on Institutionalised Neutrality:

- India believes that its diplomatic mission in Afghanistan, as well as its economic support and public health assistance, should remain.
- It was also determined that it "should make contact with leaders of all organisations and maintain relationships with them so that India can deal with whoever comes to power in the future."
- Afghans must state explicitly that they would maintain absolute neutrality in their dealings with other countries, and foreign powers must commit to respecting Afghanistan's neutrality.

Conclusion:

 With Afghanistan's dire need for accommodation with external powers, aid providers, and economic assistance, the situation is ripe for political adjustment of basic perceptions. Institutionalised Neutrality allows friendly countries to provide assistance without being constrained by competition and power politics.

ART AND CULTURE

Art and Culture - Handlarafts of India

1. Best Tourism Village

- » Prelims: Pochampally Ikat sarees
- » Mains: Using art and culture as a tool for promoting rural tourism in India- Significance and challenges

Context:

 Pochampally village, often known as the Silk city of India, in Telangana has been selected as one of the best tourism villages by United Nations World Tourism Organization (UNWTO).

What is the Best Tourism Village Initiative?

- This initiative of UNWTO awards the villages that are exemplary in showcasing the good practices in line with specified evaluation areas.
- This aims to assist the villages to increase their tourism potential through training and creation of opportunities to promote their indigenous products.

About:

- Pochampally is famous for its unique weaving styles and patterns and emphasizes the vision of the Prime Minister's 'vocal for local' campaign
- Pochampallylkat is a unique style saree that received Geographical Indication status in 2004.
- Ikat is a Malaysian, Indonesian word which means "Tie and Die" and which involves patterns formed by yarn and woven into fabric.

Art and Culture - Important terminologies related to Buddhism

2. Dharma Dhamma International Conference

» Prelims: Dharma-Dhamma Tradition of Buddhism

Context:

 The Vice President inaugurated the 6th Dharma Dhamma International Conference on Dharma Dhamma Traditions.

About Dharma-Dhamma Conference

- Dharma Dhamma Conference is an endeavour by India Foundation to revive the concept of dharma-dhamma traditions.
- The conference aims to make these traditions relevant in solving problems and developing policies for the state in the twenty-first century.
- In September 2012, the India Foundation's Centre for Study of Religion and Society (CSRS) hosted the First International Conference on Dharma-Dhamma in Bhopal.

6th Dharma-Dhamma Conference

- The 6th Dharma-Dhamma Conference was organised at Nalanda University in Bihar.
- Aim: To bring together religious, political and thought leaders from Dharma-Dhamma traditions to ponder over building a philosophical framework for the emerging new world order.
- Theme of the 6th Dharma-Dhamma Conference:
 "Dharma-Dhamma Traditions in building the Post-Covid World Order".

Significance of the Dhamma-Dhamma Traditions

- For a peaceful existence, the Vice President emphasised the need of adhering to the Dharma-Dhamma traditions of Hinduism and Buddhism.
- The universal ideals of peaceful coexistence, collaboration, mutual care and sharing, nonviolence, friendliness, compassion, peace, truth, honesty, selflessness, and sacrifice have all been emphasised in dharmic ethical exhortations.
- The Dharma-Dhamma traditions can play an important role in moulding both individual lifestyles as well as politics and government.

Art and Culture - Covernmental initiatives

3. International Tourism Mart

» Mains: Economic potential of the North eastern states-Tourism sector and its significance

Context:

 The International Tourism Mart is an annual event organized by the Ministry of Tourism. The 9th edition of the event was held recently.

Important Highlights:

- This will make the tourism potential of the region prominent and bring into the spotlight domestic tourism.
- For the first time, the International Tourism Mart was hosted by Nagaland.
- This event occurs in the NorthEast region on a rotation basis. Earlier this event was held at Guwahati, Tawang (Arunachal Pradesh), Shillong, Gangtok, Agartala and Imphal.
- A delegation of students from various parts of the country will be engaged in a study tour under Ek Bharat Shreshtha Bharat.

Objectives of the Event:

To discuss the way forward for tourism in the region

- To enhance cultural ties with the Northeast region and improve connectivity
- Promote the natural beauty of the region through tourism

Art and Culture - Testivals

4. KashiUtsav

» Prelims: Important personalities associated with Kashi city and their contributions

Context:

 The 'KashiUtsav' is celebrated to cherish the rich cultural heritage of Kashi and the centuries-old illustrious personalities like GoswamiTulsidas, SantKabir, SantRaidas, MunshiPrem Chand and many more.

About the Festival:

- This is a remarkable initiative by the Ministry of Culture to enliven the folk music, Vedas, science, knowledge and literature associated with Kashi.
- Kashike Hastakshar, 'Kabir, Raidaski Baniaur Nirgun Khushi' and 'Kavitaaur Kahani – Kashiki Zubani' are the central themes of the celebration.
- Besides, there will be plays on personalities like Rani LaxmiBai, a book exhibition and the involvement of 150 artists participating in the event reflecting the literary and cultural enrichment of Kashi.

Art and Culture - Dance Forms

5. Pungcholom

- » Prelims: Pungcholom dance form
- It is a dance form from Manipur
- It is derived from martial arts and also the traditional MaibiJagoi dance.
- PungCholom is performed in Manipur during weddings, temple functions and even funerals.

Art and Culture - Important personalities related with the Bhakthi movement

6. PM to lay foundation stone of dedicated walkways for 'Palkhi'

- » Prelims: Sant Dnyaneshwar and Sant Tukaram
- » Mains: Role of Bhakthi movement in the history of India- Its contributions and significance

Context:

 Prime Minister Shri NarendraModi will lay the foundation stone of Palkhi Marg to facilitate the movement of devotees to Pandharpur.

Details:

- Prime Minister Modi will lay the foundation for the four-laning of five parts of the Shri SantDnyaneshawarMaharajPalkhi Marg (NH-965) from Dive Ghat to Mohol.
- This also comprises the laning of three sections of the Shri SantTukaramMaharajPalkhi Marg (NH-965G) from Patas to Tondale – Bondale.
- There will be four laned sections with dedicated walkways for two major 'Palkhi Marg"

SantDnyaneshwar

- SantDnyaneshwar was a Marathi saint, poet, philosopher,andyogioftheNathVaishnavaschool who lived in the 13th century.
- Dnyaneshwar's thoughts are based on the nondualistic Advaita Vedanta philosophy.

Writings of SantDnyaneshwar

- Dnyaneshwari is a commentary on the Bhagavad Gita that served as the core of Maharashtra's Bhakti philosophy. SantDnyaneshwar wrote Dnyaneshwari on the orders of his Guru Shri Nivruttinath.
- He also wrote "Amritanubhava" (immortal experience), based on Upanishad philosophy, and "Haripath," a hymn praising Hari (Vishnu).

Teachings of SantDnyaneshwar

- SantDnyaneshwar emphasised teachings such as discovering spirituality within one's soul.
- He prevented his followers from depending on texts and preached the belief in a single, formless God.
- He was adamantly opposed to caste boundaries and felt that the only road to God was via Bhakti.

SantTukaram

- SantTukaram is a 17th-century poet-saint who was a contemporary of ShivajiMaharaj, Eknath and Ramdas.
- His poetry was dedicated to Vithoba or Vitthala, an incarnation of Vishnu, the Hindu God.
- He is well-known in Marathi for his Abangas (dohas). Abangas are a rich tradition of devotional poetry.
- SantTukaran emphasised community-based worship via spiritual melodies known as Kirtans.

 They were also crucial for laying the groundwork for Parmaratha. He promoted the virtues of piety, forgiveness, and inner tranquilly.

Art and Culture = Conservation of art forms

7. UNESCO Creative Cities Network (UCCN)

- » Prelims: UNESCO creative cities network- Cities in India
- » Mains: Using creativity as a strategic factor for sustainable urban development

Context:

Srinagar joins UNESCO Creative Cities Network (UCCN).

Details:

- Srinagar has joined UNESCO's network of creative cities and has been designated as a creative city of craft and folk arts.
- Along with Srinagar, 49 cities have newly joined the Creative Cities Network in recognition of their commitment to placing culture and creativity at the heart of their development and to sharing knowledge and good practices.
- Other Indian cities that are in the network are:
 - * Chennai and Varanasi UNESCO cities of music
 - * Jaipur UNESCO city of crafts and folk arts
 - * Mumbai UNESCO city of film
 - * Hyderabad UNESCO city of gastronomy
- Currently, UCCN has 295 cities in 90 countries.
- By joining the UNESCO Creative Cities Network (UCCN), cities commit to sharing their best practices and developing partnerships involving the public and private sectors as well as civil society in order to strengthen the creation, production, distribution and dissemination of cultural activities, goods and services.
- They also pledge to develop hubs of creativity and innovation and broaden opportunities for creators and professionals in the cultural sector.
- The UCCN was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development.

Art and Culture - World Heritage sites in India

8. World Heritage sites in India

- » Prelims: World Heritage sites in India
- World Heritage Sites are designated by UNESCO for having cultural, historical, scientific or other forms of significance.
- Of the over 1,150 such sites globally (as of July 2021), India has 40 of them, the second-most in the continent and sixth overall. This includes 32 cultural, 7 natural and 1 mixed heritage site.
- The walled city of Ahmedabad has the distinction of being the first city in India to be accorded the status of a UNESCO world heritage site.
 - * The city was founded by Sultan Ahmad Shah in the 15th century, on the eastern bank of the Sabarmati River. It presents a rich architectural heritage from the sultanate period, notably the Bhadra citadel, the walls and gates of the Fort city and numerous mosques and tombs as well as important Hindu and Jain temples of later periods. The urban fabric is made up of densely-packed traditional houses (pols) in gated traditional streets (puras) with characteristic features such as bird feeders, public wells and religious institutions.
- Of the 40 inscribed sites located in India, Khangchendzonga National Park is the only 'Mixed World Heritage Site' in India having fulfilled the nomination criteria under both natural and cultural heritage.
 - * Located at the heart of the Himalayan range in northern India (State of Sikkim), the Khangchendzonga National Park includes a unique diversity of plains, valleys, lakes, glaciers and spectacular snow-capped mountains covered with ancient forests, including the world's third highest peak, Mount Khangchendzonga.

- As far as antiquity is concerned, the rock shelters of Bhimbetka, Madhya Pradesh are the oldest inscribed site and are said to be 30,000 years old.
 - * The Rock Shelters of Bhimbetka are in the foothills of the Vindhyan Mountains on the southern edge of the central Indian plateau.

SCIENCE AND TECHNOLOGY

Covernmental Initiatives

1. Mentorship Programme for Young Innovators

» Mains: Governmental initiatives to promote young innovators- Significance and challenges

Context:

 Union Minister launched India's first-ever Mentorship Programme for Young Innovators called the DBT-Star College Mentorship Programme.

About the DBT-Star College Mentorship Programme:

- The programme is basically meant to help in networking, hand-holding and outreach.
- The plan envisages organizing workshops, meetings per month; handhold at colleges particularly in the rural areas or lesser endowed areas and conducting outreach activities with government schools.
- The Star Status Colleges will help in incorporating the vision of the Department of Biotechnology (DBT) towards strengthening UG Science Courses throughout the country by mentoring newer colleges through hand-holding and peer learning and bringing them under the aegis of the Star College Scheme.

About the Star College Scheme:

- The Star College Scheme was initiated by DBT in 2008 to support colleges and universities offering undergraduate education to improve science teaching across the country.
- This Scheme was launched for improving critical thinking and encouraging 'hands on' experimental science at the undergraduate level in basic science subjects.
- It also aimed at encouraging more students to pursue higher education in science.
- Through this scheme, the Department identifies colleges with potential for excellence and provides support for developing infrastructure for academics and laboratory activities.
- A total of 278 undergraduate colleges across India are currently being supported under the DBT Star College Scheme.

Awareness in the field of Space

2. Russia puts into orbit classified military satellite

- » Prelims: Kupol system; Tundra satellite
- Russia has successfully placed into orbit a military satellite believed to be part of its early warning anti-missile system.

- The Soyuz rocket carried what is believed to be a Tundra satellite, part of Russia's missile warning system named Kupol or dome.
 - * Kupol is designed to detect launches of ballistic missiles and track them to their landing site.
 - * The system has been designed as a replacement for the current system of early warning satellites called Oko.

Science and Technology- Developments and their Applications and Effects in Everyday Life

3. Starlink

- » Prelims: Starlink
- » Mains: Potential and significance of the starlink satellite internet constellation

Starlink:

- Starlink is a satellite internet constellation operated by SpaceX.
 - * It aims to provide internet services to customers on Earth by creating a network of thousands of satellites known in the space industry as a constellation.
- The constellation consists of mass-produced small satellites in low Earth orbit (LEO), which communicates with designated ground transceivers.

Why is it necessary to launch satellites in order to provide Internet services?

- This is mainly to ensure that reliable and uninterrupted Internet services — now part of humanity's basic infrastructure and an important means of delivering a wide variety of public services to the world's peoples — are universally available in every part of the globe.
- Currently, about 4 billion people, more than half the world's population, do not have access to reliable Internet networks.
 - * And that is because the traditional ways to deliver the Internet fibre-optic cables or wireless networks cannot take it everywhere on Earth.
 - * In many remote areas, or places with difficult terrain, it is not feasible or viable to set up cables or mobile towers.
- Signals from satellites in space can overcome this obstacle easily.

So how will placing satellites in lower orbits help?

- One big advantage of beaming signals from geostationary orbit is that the satellite can cover a very large part of the Earth.
- Signals from one satellite can cover roughly a third of the planet — and three to four satellites would be enough to cover the entire Earth. Also, because they appear to be stationary, it is easier to link to them.

Concerns

- Increased space debris
- · Increased risk of collisions
- Concern of astronomers that these constellations of space Internet satellites will make it difficult to observe other space objects, and to detect their signals.

Context:

 NGO Telecom Watchdog has written to the Department of Telecom (DoT) seeking a criminal case be filed against Starlink, for allegedly charging people in India for satellite Internet services without having a licence for the same.

Additivements of Indians in Salance & Technology, Indigenization of Technology and Developing New Technology

4. SWADESH

» Prelims: SWADESH

Context:

- SWADESH is the world's first multimodal brain imaging data and analytics developed by DBT – National Brain Research Centre.
- It was inaugurated as a unique brain initiative that emphasized neuroimaging, neurochemical and neuropsychological data and analytics that are made accessible to the researchers to treat brain disorders.

Important Facts:

- This has been designed for the Indian population and to provide them with big data architecture for various diseases under one platform.
- SWADESH is facilitated by JAVA based programs and Python. Java is the most commonly used programming language that is used in big data and android development and it is also used in mobile computing, desktop computing and gaming.
- It has a powerful storage system that offers quality control, data analysis reports and data backups.
- It has data on healthy old people, healthy young people and patients with neurodegenerative disorders like Alzheimer's disease, Mild Cognitive Impairment and Parkinson's disease.

 DBT-NBRC has been successful in the development of research tools through SWADESH.

Important Tools of SWADESH

- GAURI system uses an adaptive pattern of recognition and learning schemes for better diagnosis and consists of MRI modalities and neuropsychological batteries.
- NINS-STAT An automated highly advanced statistical test selection which can be useful for clinical research.
- KALPANA It is an integrative package for visualization and quantitative analysis of data.
- PRATEEK Allows multimodal neuroimaging data analysis.
- Stimulus Timing Integrated Module It is a multipurpose design system for MRI related purposes, mapping brain activity and clinical evaluation of brain disorders.
- BHARAT It is a big data analytical model for early diagnostic biomarkers of Alzheimer's disease.

About DBT:

 The Department of Biotechnology operates under the Ministry of Science and Technology that aims to promote and improve the research and development in the field of biotechnology that has its wide application in agriculture, healthcare, animal sciences, environment and industry

About NBRC:

- The National Brain Research Centre is the only institution in the country that is dedicated to neuroscience research.
- The institution includes scientists and students from diverse disciplines like biology, computer science, mathematics, engineering working together to establish a clear understanding of the brain.

Covernmental initiatives

5. Swarnajayanti Fellowships Scheme

» Mains: Governmental initiatives to promote Research and Development activities-Significance and challenges

Context:

 17 scientists from across India were awarded Swarnajayanti Fellowships.

About the Swarnajayanti Fellowship Scheme:

- ItisaresearchfellowshipinIndiaawardedannually by the Department of Science and Technology (GOI) for notable and outstanding research by young scientists, applied or fundamental, in biology, chemistry, environmental science, engineering, mathematics, medicine and physics.
- It was instituted in 1997.
- The selected scientists are provided special assistance and support to enable them to pursue basic research in frontier areas of science and technology.
- The award consists of a Fellowship of Rs 25000/per month in addition to the salary drawn from the parent institute for a period of 5 years.
- The fellows' projects may also be funded by the Science & Engineering Research Board (SERB).
- The duration of the fellowship will not exceed five years.

<u>About Science and Engineering Research Board (SERB):</u>

- It is a statutory body and is established through an Act of Parliament: SERB Act 2008, Government of India.
- The Organisation aims to uplift science and engineering in India, in a manner that it can contribute majorly in the economic growth of the country.
- It is the premier research funding agency in India.
- Its functions include:
 - * Investigating and identifying the major areas of development and research
 - Maintaining a disciplinary link between academic institutions, research labs, and industries promoting Science and Technology
 - * Monitoring the development and implementation of various research projects

Science and Technology - Developments and their Applications and Effects in Everyday Life

6. Breaking down the hype around Metaverse

- » Prelims: Metaverse
- » Mains: Potential applications and challenges associated with Metaverse

Context:

 Facebook CEO Mark Zuckerberg recently made an announcement that he's changing his company's name to Meta Platforms Inc.

What is Metaverse?

- The term "Metaverse" refers to a collection of interconnected 3D virtual worlds enabled by advances in technology such as Augmented Reality (AR), Virtual Reality (VR), Artificial Intelligence (AI), and blockchains.
- The metaverse would be a fully open and inclusive arena for self-expression, exploration, and empowerment.
- Metaverse is claimed to be the post-Internet world, a decentralised, live, and continuous computing platform.

Origin of the idea:

- The term "metaverse" originally appeared in Neal Stephenson's futuristic science fiction novel Snow Crash, published in 1992.
- The metaverse has also been explored in works such as Ernest Cline's 2011 novel Ready Player One, which was adapted into a film in 2018.

How does the Metaverse Space work?

- Cloud computing, big data, advanced Artificial Intelligence systems, AR/VR, blockchains, NFTs, and other technologies will be combined in the metaverse.
- A hypothetical metaverse runs on Web 3.0 which uses technologies such as blockchains and tokens to create a decentralised Internet for online interaction and online payments.
- As a result, several organisations advocate for an "Open Metaverse."
- Metaverse aspires to take human interaction to the next level of commodification, where every single activity is logged and monitored for profit, and structured to maximise data gathering.

What is the Potential of Metaverse Space?

- Interoperability: Metaverse promises the capacity to smoothly move data between virtual worlds, allowing for a wide range of social and economic possibilities.
- Creator economy: With the power of Non-Fungible Tokens (NFTs), the Metaverse will bring the Creator Economy to life.
- Social Security: Metaverses have great potential to revolutionise fields such as education and healthcare which in turn ensure social security.
- Virtual Economies: Customization of metaverse platforms may potentially grow into a virtual economy. Cryptocurrency is another facet of the virtual realm that has come to fruition.
- The VR taste to Tasks: Immersive social virtual shopping experiences, concerts, games, and virtual classrooms all have the potential to advance significantly with the development of Metaverse space.

<u>What are the challenges associated with the Metaverse?</u>

- Monopoly Concerns: Competitors are likely to pop up with their own versions of the technology, leading to a number of 'Closed' metaverses. The monopolies in a revolutionary concept as the metaverse space is a cause for concern for competition law regulators.
- Artificial Scarcity: In the virtual world scarcity is actually designed. The most common criticism of Non-Fungible Tokens (NFTs) is that they are an attempt to create value and scarcity where there should not be any. It will open a new avenue for capitalist expansion.
- Mental Health Issues: Metaverse platforms will be the next way to flaunt your glittering social media accounts. It will mask who the person really is behind-the-scenes. As a result, narcissism, mental health concerns, and insecurities will continue to thrive.
- Privacy and Security Concerns: The rampant health and biometric data collection will lead to significant data breaches and theft.
- Increased Cost: Metaverse technologies require tremendous processing power and, consequently, would lead to a great cost in terms of the environment.
- Increased Threats of Cyber Crimes: The metaverse platform's advanced virtual reality and huge data collection will pave the way for increased cyberattacks. In these new virtual worlds, cybercrime might take on new shapes.
- Threats from Facebook: The role of Facebook in pushing violent and offensive content in order to increase user interaction is widely known. If left unchecked, something similar may happen in immersive virtual environments on a far bigger scale.
- Challenges to Democracy: As the number of blockchain-based Decentralized Autonomous Organizations (DAOs) grows, virtual worlds may one day become viable alternatives to nationstates. Metaverses will raise difficult concerns of jurisdiction and governance.

Way Forward

- When it comes to the metaverse, regulators need to step in right from the start and work on regulatory laws.
- There is a need to follow a precautionary rather than a permissive approach.

Awareness in the field of Space

7. A launch window for India as a space start-up hub

- » Prelims: IN-SPACe (Indian National Space Promotion and Authorisation Centre)
- » Mains: Private players in the space sector: Significance and challenges

Context:

 This article discusses the entry of private players in the space field to take the next leap for mankind and democratise space usage to build commercial value.

<u>Significance of Private Players in Space:</u>

- Mature space agencies, such as the United States' National Aeronautics and Space Administration (NASA), China's China National Space Administration (CNSA), and Russia's Roscosmos (Roscosmos State Corporation for Space Activities), seek assistance from private players such as Boeing, SpaceX, and Blue Origin for complex operations that go beyond manufacturing support, such as sending crew and supplies to the International Space Station.
- With innovation and innovative technology, these businesses have revolutionised the space sector by lowering prices and turnaround time.

Challenges of Private Players in Space Field:

- Brain Drain: Significant aspect to throw light on is the extensive brain drain in India, which has increased by 85% since 2005.
- Loopholes in Policies: Brain drain might be connected to policy bottlenecks that make it difficult for private space companies and entrepreneurs to acquire investors, making it almost impossible to operate in India.
- Lack of Private Participation: The absence of a framework to give openness and clarity in rules is one of the reasons for the lack of independent private participation in space.
- Issues with Liabilities and Space Insurance: Another critical feature of space law is insurance and indemnity clarity, namely who or which organisation assumes obligation in the event of a mistake.
 - * There is a cap on responsibility and the financial damages that must be paid in some Western nations with a developed commercial space sector.
 - * Under Australian space legislation, space operators are required to carry insurance for up to AUD\$100 million.

- As a part of the system: Many private businesses are already active in equipment and frame fabrication, using either outsourced specs or leased licences.
 - * NASA and the CNSA allocate a portion of their annual budgets to private players for this reason.
 - * Until 2018, SpaceX was a member of 30 NASA missions, receiving approximately \$12 billion in contracts.

India and the Space Race:

- A. India as a Very Marginal Player
 - The space economy is a \$440 billion worldwide industry, with India accounting for less than 2% of the total.
 - * This is despite the fact that India is a prominent space-faring country with end-to-end capability for manufacturing satellites, developing enhanced launch vehicles, and deploying interplanetary missions
 - The space race has significant consequences for original equipment manufacturers (OEMs) in India's space sector and is a viable endeavour for global investors.
- B. Indian Space Agencies:
 - According to a report, the Indian government established a new organisation called as IN-SPACe (Indian National Space Promotion and Authorisation Centre).
 - * It is a "single window nodal agency" set up to promote the commercialization of Indian space operations.
 - The agency supports the entry of Non-Government Private Entities (NGPEs) in the Indian space industry as a complement to the Indian Space Research Organisation (ISRO).
 - * The agency will also promote the quick onboarding of private sector companies by encouraging policies in a conducive regulatory environment and generating synergies through previously existing essential infrastructure.
- C. Indian Potential in the Space Sector:
 - India is presently on the verge of developing a space ecosystem, and with ISRO as the leading agency, India may now flourish as a global space start-up powerhouse.
 - The sector is in its infancy, and the opportunities to establish a viable company strategy are endless.
 - Already, over 350 start-ups, like AgniKul Cosmos, Skyroot Technologies, Dhruva Space, and Pixxel, have laid the groundwork for home-grown technologies with a viable economic unit.

- However, in order to sustain the development engine, investors must see the industry as the next "new-age" boom, and ISRO must transition from a supporter to a facilitator.
- To guarantee that the sky is not the limit, investor trust must be boosted, and unambiguous rules must be set.

Way Forward

- Ensuring investor confidence needs to be pumped up and for the same, clear laws need to be defined.
- Breaking activities down into multiple sections, each to address specific parts of the value chain and in accordance with the Outer Space Treaty.
- Dividing activities further into upstream and downstream space blocks.
- Providing a solid foundation to products/services developed by the non-governmental and private sectors within the value chain.
- Creating value, Indian space private companies need to generate their intellectual property for an independent product or service.

Additional Information

Space race

- The space race was a series of technological experiments between the United States and the Soviet Union in order to demonstrate dominance in spaceflight.
- The Soviet Union launched Sputnik in 1957, kicking off the epic space race of the twentieth century.
- It turned out to be a metaphor for the whole Cold War between the capitalist US and the socialist Soviet Union.
- It sprang from the Cold War of the midtwentieth century, a severe worldwide battle that pitted the ideas of capitalism and communism against one another.

DEFENCE AND INTERNAL SECURITY

International Co-operation in Defence and Internal
Security

1. Colombo Security Conclave Focused Operation

- » Prelims: Colombo Security Conclave
- » Mains: Partnerships in the Indian Ocean Region aimed at maritime security

Context:

 Colombo Security Conclave (CSC) Focused Operation was conducted between the lead Maritime Security Agencies of India, Maldives and Sri Lanka.

Details:

'Colombo Security Conclave (CSC) Focused Operation'

- Colombo Security Conclave (CSC) Focused Operation' is a trilateral maritime drill conducted by the coast guards of India, Sri Lanka and the Maldives.
- It aims to bolster security in the Indian Ocean.
- It exemplifies a trilateral commitment to promoting peace and security in the region.

Aims and Objectives:

- To secure part of the Indian Ocean Region for safe commercial shipping and international trade.
- · To conduct legitimate maritime activities.
- To build understanding and interoperability between the lead maritime security agencies.
- To facilitate the institution of measures to prevent and suppress transnational crimes in the region.
- To enhance the operational synergy by exchange of information and conduct of coordinated operations to handle maritime incidents/ accidents.

Challenges to Internal Security through Communication Networks, Role of Media and Social Networking Sites in Internal Security Challenges

2. Cyber Surakshit Bharat

- » Prelims: CERT-In
- » Mains: Cyber security concerns and initiatives taken in this direction
- This initiative was launched by the Ministry of Electronics and Information Technology in 2018 to tackle the progressive spread of cyber attacks in the country.
- This initiative is the first public-private partnership of its kind.

 Under this initiative, experts of the IT industry and MeitY collaborate with organisations like CDAC (Centre for Development of Advanced Computing), CERT-In (Indian Computer Emergency Response Team), NIC (National Informatics Centre) and STQC (Standardisation Testing and Quality Certification) as knowledge partners in the training program.

Significance:

- In a world with advancing technology, the emerging issue of cyber security is a major concern and initiatives like Cyber Surakshit Bharat play an exemplary role in promoting awareness on cyber security. In a country like India, awareness is an essential tool to resolve many challenges.
- This initiative offers guidelines and policies related to cyber security along with best practices to learn from successes and failures.
- A massive impetus is provided to the vision of 'Digital India' that establishes an empowered and equipped ecosystem ensuring cyber security.

Basies of Gyber Security

3. Cyber Security Grand Challenge

» Mains: Significance of cyber security in an increasingly digitalizing world

Context:

 The cyber security grand challenge was launched for the first time by the joint efforts of the Ministry of Electronics and IT and the Data Security Council of India.

Objective:

 The grand challenge was organised to promote innovation and entrepreneurship in the country with enormous emphasis on cyber security. This would also ensure better collaboration between government, industry and start-ups.

About the Challenge:

- This initiative provides an opportunity for the start-ups to innovate in the crucial theme of cyber security and yield solutions to be adopted and incentivized.
- The challenge focused on expanding India's cyber security capacity.
- Such innovative steps would help to prevent the emerging threats to cyber security.
- Intellectual Property Rights (IPR) of every product was offered as a part of the challenge which is a unique feature.

- The opening of the challenge covered six problem statements and was conducted in three stages namely, Idea, Minimum Viable Product and Final Stage.
- The panel of jurists consisted of individuals from Government, Academia and Industry.
- The winners were awarded a trophy and cash prize worth rupees one crore and rupees 60 lakhs and 40 lakhs were given to the first and second runners-up respectively.

Therefore, this grand challenge was an encouraging step towards India's vision to become the thought and market leaders in the realm of cyber security transforming the digital economy into a trillion-dollar one.

Military Exercises

4. Ex SHAKTI - 2021

» Prelims: Ex Shakti; Other bilateral exercises with France

Context:

 The 6th edition of the biennial Indo-France military exercise was carried out under the title Ex-SHAKTI.

About the Exercise:

- The exercise was preceded by joint military training, execution of combat power in a counterinsurgency environment.
- The Indian army was represented by the Gorkha rifles
- This gave an opportunity to both contingents to get trained in a counter-terrorism environment.
- It was conducted in two phases that consisted of combat conditioning and tactical training of counter-terrorism operations.
- Besides, there were cultural and sports activities that enhanced the friendship between the military personnel of India and France.

Aim of the Exercise:

- Both the militaries had a clear objective of ensuring a terrorism free world.
- To promote military diplomacy between the participating countries.
- To strengthen their defence cooperation, France has emerged as one among India's top strategic partners.

The three biennial exercises of India and France:

- Exercise Garuda India-France Air forces
- Exercise Varuna India-France Naval forces
- Exercise Shakti India-France Military forces

Military Exercises

5. Exercise SITMEX

» Prelims: Exercise SITMEX

Context:

 Indian Navy participates in India, Singapore and Thailand Trilateral Maritime Exercise 'SITMEX'.

Details:

- This is the third edition of Ex SITMEX.
- It is being held in the Andaman Sea.
- FromtheIndianNavy,INSKarmuk,anindigenously built Missile Corvette is participating.
- It is being hosted by Royal Thai Navy (RTN).
- SITMEX is being conducted annually since 2019 with an aim to enhance mutual inter-operability and imbibing best practices between the Indian Navy (IN), Republic of Singapore Navy (RSN) and RTN.
- The maiden edition of SITMEX was hosted by India off Port Blair in 2019.

Defence Equipment

6. INS Visakhapatnam

- » Prelims: Project 15B
- INS Visakhapatnam is one of the four stealth guided-missile destroyer ships under Project 15B.
 - * The Project 15B class of guided missile destroyers being built by Mazagon Dock Limited (MDL) for the Indian Navy.
 - * Project 15B comprises four ships Visakhapatnam, Mormugao, Imphal and Porbandar.

Significant Features

- State-of-the-art weapons
- Sensors such as surface-to-surface missile and surface-to-air missiles.
- Modern surveillance radar
- · Anti-submarine warfare capabilities
- Anti-Submarine Warfare (ASW) helicopters.
- Nuclear, biological and chemical (NBC) warfare capabilities

Military Exercises

7. OP SANKALP

» Prelims: Operation SANKALP

Context:

 Operation SANKALP is a mission-based deployment of INS Trikand in the strategic locations of the Persian Gulf and the Gulf of Oman. This is an effort by the Indian Navy to deploy a frontline ship in the region for the maintenance of safety, security in the regional maritime sphere facilitating trade in that region.

About INS Trikand:

- It is the latest model of guided missile stealth frigate and a part of the western fleet that operates under Western Naval Command, Mumbai.
- It is a talwar class frigate

Military Exercises

8. Prasthan Exercise

» Prelims: Prasthan Exercise

Context:

 The Western Naval Command conducted an offshore naval exercise which is codenamed Prasthan in the Offshore Development Area (ODA) of Mumbai.

About the Exercise:

- This exercise is conducted every six months in order to bring together all the maritime stakeholders aiming at offshore security. Indian Navy, Air Force, Coast Guard, ONGC, the Port Trust, Marine police and Department of state Fisheries participated in the exercise.
- Refinement of SOP and response actions in the ODA contingencies are major areas of focus.
- Terrorist intrusion, bomb explosion, firing, oil spill, casualty evacuation are the contingencies that were exercised.
- This paints a realistic scenario in front of the stakeholders to increase responsiveness in the region with a joint effort.

Defence Equipment

9. 'Shakti'- The Warfare Suite

» Prelims: Shakti- Electronic warfare suite

Context:

 The Prime Minister handed over the advanced electronic warfare suite Shakti which is developed by DRDO to the Chief of Naval Staff. The Defence Electronics Research Laboratory of DRDO in Hyderabad has developed the warfare suite.

About Shakti EW:

- This will offer an electronic layer of defence against the radars and anti-ship missiles to enable a better survival chance in maritime wars.
- This is a new generation of electronic warfare (EW).
- Thewarfare suite will be integrated with Electronic Support Measures (ESM) and Electronic Counter Measures (ECM) against missile attacks.
 - * ESM finds the accurate position and direction of radars through its built-in radar fingerprinting and data recording replay feature helping in post-mission analysis.
- The first Shakti system has been installed onboard INS Visakhapatnam with an indigenous aircraft carrier, INS Vikrant. Twelve other Shakti systems will be produced by BEL.
- This will enhance the Indian Navy's electronic intelligence potential.

Misællaneous

10. The Sydney Dialogue

- » Prelims: Sydney dialogue
- It is an annual summit of cyber and critical technologies to discuss the fallout of the digital domain on the law and order situation in the world.
- The Sydney Dialogue is an initiative of the Australian Strategic Policy Institute.

Context:

• Prime Minister Narendra Modi delivered the keynote address at The Sydney Dialogue

Miscellaneous

11. A new jurisprudence for political prisoners

- » Prelims: UAPA act- Provisions
- » Mains: Concerns over the misuse of the UAPA act

Context:

 Students from Kerala who were charged under provisions of the Unlawful Activities (Prevention) Act (UAPA) for alleged Maoist links have been granted bail by the Supreme Court by setting aside the objections of the National Investigation Agency.

Background

- The case involved students from Kerala, who were pursuing Journalism and Law respectively.
- The police had allegedly seized objectionable printed and written materials from them which include violent exhortations for civil war, in tune with Maoist ideology.

 The police registered the case and later the investigation was handed over to the National Investigation Agency (NIA).

The provisions of the UAPA were invoked.

Provisions of the UAPA

Section 13

- It deals with participating in or inciting unlawful activities.
- It is the provision about punishment for unlawful activities.

Section 38

- Offence relating to membership of a terrorist organisation.
 - * A person, who associates himself, or professes to be associated, with a terrorist organisation with intention to further its activities, commits an offence relating to membership of a terrorist organisation.

Section 39

 It deals with "offence relating to support given to a terrorist organisation."

Arguments in favour of the Accused

- Both the accused were students and there were no allegations of any overt act of violence.
- At a formative young age, the accused might have been fascinated by what is propagated by CPI (Maoist).
- There was no prima facie material to show an intention on the part of the accused to further the activities of the terrorist organisation.

SC Observation

- Mere association with a terrorist organisation is not sufficient to attract Section 38 and mere support given to a terrorist organisation is not sufficient to attract Section 39 of UAPA.
- The association and the support have to be with the intention of furthering the activities of a terrorist organisation.
 - * Such intention, according to the court, can be inferred from the overt acts or acts of active participation of the accused in the activities of a terrorist organisation.
- Mere possession of documents or books by the accused at a formative young age, or even their fascination for an ideology, does not ipso facto or ipso jure make out an offence, the Court ruled.

Section 43D(5) of the UAPA

• It says that for many of the offences under the Act, bail should not be granted, if "on perusal of the case diary or the report (of the investigation)... there are reasonable grounds for believing that the accusation ... is prima facie true".

- * As opposed to the general criminal law, under the Unlawful Activities (Prevention) Act (UAPA), grant of bail is the exception.
- * If the prosecution either through the case diary or through the chargesheet is able to show reasonable grounds for believing that the accusation is prima facie true, then the accused shall not be released on bail."
- Thus, the Act prompts the Court to consider the version of the prosecution alone while deciding the question of bail.

Concerns

- Unlike the Criminal Procedure Code, the UAPA, by virtue of the proviso to Section 43D(2), permits keeping a person in prison for up to 180 days, without even filing a charge sheet.
- Thus, broad offences included under the UAPA and difficult bail conditions mean individuals can be detained indefinitely even without conviction of the accused.

Presumption of guilt

National Investigation Agency (NIA) vs Zahoor Ahmad Shah Watali

- In Zahoor Ahmad Shah Watali, the Court said that by virtue of Section 43D(5) of UAPA, the burden is on the accused to show that the prosecution case is not prima facie true.
- Many intellectuals including Sudha Bharadwaj and Siddique Kappan were denied bail based on a narrow interpretation of the bail provision as done in Zahoor Ahmad Shah Watali.

Thwaha Faisal v Union of India

- The Court, in Thwaha Faisal, refused to construct Section 43D(5) in a narrow and restrictive sense.
- It has to some extent, liberalised an otherwise illiberal bail clause.

Union of India vs K.A. Najeeb (2021)

- For granting bail in Thwaha Faisal the SC relied on a decision in Union of India vs K.A. Najeeb (2021).
- In K.A. Najeeb, the larger Bench said that even the stringent provisions under Section 43D(5) do not curtail the power of the constitutional court to grant bail on the ground of violation of fundamental rights.

Challenges in the interpretation of laws

- The text of the UAPA limits judicial discretion and adjudication. This is more evident in the context of bail.
- As part of interpretation, the court usually has two approaches:
 - * Literal Interpretation
 - » To read and apply the provision literally and mechanically which has the effect

- of curtailing the individual freedom as intended by the makers of the law.
- * In contrast to this approach, there could be a constitutional reading of the statute, which perceives the issues from a human rights angle and tries to mitigate the rigour of the vicious content of the law.
- The former approach is reflected in Zahoor Ahmad Shah Watali and the latter in Thwaha Faisal.

Significance

- In this case, the Court has asserted the primacy of judicial process over the text of the enactment, by way of an interpretative exercise.
- The Court has acted in its introspective jurisdiction and deconstructed the provisions of the Unlawful Activities (Prevention) Act (UAPA) with a great sense of legal realism.

Way forward

 The judgment should be invoked to release other political prisoners in the country who have been denied bail either due to the harshness of the law or due to the follies in understanding the law or both.

Conclusion

 Thwaha Faisal vs Union of India thus paves the way for a formidable judicial authority against blatant misuse of the draconian law.

Role of External State and Non-state Actors in areating challenges to Internal Security

12. <u>Assam Rifles Commanding Officer, family, four</u> jawans killed in <u>Manipur ambush</u>

- » Prelims: Assam Rifles and other Central Armed Police Forces
- » Mains: Insurgency issue in Manipur

Context:

• Four jawans and Assam Rifles Commanding Officer(CO) were attacked by militants in Manipur.

Background:

- The officer's convoy was attacked with Improvised Explosive Devices (IEDs) by militants.
- The People's Liberation Army (PLA) and the Manipur Naga People's Front(MNPF) jointly claimed responsibility for the ambush.
- The PLA and MNPF's targeted killing of a CO marked a major escalation in insurgent operations in Manipur.

Insurgency in Manipur

 The United National Liberation Front (UNLF) was formed in the 1960s owing to resentment among a portion of Meitei society over Manipur's merger

- into the Union of India. This led to the beginning of the insurgency in Manipur.
- Later, various more insurgent organisations arose to demand independence of Manipur.
- The Meiteis were further radicalised by the creation of the People's Liberation Army.
- After separating from the UNLF in 1969, N Bisheshwar founded the People's Liberation Army.
- The goal was freeing the northeastern area via a meticulously organised revolutionary revolt. This was used as a basis for 'liberating' the rest of India."
- Bisheswar claimed to have built his organisation on Marxism-Leninism and Mao's ideas, as well as appealing to the Naga and Mizo groups to join the PLA.
- The Revolutionary People's Front (RPF), the PLA's political branch, was founded in 1979.

Security Challenges - Left Wing Extremism

13. A lost cause

» Mains: Left wing extremism- challenges and measures being taken

Context:

 26 Maoists were killed in a fierce encounter with security forces in a dense forest in Gadchiroli district, Maharashtra

Gadchiroli



- Gadchiroli has dense forests, rivers and sparse population, and has long been a difficult terrain for security personnel to control and operate
- It is difficult to operate in this region due to Gadchiroli's location at the trijunction of Maharashtra, Chhattisgarh, and Telanagana. The Maoists would be able to shift bases easily.
 - * With the coordination among state forces not always at optimal levels, Gadchiroli offers both a corridor for passage, as well as a mostly safe holding area for Maoists.
- It is among Maharashtra's poorest and the Maoists have sought to expand their presence extending from neighbouring Chhattisgarh.

Concerns

 Despite suffering significant losses to its leadership either in military operations or due to physical infirmities and a shrinking of the areas of influence, the Maoists have refused to withdraw from their pursuit of armed struggle.

Conclusion

 The success of development programs must continue, people attracted towards Maoism should be weaned away and Maharashtra must not rest on its success in militarily diminishing the Maoist threat in Gadchiroli.

Money - Laundering and its prevention

14. 1,000 held in 20 countries in financial crime crackdown

» Mains: Cyber-enabled financial crime: Threat and global efforts to counter the threat

Context:

 Interpol has coordinated an operation with enforcement agencies in more than 20 countries highlighting the global threat of cyber-enabled financial crime.

Details:

What is Cyber-enabled financial crime?

- Ransomware, sextortion scams, identity theft, money laundering, and other financial crimes are examples of cyber-enabled financial crime.
- It's not about draining bank accounts or bitcoin wallets; it's about stealing IP.

Threats from cyber-enabled financial crime:

- Social engineering (e.g. phishing email) might be used to launch a cyber-enabled financial assault from the outside.
- Insider threats criminally motivated workers attempting to obtain access to cash – are also a concern.

- The following are the four most prevalent components of these attacks:
 - * Distributed Denial of Service (DDoS) smokescreens: Coordinated denial of service attacks on financial institutions are common, and they often appear to be aimed solely to impair the usage of online banking assets.
 - * Transactional based network penetration: When the financial institution's systems are breached to begin or facilitate transactions from within the financial institution, one of the developing cyber enabled fraud assaults happens.
 - * Data theft based network penetration: Hackers continue to try to hack into processor and other financial institution systems in order to obtain client data such as account numbers, card numbers, and other personal identifiers.
 - * Conventional remote banking fraud: The latest wave of cyberattacks is notable for combining any or all of the abovementioned attacks with traditional internet, mobile, phone payment, and card attacks.

<u>Global Efforts to Prevent Cyber-enabled financial</u> crime:

A. 'HAECHI-II': -

- The operation codenamed 'HAECHI-II' was conducted by INTERPOL saw police arrest more than 1,000 individuals underlining the global threat of cyber-enabled financial crime.
- Specialised police units from 20 countries, including Hong Kong and Macau, took part in the exercise to target specific types of online fraud, such as "romance" scams.
- It is the second such operation in a three-year project launched to tackle cyber-enabled financial crime.

B. Anti-Money Laundering Rapid Response Protocol (ARRP)

- The Anti-Money Laundering Rapid Response Protocol (ARRP) has been vital to effectively intercepting illegal payments in various HAECHI-Il situations.
- The findings revealed that the increase in crimes caused by the COVID-19 epidemic had not subsided.

C. Purple Notices from Interpol

 Based on the findings during the operation, the Interpol published multiple Purple Notices police alerts that seek or provide information on modus operandi, objects, devices and concealment methods used by criminals. The notices are shared with the member countries to enable exchange of information on emerging criminal methods and establish links between cases.

Security Challenges and their Management in Border Areas - Linkages of Organized Crime with Terrorism

15. How to win over Kashmiri youth

» Mains: Radicalization- Concerns and measures being taken to counter this threat

Context:

 Recently, there was a suggestion that deradicalisation camps should be organised for the youth in Jammu and Kashmir.

What is Radicalisation?

- Radicalisation is the process through which an individual or a group adopts progressively radical political, social, or religious ideas, particularly when it comes to support for or use of violence.
- Ideologies, religious views, political convictions, and biases towards certain groups of people can all be motivating factors.
- People can be radicalised in a variety of methods and over a variety of time periods, ranging from a few days or hours to several years.
- The Judge Webster Commission 2009 had observed: 'Radicalism is not a crime. Without exhortation to violence, radicalization alone may not be a threat.'

History of Radicalisation in Kashmir

- General Muhammad Zia-ul-Haq, Pakistan's dictator-President, started the practise of utilising religious overtones in statecraft.
- He emphasised the importance of religion in government policy, which led to radicalization of Pakistani youth.
- Later, as part of low-intensity war activities, this spilled over into Kashmir.
- Insurgents who wanted J&K to secede from India began using violent measures to achieve their goal in 1989.
- As a result, effective counter-insurgency operations were launched.
- To combat militancy, the Public Safety Act of 1978 and the Armed Forces (Special Powers) Act of 1958 were utilised.
- In Pakistan, hundreds of tanzeems (fighting organisations) were formed to fight in Afghanistan. Some of these were later sent to Jammu and Kashmir.
- In the pretext Kashmiri liberation, Pakistani operatives went about recruiting young people to train in Pakistan.

- Due to threats from terrorist leaders in the 1990s, many Kashmiri families transferred one of their sons to Pakistan to be trained and subsequently deployed in Kashmir.
- Governor's rule remained in place in J & K for a long period, effectively suppressing the democratic process.
- Home grown militancy first emerged in Kashmir during protests over state elections in 2008, and then again when the Indian Army killed three infiltrators in 2010.
- The Hurriyat Conference of All Parties called for violent protests, which led to rioting, the burning of government cars, and "stone-pelting events."
- With the emergence of home grown militancy, the situation on the ground deteriorated.

Critical Evaluation of De-radicalisation camps

A. What is De radicalisation?

- Deradicalization is a term used to describe the process of persuading someone with strong political, social, or religious beliefs to take more moderate perspectives on topics.
- Even in the last five years, "deradicalization" initiatives, which are aimed at gently moving people and groups away from violent extremism, have expanded in popularity and reach.
- Deradicalization is the process of separating a person from their extremist beliefs, whether voluntarily or involuntarily.

B. Significance of De-radicalisation Camps

- Deradicalisation camps are distinct from past approaches to rehabilitation in that they also focus on persons who have not yet committed a terrorist act.
- Deradicalisation camps employ modern approaches such as technology and internet communication, which have been effectively coopted by terror groups.
- It requires examining if the process can be reversed and how government-led measures can assist in ensuring that committed terrorists do not engage in criminal activities after freed from jail.
- Focusing on rehabilitation makes sense in light of the fact that dedicated ideologues may never abandon their views, but they may modify their conduct.

C. Challenges associated with Deradicalization Camps

- No standard definition: The terms "terrorism," "violent extremism," "radicalisation" and "deradicalisation" are still loosely defined; there is no universal agreement.
- Twin Challenges: There were now twin challenges for the Army, the Central Armed Police Forces and the J&K Police.

- * The first were the terrorists for whom the rules of engagement were different
- * The second were the Kashmiri youth who formed the bulk of the protestors Indians for whom all the rules and laws applicable to any Indian citizen apply.
- Human Rights Issues: When stone-pelting incidents took a serious and alarming turn, armed personnel responded with pellet guns and other means of riot control. Injuries, especially eye injuries, were a serious fallout of this response which was criticised for Human rights violation.
- · Problems of Kashmiri Youths:
 - * Kashmiri children in schools and colleges outside the State are often mistreated when any misadventure takes place in J&K. The incidents of violence against minorities, in north India have only worsened problems with Kashmiri youths.
 - * The Kashmiri youth feel that they face hostility from the Indian state because of their identity and so the status quo cannot be effective.

D. De-radicalisation Efforts:

Operation Sadbhavana:

Operation Sadbhavana is a one-of-a-kind compassionate endeavour undertaken by the Indian Army in the state of Jammu and Kashmir to address the aspirations of people afflicted by terrorism aided and abetted by Pakistan.

Bharat Darshan:

The J&K Police Department organised a Bharat Darshan tour to Delhi and Agra for students in August 2018 to "provide them the chance to comprehend the history and development of different regions of the country."

Other Initiatives:

The Army has also helped in school construction, medical assistance, veterinary care, and disaster relief.

E. Global Experience:

- UK: By revising the Counter Terrorism and Security Act (CTSA) in 2009, UK Prime Minister Gordon Brown transformed the country's counter-terrorism strategy (CONTEST) into a multi-agency approach, making it more transparent and democratic.
- Sri-Lanka: Sri Lanka's rehabilitation programme to combat violent insurgency, which was started by the Liberation Tigers of Tamil Eelam (LTTE), provides valuable insight into

both the accomplishments and pitfalls of the deradicalisation programme.

Solutions to De-radicalisation

- To combat the 'hate' ideology, it is necessary to move away from a State-mandated counselling programme and toward a multiagency-designed educational programme with community and religious backing.
- Elected community officials and faith-based organisations can both play key roles.
- 'Counter-narratives' and avoiding internet radicalization are important aspects which can identify and assist susceptible people.
- Individuals at risk should be identified, the nature of the risk assessed, suitable assistance plans developed, and channel support extended or terminated by local government entities.
- As a 'channel police practitioner,' the police function has been limited to coordinating.
- Human rights organisations can work to look after infringes on freedom of expression and privacy, particularly in schools.
- Before increasing counter-terrorist capabilities, policymakers must address "unaddressed socio-economic and political reasons" that are accountable for the increase of violence, according to a Brookings research on violent extremism released in 2019.

Conclusion:

- Deradicalization camps provide a number of challenges for India as it considers what ideas and experiences to adopt for its own programmes.
- When Kashmiri youngsters study in other parts of India, the state must ensure their safety.
- It is critical that Kashmiri youngsters feel at ease wherever they are. This necessitates a genuine professional approach, a gentle touch, and longterm commitment.
- Former UN Secretary-General Ban Ki-speech moon's in Addis Ababa in 2016, provided a final solution to this question, stating that "good governance can prevent terrorism." That is exactly what our government should do.

Role of External State and Non-state Actors in areating challenges to Internal Security

16. Maritime Security of India

» Mains: Maritime security of India- Challenges; Initiatives being taken by India to strengthen its maritime domain security

Context:

 The article examines some major aspects of maritime security for India as discussed by the Indian Navy chief on the sidelines of the Goa Maritime Conclave.

Goa Maritime Conclave (GMC)

- The GMC is the Indian Navy's outreach initiative providing a multinational platform to harness the collective wisdom of practitioners of maritime security and the academia towards garnering outcome oriented maritime thought.
- · Aim of the conclave
 - * With the Indian Ocean Region (IOR) becoming the focus of the 21st century strategic landscape, the GMC aims to bring together the regional stakeholders and deliberate on the collaborative implementation strategies in dealing with contemporary maritime security challenges
- The theme for 2021 is "Maritime security and emerging non-traditional threats: a case for proactive role for IOR Navies".
 - * It has seen participation from the Navy chiefs and heads of maritime agencies of Bangladesh, Comoros, Indonesia, Madagascar, Malaysia, the Maldives, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka and Thailand.

Major Challenges:

Increasing Chinese presence in IOR:

- From a security perspective, since independence, India has not faced any significant maritime threat. Much of the Indian maritime security focus was in terms of the relatively minor naval threat from Pakistan and non-traditional threats including piracy and terrorism. While these concerns remain, they have been overtaken by worries about China as an emerging IOR power, with a growing footprint in the region.
- China has been expanding its naval assets at a very fast pace. Apart from the increased forays into the IOR (Indian Ocean Region), the Chinese Navy also has a base in Djibouti. This is complemented by China's growing maritime ties with countries in the IOR and increasing naval presence in the region.
- China's growing Indian Ocean presence seems to be contesting India's strategic role in the IOR. It also poses security threats for Indian assets in the region.
- Also in a related development, China has recently exported warships to Pakistan which are to be deployed in the Indian Ocean. This is an indication of the increasingly close military cooperation between Pakistan and China, which analysts see as aimed at bolstering Pakistani capabilities in an effort to balance India in the region.
- The Indian Navy has been closely monitoring the Chinese Navy and its maritime assets deployed in the IOR. In addition, the Indian Navy is also prioritising modernisation and revising operational philosophy to counter the Chinese challenge.

Narco terrorism:

- Available intelligence indicates that there is a flow of drugs from the Makran coast, down to the East coast of Africa, from where it moves to the island nations, which are tourism-dependent economies, and then to Sri Lanka and India and also across the world.
- Thus sea bound drug trafficking is a security threat to India more so in the aftermath of the recent developments in Afghanistan.
- There seems to be a close nexus between drug trafficking and arms smuggling via sea routes in the Indian Ocean.

Efforts of India in the maritime domain:

Naval exercises:

- India has been conducting regular naval exercises with both regional nations and also countries like the U.S., France, etc.
- The Malabar exercise including India, the U.S., Japan and Australia has continuously increased in scope and complexity. Such exercises by ensuring interoperability will allow the nations to coordinate operations seamlessly in case of any contingency or challenge.

Goa Maritime Conclave:

 Goa Maritime Conclave brings together a small group of navies in the immediate neighbourhood, considers common challenges and helps formulate tangible solutions to key issues. The GMC has grown as a platform.

Colombo Security Conclave:

 In order to tackle the threat of sea-bound drug trafficking, India is part of initiatives such as the Colombo Security Conclave, which involves focused operations with countries that are affected by drug trafficking.

Logistics agreements:

- India has signed logistics support agreements with several countries, including the U.S., Australia and Japan.
 - * Military logistics agreements are merely administrative arrangements between strategic partners that would facilitate replenishment of fuel, rations, and spare parts, as well as berthing and maintenance for each other's warships, military aircraft, and troops during port visits and joint exercises, on a reciprocal basis.
- The Navy stands to benefit from these agreements as they will help acquire much-needed reach and sustenance for the Indian navy.

Mission Based Deployments (MBD):

 India started Mission Based Deployments for the navy in 2017.

- * The Mission Based Deployments concept involves deploying mission-ready ships and aircraft at major and sensitive locations like critical sea lanes of communications and choke points to protect India's maritime interests.
- The MBD concept ensures Indian ships are on regular deployment in key areas in the IOR. This helps the Indian Navy increase their familiarity with the area of operation, helps assure friendly nations by being available for response in any situation and also helps the Indian Navy establish its credibility as a net security provider in the IOR.

Other efforts:

 India has been collaborating and cooperating with other nations in the IOR in the domain of information-sharing, hydrographic cooperation, maritime law enforcement, training, opportunities in disaster response, crisis management, etc.

ENVIRONMENT AND ECOLOGY

Intitatives in news

1. Air Pollution Control Tower (APCT)

- » Prelims: BHEL
- » Mains: Measures to mitigate the impact of air pollution

Context:

 The State of the Art prototype Air Pollution Control Tower, developed in-house by Bharat Heavy Electricals Limited (BHEL) has been inaugurated.



How an pollution control tower cleans air

- It sucks in polluted air through its base.
 Filters installed inside capture particulate matter
- ➤ The cleaned air is then released from the top of the tower
- ➤ The captured particulate matter is collected in the form of dust at the tower's base, which is be removed periodically

Image Source: Tol

Importance:

- The APCT will assist in tackling urban pollution, especially in the National Capital Region as it is an area of concern that imposes adverse effects on health.
- Much emphasis has been placed on eliminating the pollutants at the source.
- There is a possibility of expanding the APCT project and setting up a grid of such pollution control towers.

About BHEL:

- BHEL is India's largest engineering and manufacturing enterprise in the energy and infrastructure sectors
- It is under the ownership of Ministry of Heavy Industries and Public Enterprises

Species in news - Fauna

2. Coringa set for fishing cat collaring project

» Prelims: Fishing cat; Coringa wildlife sanctuary

Context:

• Conservation biologists of the Wildlife Institute of India (WII), Dehradun, will begin collaring 10 fishing cats (Prionailurusviverrinus) in the Coringa Wildlife Sanctuary (CWS) in Andhra Pradesh for a better understanding of the species.

Fishing cats:

- The fishing cat (Prionailurusviverrinus) is a medium-sized wild cat. It is predominantly nocturnal.
- The fishing cat hunts in water. It has specialized features like partially webbed feet and waterresistant fur that helps it to thrive in wetlands.
- Since 2016, the fishing cat is listed as Vulnerable on the IUCN Red List. In India, the fishing cat is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and thereby protected from hunting.
- The fishing cat is the state animal of West Bengal.

Threats

- The fishing cat is threatened by the destruction of wetlands, which are increasingly being polluted and converted for agricultural use and human settlements.
- The conversion of mangrove forests to commercial aquaculture ponds is a major threat.
- Another threat to the fishing cat is the depletion of its main prey – fish due to unsustainable fishing practices and over-exploitation of local fish stocks.

Coringa Wildlife Sanctuary:

- Coringa Wildlife Sanctuary is an estuary situated near Kakinada in Andhra Pradesh. It constitutes a large stretch of mangrove forests in India.
 - * The sanctuary is a part of the Godavari estuary.
- The sanctuary is yet to be declared as a Ramsar site despite facing various threats to its ecology.

Initiatives in News

3. E-Amrit Portal on Electric Vehicles at COP26

» Prelims: E-Amrit portal

Context:

 The Government of India launched the E-Amrit web portal on electric vehicles at the COP26 Summit in Glasgow.

Facts about the Portal:

- The E-Amrit portal acts as the one-stop destination for providing all information about electric vehicles and the myths surrounding them including their adoption, purchase, investment opportunities, policies and subsidies.
- The portal has been developed by NITI Aayog in association with the UK government to boost the UK-India Roadmap 2030. In the upcoming days, more features will be added to this portal to make it interactive.
- · Objectives:
 - * The important purpose of the E-Amrit portal is to increase awareness about electrical vehicles and encourage people to switch to such vehicles.
 - * To ensure the decarbonisation of transport with the introduction of electric mobility that would assist in reducing the carbon footprint.
- As India also celebrates Transport Day at COP26, initiatives like the launch of the E-Amrit portal will play a pivotal role in increasing the pace of zero emission vehicle transition and also address the challenges.

Species in News - Fauna

4. Ganges River Dolphin

- » Prelims: Ganges river dolphin- habitat range
- The Ganges river dolphin is the national aquatic animal of India.
- The global population of the species is estimated at 4,000. It is mostly found in the Indian subcontinent throughout the Ganges-Brahmaputra-Meghna and Karnaphuli-Sanguriver systems of Nepal, India and Bangladesh.
- The species Platanistagangeticagangetica is considered an indicator species of aquatic systems.
- It is listed as 'endangered' under the IUCN Red List, Schedule I of the Indian Wildlife (Protection) Act (1972), Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Threats to Gangetic Dolphin:

- Water Development Projects
- · Toxicity of rivers
- Killing of them for their oil, by the local inhabitants around the river
- Accidental killings when the Gangetic Dolphins are trapped in fishermen gear

Context:

 The Jal Shakti Ministry has released a guide for the safe rescue and release of stranded Ganges river dolphins.

Important Indiæs

5. Global Climate Risk Index (GCRI)

- » Prelims: Global climate risk index
- It is an index published annually by German Watch, a non-profit organisation.
- The Index analyses to what extent countries have been affected by the impacts of weather-related loss events (storms, floods, heatwaves, etc.).

Issue Area

The 2021 version ranked 180 countries based on the impact of extreme weather events and associated socio-economic data from 2000-2019. There are deep fault lines in the methodology and interpretation of the country rankings.

- 1. First, the GCRI ranks countries based on four key indicators:
 - Number of deaths;
 - Number of deaths per 1,00,000 inhabitants;
 - Sum of losses in Purchasing Power Parity (in U.S. dollars); and
 - Losses per unit of the Gross Domestic Product (GDP). Of these indicators, two are absolute while the other two are relative.

Concern

- The GCRI report does not provide a rationale for the selection of these macro indicators.
- 2. Second, the index suffers from exclusion errors and selection bias.
 - Composite indicators are better constructed using micro indicators instead of macro indicators, which measure loss because isolating the effect of the loss of elements on GDP is fraught with errors.
 - Instead, a number of key micro indicators such as the total number of people injured, loss of livestock, loss of public and private infrastructure, crop loss and others are better candidates for assessing the composite loss resulting from climate change events.
- 3. Third, the index provides us with information on weather-related events like storms, floods, temperature extremes and mass movements.
- However, it omits geological incidents like earthquakes, volcanic eruptions or tsunamis, which may be potentially triggered by climate change and can have economic and humanitarian impacts.

4. Fourth, the ranking under the GCRI is done based on data collected by Munich Re'sNatCatService, which is not authenticated at the ground level.

<u>National Disaster Management Information System</u> (NDMIS)

- It is a comprehensive online application, being developed to capture disaster damages and the losses effectively and also for monitoring of funds disbursal under State Disaster Response Fund (SDRF) and National Disaster Response Fund (NDRF) to States for relief activities in case of disasters.
- The online System will track the impacts of hazards for the entire country up to the district level.

Significance

- It thus captures damages and losses caused by disasters and monitors the targets of the Sendai Framework for Disaster Risk Reduction.
- The NDMIS captures details on parameters like death, injury, affected population by categories as well as economic losses in social and infrastructure sectors due to weather and geological events on a daily basis. The data captured by the NDMIS includes all major climatic events.

Way forward

 Deploying effective approaches and standards to cultivate collaboration among climate risk information users and providers along with the execution of effective action plans, will allow India to meet the targets envisaged in the Sendai Framework.

Initiatives in news

6. Green Energy Collaboration

» Mains: Green energy collaboration in International relations- Potential, significance and challenges

Context:

 India and UK engaged in a scientific discussion of green energy collaboration involving the Ministers of Science and Technology from both countries.

Objectives of the Collaboration:

- To increase cooperation between India and the UK in the areas of clean and green energies
- · Promote the use of advanced batteries
- Use of carbon capture method to reduce air pollution and infusing better technology in this area
- Production of hydrogen-related fuels
- Encourage the affordability of biomaterials, improvement of livestock research

Important Highlights of Discussion:

- It was rightly pointed out that the Newton

 Bhabha MoU, which was signed between
 India and UK, took scientific cooperation to the next level and opened up avenues for research in energy security, food and agriculture, water, health, climate change. The present collaboration acts as a further boost to these areas of cooperation.
- India's agenda to join the G20 troika in 2021 was highlighted and India assured to work towards the development of science-based solutions to counter the multiple challenges faced by humanity.
- India is assured to establish a One Health approach and put forth a Global Equitability for Health Infrastructure Development to counter pandemic-like situations.

Why is Green Energy Collaboration Needed?

- The rising threats of climate change have sent an alarming message to the world and it is the time wherein the countries must collaborate to achieve a low carbon future that is sustainable.
- Green energy is a form of a sustainable source of renewable energy that employs natural resources like sun, wind and water. However, all the sources used in the renewable energy industry are not green.
- Green energy refers to those sources which do not result in pollution. Examples – Wind power, Hydropower, Solar power and Geothermal energy.
- India had expressed its firm determination in promoting the usage of clean energy in the recently concluded COP26 summit at Glasgow.
- In this regard, the India-UK partnership for green energy will be a welcoming step towards research and development along with the holistic exchange of technology at the international level.

Species in News - Fauna

7. Kaiser-i-Hind is Arunachal's State butterfly

» Prelims: Kaiser-i-hind

Kaiser-i-Hind:

- Kaiser-i-Hind (Teinopalpusimperialis) is found in six States along the eastern Himalayas at elevations from 6,000-10,000 feet in wellwooded terrain.
- The butterfly is also present in neighbouring countries of Nepal, Bhutan, Myanmar, Laos, Vietnam and southern China.
- The Kaiser-i-Hind is protected under Schedule II of Wildlife (Protection) Act, 1972.
- Its IUCN status is Near Threatened

Context:

 Arunachal Pradesh has approved the Kaiseri-Hind (Teinopalpusimperialis) as the State butterfly.

Initiatives in news

8. LeadIT

» Prelims: LeadIT

Context:

- In order to give effect to the goals of the Paris Agreement, the government has come up with several measures with the objective of reducing carbon content released by the industries as they contribute to 30% of the total CO2 emissions.
- This subject was discussed in the LeadIT (Leadership Group for Industry Transition) Summit 2021 which was presided over by India and Sweden. The hybrid summit took place on the sidelines of COP 26 at Glasgow.

About LeadIT:

- LeadIT is a voluntary initiative to create a low carbon transition especially in the industries like Iron & Steel, Aluminium, Cement and Concrete, petrochemicals, fertilizers, bricks, heavy duty transport, along with the engagement of private sectors.
- The global aim of reaching a low carbon industry transition faces the following challenges with respect to:
 - * Technology development and transfer
 - * Proper funding at scale and speed
 - * Capacity constraints
 - * Policy to enable such transition
 - * Lowering the process-related emissions

Initiatives in news

9. River Cities Alliance

» Prelims: River Cities alliance

Context:

- The symbolic partnership between the Ministry of Jal Shakti and the Ministry of Housing and Urban Affairs led to the launch of the River Cities Alliance.
- This is the world's first alliance that offers attention to the themes of networking, capacity building and technical support for the sustainable management of urban rivers.

Participants:

 The alliance has been signed by 30 members across the country including the cities like Dehradun, Haridwar, Rishikesh, Srinagar, Begusarai, Bhagalpur, Aurangabad, Chennai, Bhubaneshwar, Hyderabad, Pune, Udaipur, Vijayawada.

Significance:

- The river alliance will be an embodiment of the people's movement, ensuring the engagement of the people with the natural resources and promoting the sense to conserve the resources.
- The key intention of the alliance is to improve the rivers and map them with urban planning and developmental programmes.
- This offers a platform where the cities can learn from each other's successes and failures with the assistance of municipal administrators.
- The alliance can significantly contribute towards minimizing the water footprint, preventing pollutants' entry into the water bodies and capitalizing on architectural heritage.
- Under this initiative, national policies with riverrelated directives can be adopted and facilitate a proper Urban River Management Plan. This will empower the governance of river cities and help in attracting external economic investment.

Initiatives in news

10. <u>USA Becomes the 101st Member of the International Solar Alliance (ISA)</u>

» Prelims: ISA- membership and objectives

Context:

 The US Special Presidential Envoy, in the COP26 Summit, made a landmark declaration confirming the membership of the USA to the International Solar Alliance. USA's membership will be a boost to the entire cause of ISA.

The Importance of USA's Membership in the ISA:

- India expressed its welcoming gesture to this move and looks up to this membership as a mode to strengthen the ISA by stimulating the future action plans assuring the provision of clean energy to the world.
- The US official informed the parties present at the COP26 that it has worked out the details of ISA and would like to contribute to the deployment of solar energy that would benefit the developing countries.
- Experts believe that this landmark membership of the USA in the ISA takes the significance of economic and energy potentials of solar power to the next level.

Species in news-Fauna

11. <u>Batting for an important yet misunderstood</u> species

» Prelims: Bats-Ecological significance

Context:

The article discusses the role of bats in the ecosystem

Bats and the ecosystem:

- · Bats are winged mammals
 - * There are about 128 species of bats in India and 1200 across the world.
- Humans and bats have existed together beyond the reach of memory and they play a critical role in the ecosystem that is as follows:
 - * They destroy insects in farms, fields, forests, grasslands, and around our homes including agricultural pests and disease-causing mosquitoes by eating them up.
 - * Some bats also pollinate flowers, sip nectars, and spread the seeds of many important trees including a wide variety of guava, banana, mango, and other fruits, etc.
 - * Excrements of bats known as guano are widely used as fertilizers for agricultural crops as they are rich in phosphorous and nitrogen.

Role of bats in the spread of disease:

- The scientific study has shown that the SARS-CoV2 virus that cause Covid-19 emerged in bats and there is a sense of fear that bats can carry more diseases that can be transmitted.
- Bats have a unique characteristic of being a natural reservoir for many pathogenic viruses such as Hendra, Nipah, Marburg, Ebola, and the coronaviruses that cause severe acute respiratory syndrome.
- Flying long-distance can result in the damage of cell contents and to avoid such damage bats have developed an immune system that protects them from harmful viruses. Despite being the reservoirs of the viruses, bats never fall sick.
- This immune system also enables them to live longer and age slower. They are the longest-lived mammals for their body size.

Ecological imbalance:

- Because of Covid-19, we have come across the fact that bats can transmit viruses to humans. But this transmission of viruses from the natural hosts (bats) to the novel hosts (humans) is a rare event and can only take place by increased contact between bats and humans.
- Over the period of time, humans have cut the forests for agriculture and development use.
 They have also sped up the mining process

- which destroys the homes of bats as they live in natural caves.
- This imbalance caused by humans leads the bats to change their homes and it makes them stressed. Thus, the risk of spillover of viruses increases.
- Scientists have concluded that this ecological imbalance has made bats move closer to human habitats and transmit the viruses they carry along with them.

Human-bat interface:

- Many indigenous groups of people are dependent on nature and animals and they try to maintain the balance without any harm to both humans and animals. They understand the importance of giving space to all animals including bats.
- One example of this is the bat harvest festival of the Bomrr clan in Nagaland. They celebrate a festival in which they smoke a cave in which the bats live and when the bats start exiting, they kill them for consumption purposes. During this process, bats bite or scratch them but this does not lead to the outbreak of any harmful disease due to viruses.
- The National Centre for Biological Sciences (NCBS-TIFR) and the Centre of Department of Atomic Energy (DAE) are conducting research on how the Bomrr clan are immune to such viruses.
- They are also studying the microbial diversity of bats and serology to identify which part of diversity is potentially pathogenic.
- They have come to a finding that there is a genetic prevalence of bacteria and viruses in bats and they have also found that humans and bats have a common antibody response to certain viruses that is an indication of spillover.
- The NCBS is also trying to collect a series of genomes of bat viruses so that they can be prepared for any possible outbreak in the future.
- India is very rich in cultural and biological diversity and the local practices can provide us with a guide on how to minimize the risks of infectious viruses from bats in the future.
- India is the best place to conduct such researches and studies.

Precautions to be taken:

- · Minimize direct contact with bats.
- · Avoid eating or handling bats.
- Avoid eating fallen fruits and vegetables that might be contaminated with bat fluids or quano.
- In the long-term, we can avoid practices that bring us closer to bats and stress them out to shed the viruses.

Way Forward:

- India is a place where most of the people are dependent on the services provided by ecosystems such as clean water, clean air, pollination, etc.
- Over the period of time, there has been an ecological disturbance and that be balanced by a combination of habitat restoration and coexistence with wildlife including bats.
- An integrated approach such as 'One health' in which the health of humans can be linked to the environment and animals can result in positive outcomes.
- We require a global commitment to protect natural habitats and biodiversity.

Conclusion:

 A world with few bats will result in greater loss of agricultural crops by pests and will also suffer from many diseases caused by mosquitoes, etc. Hence, finding a balance is the need of the future.

Environmental pollution and degradation

12. Char Dham project

» Mains: Balancing developmental needs and ecological integrity

Context:

 The Char Dham road project has been criticised for going against all environmental safeguards.

Char Dham Road Project:

- The Char Dham road project is a massive undertaking that will expand over 900 kilometres of mountain roadways.
- The Ministry of Road Transport and Highways will oversee the project (MoRTH).
- It attempts to link the four important shrines of Yamunotri, Gangotri, Kedarnath, and Badrinath in all weathers.

What is the Significance of the Project?

- The project will expand pilgrimage tourism from the Indian plains and give attendant local economic gains.
- The government argues that it is essential to back up troop and arms movement towards the India-China border.

What is the case against the Project?

- An NGO contested the road-expansion proposal in 2018 because of its possible impact on the Himalayan ecosystem. To investigate the concerns, the Supreme Court formed a High-Powered Committee (HPC).
- The Court ruled in 2020 that the carriageway width of the roadways should not exceed 5.5 metres.

 The Ministry of Defence (MoD) had filed an appeal, requesting "a double-lane road with a carriageway width of 7m to "meet the needs of the Army," citing the MoRTH Affidavit.

What are the Concerns Associated with The Char Dham Road Project?

- Rampant Development: In its enthusiasm for an infrastructure project, the administration has ignored the facts revealed by countless terrible incidents in Uttarakhand's hills over decades. Due to rapid growth and its tangled link with climate change, massive landslides and floods have occurred throughout the Himalayan range.
- Geographic Concerns: Several natural disasters have struck Uttarakhand in the recent two decades. Uttarakhand's valleys are tiny and closeended, with steep 60-70 degree slopes. Over 200 people were killed this year by floods in the Dhauli Ganga, Rishi Ganga, and Alaknanda rivers. Several landslides have occurred in the region during the monsoons as a result of the enormous hill-cutting for the Char Dham road project.
- Failure of Mitigation Measures: Many people believe that landslides are a natural result of road building and that they can be avoided. In court, similar arguments were raised concerning this project as well. The rains in 2021, demonstrated that the mitigation efforts are no match for nature's fury. In these vulnerable mountains, prevention and limitation of activities appear to be the only viable means of mitigation.
- Geology of Himalaya: The double-lane paved shoulder roads are far too broad, putting the slopes at risk. Human engineering cannot overcome the Himalayan landscape's high slopes and severe gradients. Any modification brought about by humans will have an influence on stream runoff, erosion, and depositional processes.
- Against Environmental Safeguards: In its existing configuration, the Char Dham project violates all environmental regulations. Given the steepness of the slopes, seismic activity, and erosivity of enhanced monsoonal precipitation, it will greatly accelerate mass wasting processes and erosion rates.

Conclusion

 The only way to commute by road in the hills is to have a disaster-resistant, safe, and reliable infrastructure. We need to keep the extent of human-caused disruptions as small as feasible. For future generations, the Himalayas must be conserved as a wildlife reserve.

Environmental Degradation

13. Finding a way out of India's deepening water stress

» Prelims: Jal jeevan mission

Context:

 In view of the ongoing scarcity of water resources and an ever ¬increasing demand for water, the need is for a locus-specific response, that can galvanise and integrate the ongoing work of different Ministries and Departments through new configurations.

Background:

 In 2019, the Ministries of Water Resources, River Development and Ganga Rejuvenation and the Ministry of Drinking Water and Sanitation were merged, which led to the formation of the Ministry of Jal Shakti.

Understanding water stress:

- In the rural areas, 80%-90% of the drinking water and 75% of the water used for agriculture is drawn from groundwater sources.
- In urban areas, 50%-60% of the water supply is drawn from groundwater sources, whereas the remaining is sourced from surface water resources such as rivers, often located afar, in addition to lakes, tanks and reservoirs.
- According to the composite water management index released by the NITI Aayog in 2019, 21 major cities (including Delhi, Bengaluru, Chennai, Hyderabad) were on the brink of exhausting groundwater resources, affecting about 100 million people.
- The study also points out that by 2030, the demand for water is projected to be double the available supply.
- The article also discusses the problem in Punjab

 The draft report of the Central Ground Water
 Board concluded that Punjab would be reduced to a desert in 25 years if the extraction of its groundwater resources continues unabated.
 82% of Punjab's land area has seen a huge decline in groundwater levels, wherein 109 out of 138 administrative blocks have been placed in the 'over exploited' category.
- Groundwater extraction which was at 35% in the 1960s and 1970s, rose to 70% post the Green Revolution — a period that saw governments subsidising power for irrigation.
- Cultivation of water-intensive crops such as paddy has further aggravated water depletion, even turning water saline.
- In 2019, in Chennai, life came to a standstill and parts of the city went without piped water for months.

Factors responsible for water stress:

- Lack of rainfall: For example in Chennai in 2019, rainfall was 50% less than normal.
- Encroachment: The cities like Chennai and Mumbai have been built by incrementally encroaching on floodplains and paving over

- lakes and wetlands. The lack of space for water to percolate underground has prevented rainwater from recharging the aquifers.
- Loss of green cover: In Mumbai, in 2019, 2141 trees were felled at the Aarey colony, amid massive protests, to make space for a shed for the Mumbai Metro Rail Corporation Limited.
- Lack of sustainable urban planning.

Need for synergy

- Ministries & other institutions must reconfigure synergy among them: The Ministry of Water Resources should bring synergy in its relationship with other Ministries and Departments – like Local Self-Government, Agriculture and Environment.
- Effective land zoning regulations: With enhanced integration and coordination through effective land and water zoning regulations that protect urban water bodies, groundwater sources, wetlands and green cover.
- Measures need to be taken to manage and replenish groundwater, especially through participatory groundwater management approaches with its combination of water budgeting, aquifer recharging and community involvement.
- Importance also needs to be given to surface water conservation, which is in a critical and dying state due to encroachment, pollution, over-abstraction and barrier in water flow by dams.

Conclusion:

- In 2019, the Ministry of Jal Shakti had announced an ambitious plan to provide water connections to every household in India by 2024.
- Along with this aim, the need of the hour is to protect and conserve water resources on the one hand and minimise and enhance the efficiency of water usage on the other.

Environmental Pollution and Degradation

14. <u>Study Reveals Pollution in Water Bodies around</u> <u>Thermal Power Plant</u>

» Prelims: Pollution by thermal power plants

Context:

 Recently, a new study titled "Polluted Power: How Koradi and Khaperkheda Thermal Power Stations Are Impacting the Environment" has been released.

Details:

 The study discovered severe and widespread contamination in the areas surrounding the Maharashtra State Power Generation Company Koradi and Khaparkheda thermal power facilities. The research discovered harmful elements such as mercury, arsenic, aluminium, and lithium in surface and groundwater, as well as extensive pollution of air, water, and soil owing to fly ash.

<u>How are Thermal Power Plants Polluting the Water</u> Bodies?

- Thermal pollution is one of the most serious problems in the local environment.
- When the water in a power plant becomes unusable, it is frequently dumped into a nearby canal.
- Because this effluent is often hotter than the surrounding natural water, it can raise the temperature of the water, which can have a harmful influence on the local ecology.
- Furthermore, this effluent frequently contains dissolved metals and metalloids, which might disrupt the surrounding ecosystem's equilibrium.

Environmental Pollution and Degradation

15. COP26 Glasgow Summit of UNFCC

- » Prelims: Static facts about IPCC and Assessment Report; Global Methane Pledge; Infrastructure for Resilient Island States (IRIS) initiative
- » Mains: Climate deal struck in Glasgow; Mitigating the Impact of Climate Change

Context:

• The 26th UN Climate Change Conference of the Parties (COP26) held in Glasgow.

Background:

Climate change and its implications:

- The Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change released in August 2021 had sounded an alert for the nations of the world over global temperature rise and associated risks.
- The report notes how human influence has warmed the atmosphere, ocean and land which is in turn leading to widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere. This is contributing to increasing intensity and frequency of extreme climate events like droughts, extreme rainfall, rising sea levels and heat waves.

Insufficient climate action:

- Despite the signs of impending planetary emergency, most nations of the world have not shown signs of seriousness with respect to climate action.
- Global GHG emissions have continued unabated. The climate action envisaged seems inadequate to arrest the rising global temperatures. The 12th Emissions Gap Report released by the UN Environment Programme notes huge gap between the updated emissions reduction

pledges made by countries for 2030 and what is needed to keep the rise in global temperature to 1.5 degrees C or even 2 degrees C. This could lead to a rise in temperature by 2.7 degrees C by the end of the century. There is an increasingly narrowing window for the world to taper down emissions before the temperature rises beyond 2 degrees C.

Renewed efforts for global climate action:

 In this regard, major preparatory conferences and bilateral meetings had been held ahead of the COP26 to persuade countries to raise their emission reduction commitments from the Nationally Determined Contributions (NDC) under the Paris Agreement. There had been a growing call for net zero emissions by 2050.

Pre-summit goals set for the COP26:

- The COP26 had set itself four goals even before the start of the climate summit.
 - * To achieve global net-zero by the middle of the century and keep 1.5 degrees within reach.
 - * To adapt to protect communities as well as natural habitats from the impact of climate change.
 - * Mobilisation of finances for the stated goals.
 - * To work together so that the rules could be listed out in detail and help in the fulfilment of the Paris Agreement.

Major initiatives announced at the Glasgow summit: Ending deforestation:

- In the COP26 climate summit's first major deal, leaders at the COP26 global climate conference have pledged to stop deforestation by 2030 to help slow climate change.
 - * According to the Global Forest Watch, in 2020 the world lost 2,58,000 sq. km of forests.
 - * Felling trees contributes to climate change because it depletes forests that absorb vast amounts of the warming gas CO2.
- This agreement expands a commitment by 40 countries as part of the 2014 New York Declaration of Forests.
 - * The New York Declaration on Forests is a voluntary and non-legally binding political declaration adopted in 2014. The Declaration pledges to halve the rate of deforestation by 2020, to end it by 2030, and to restore hundreds of millions of acres of degraded land.
- Over 100 national leaders have pledged to halt and reverse deforestation and land degradation by the end of the decade. Brazil - where stretches of the Amazon rainforest have been cut down was also among the signatories.

- The pledge includes almost £14bn (\$19.2bn) of public and private funds to invest in protecting and restoring forests. Some of the funding will go to developing countries to restore damaged land, tackle wildfires and support indigenous communities.
 - * Under the agreement, 12 countries pledged to provide \$12 billion of public funding between 2021 and 2025 for developing countries to restore degraded land and tackle wildfires.
- Governments of 28 countries also committed to remove deforestation from the global trade of food including animal husbandry and other agricultural products such as palm oil, soya and cocoa. These industries drive forest loss by cutting down trees to make space for animals to graze or crops to grow.
- More than 30 of the world's biggest financial companies have also promised to end investment in activities linked to deforestation.
- Though the environmental experts have welcomed the move, they have also warned on how a previous deal in 2014 had failed to slow deforestation at all.

Reducing methane emissions:

- While the main focus of efforts to curb global warming has been on carbon dioxide, experts point out that cutting methane emissions could be one of the most effective interventions to reduce near-term global warming. Although there's more CO2 in the atmosphere and it sticks around for longer, individual methane molecules have a more powerful warming effect on the atmosphere than single CO2 molecules given its higher Global warming potential (GWP).
 - * The Global Warming Potential (GWP) of a greenhouse gas is its ability to trap extra heat in the atmosphere over time relative to carbon dioxide (CO2).
 - * Methane is one of the most potent greenhouse gases and responsible for a third of current warming from human activities. Some of the major sources of methane emissions include animal husbandry, landfill waste and in oil and gas production.
- The US and the EU have announced a global partnership to cut emissions of the greenhouse gas methane by 2030. The Global Methane Pledge aims to slash methane emissions by 30% by 2030 compared with 2020 levels.
- Nearly 90 countries have pledged support to this U.S. and EU-led effort. The Global Methane Pledge, first announced in September, now covers emissions from two-thirds of the global economy. While Brazil, one of the five biggest emitters of methane, has signed up, three other large emitter nations China, Russia and India have not signed up.

Infrastructure for Resilient Island States:

- India has launched the Infrastructure for Resilient Island States (IRIS) initiative for developing the infrastructure of small island nations.
 - * IRIS initiative becomes critical given that these small island nations remain the most vulnerable countries facing the biggest threat from climate change. They face an existential threat due to climate change.
- The IRIS is a part of the Coalition for Disaster Resilient Infrastructure (CDRI) initiative.
 - * The Coalition for Disaster Resilient Infrastructure (CDRI) is a multi-stakeholder global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions, launched at the UN Climate Action Summit of 2019. It aims to promote the resilience of new and existing infrastructure systems to climate and disaster risks in support of sustainable development.
- The new initiative is the result of cooperation between India, the U.K. and Australia and included the participation of leaders of small island nations such as Fiji, Jamaica and Mauritius.
- The initiative would involve setting up norms and standards for resilient infrastructure in small island states and coastal areas. IRIS would focus on building capacity, having pilot projects in small island developing states. Promotion of quality infrastructure in Small Island States will benefit both lives and livelihoods in such states.
- India's space agency ISRO will build a special data window for the small island nations to provide them timely information about cyclones, coralreef monitoring, coast-line monitoring through satellite.
- The initiative will make it easy for SIDS to mobilise technology, finance and necessary information faster and more effectively.

One Sun, One World, One Grid:

- The new Global Green Grids Initiative One Sun One World One Grid (GGI-OSOWOG) has been announced at the ongoing COP26.
 - * The new Global Green Grids Initiative One Sun One World One Grid (GGI-OSOWOG) is an evolution of International Solar Alliance's OSOWOG multilateral drive to foster interconnected solar energy infrastructure at a global scale.
- This initiative aims to tap solar energy and have it travel seamlessly across borders. The initiative will work towards accelerating the making of large solar power stations and wind farms in the best locations, linked together by continentalscale grids crossing national borders.

- * The sun offers a huge source of energy for mankind. All the energy humanity uses in a year is equal to the energy that reaches the earth from the sun in a single hour. Given that the sun never sets and that half the planet is always receiving sunlight, there is the potential to harness solar energy continuously across the globe and trade this energy across borders to ensure adequate energy supply to meet the needs of everyone on earth.
- Over 80 countries have endorsed the One Sun Declaration.
- This initiative will bring together an international coalition of national governments, financial organizations, and power system operators.
- Realizing One Sun One World One Grid through interconnected green grids can be transformational, enabling all the nations of the world to meet the targets of the Paris Agreement to prevent dangerous climate change, to accelerate the clean energy transition, and to achieve the Sustainable Development Goals. These efforts can stimulate green investments and create millions of good jobs. By sharing the sun's energy, the nations can help build a more peaceful and prosperous world.

India's new climate action goals:

- India will achieve net zero emissions latest by 2070. This is notable given that so far India was the only major emitter that had not committed to a timeline to achieve net zero carbon dioxide emissions and has also argued against the concept of net zero carbon targets.
- Renewable energy would be tapped in a big way in India. By 2030, India will ensure 50% of its energy will be sourced from renewable sources. India plans to generate 500 GW of renewable energy by 2030. This marks a 50 GW increase from its current target of 450 GW.
- India also committed to reduce its carbon emissions until 2030 by a billion tonnes. By 2030, India will reduce the carbon intensity of its economy to less than 45 per cent. India is largely on track to meet, and even exceed, its Paris Agreement targets: reduce emissions' intensity of its gross domestic product (GDP) by 33 to 35 percent from 2005 levels by 2030.

India's GHG emission:

Current status:

• India is the third-largest emitter of GHGs in the world. India accounts for about 7% of today's global emissions. However, India has extremely low per-capita emissions that are far below the global average.

- According to the World Bank data, in 2018, India had per capita emissions of 1.8 tonnes. This is projected to expand to 2.4 tonnes in 2030 as per the Paris Agreement obligations of India.
- In terms of sectoral GHG emissions, data from 2016 shows that electricity and heat account for the highest share of GHG emissions, followed by agriculture, manufacturing and construction, transport sector, industry and land use change and forestry.

Future outlook:

- With India's GDP per capita projected to rise, a rise in carbon emissions in the short term, primarily from energy is expected given that the Indian economy relies heavily on coal and other fossil fuel use.
- The larger share of services in Indian GDP augurs well for India's low carbon development path.
- Though the population growth is slowing, the absolute increase in population and rising consumption behaviour will result in pressure on carbon emissions in the coming years.

India's climate performance:

- India had pledged to cut the emissions intensity of its growth by 33-35% of GDP from 2005 levels by 2030. India has declared that it has so far achieved 24% reduction on this metric.
- India has also announced that it would scale-up its renewable power target to 450 GW by the end of 2030, in addition to the target of 40% of energy capacity based on renewable energy sources as pledged under the Paris climate agreement.
- India is also expanding forest cover to create a 2.5 to 3 billion tonne carbon sink.
- India has recently unveiled a national hydrogen policy to produce hydrogen through green methods, aiming for its deployment in industrial sectors as well as transport, and also for export. This would help India decarbonize its energy sector.

<u>Challenges for India with respect to the new target:</u> Stiff targets:

- Some environmental experts have expressed doubts over India's stiff climate action targets.
 - * Achieving net zero by 2070 would require India to peak emissions by 2040, following which emissions will have to start to reduce. Available studies suggest that for a 2070 net zero year and peaking year of 2040, India would have to reduce the emissions intensity (emissions per unit GDP) by 85%. This appears a stiff target as notably, India

- has so far only been able to reduce its emission intensity by 24% from the 2005 levels.
- * To enable such a steep reduction, the share of non-hydro renewable energy has to increase to 65% from the current 11% and the share of electric cars in passenger sales has to go from current 0.1% to 75% by 2040 while the share of fossil energy in primary energy has to decrease from 73% to 40%. These appear too steep a target given India's financial and technical resources at present.

Implications for India's developmental process:

- A study by the think tank Council for Energy Environment and Water said that for India to achieve the net zero target even by 2070, usage of coal, especially for power generation, will need to peak by 2040 and drop by 99% between 2040 and 2060.
- This could hurt India's developmental aspirations.

Finance shortage:

- The decarbonization of the Indian economy and adoption of renewable energy sources will require huge upfront capital investment. India currently lacks this level of capital and hence will be reliant on external funding as well.
- The failure of the developed countries to arrange for a \$100 billion climate fund annually from 2020 onwards has not materialsed as yet.

Lacunae in the global climate action efforts:

Insufficient climate action:

- The Sixth Assessment Report (AR6) had emphasised that to keep temperature rise within 1.5°C, global emissions should be reduced by 45% from 2010 levels by 2030, on the way to net zero 2050.
- However many high-emitter countries are short of the emissions reductions required by 2030 to restrict global temperature rise to well below 2°C or even the goal of 1.5°C above pre-industrial levels.
- Global emissions in 2030 are expected to be 16.3% above the 2010 level, as against the call for 2030 emissions to be 45% less from 2010 levels for the 1.5°C goal. Thus there is a need for a significant increase in the level of ambition of NDCs till 2030.
- The updated NDCs submitted by the parties too would not be sufficient to meet the IPCC recommendations. While several large emitters like the U.K., European Union, China and the U.S. have raised their emission targets, this is still grossly insufficient to meet the temperature goals. At the current rate of emissions even with the updated NDCs, much of the carbon budget would be used up fast.

* Carbon budgets represent the quantum of CO2 the atmosphere can hold for a given global temperature, best assessed through cumulative emissions and not annual flows.

Overlooking the need for immediate action:

 The net zero 2050 target is too distant a goal and this might divert attention away from the urgent 2030 target that COP26 should focus on.

Contradictory to the CBDR principle:

The net zero target also seems to be contradictory to the foundational principle of the UN Framework Convention on Climate Change (UNFCCC), which is common but differentiated responsibilities (CBDR). Instead of a common goal, the article argues for a differentiated target year. Developed countries should reach net zero earlier while the developing countries should get more time. The article calls on the developed countries to take up more responsibility for climate action given their legacy emissions. The developing countries should also do what they can, with technological and financial assistance from the developed countries

Way forward for India:

Take up leadership role:

- Given the global repercussions of climate change, India should participate in global efforts to draw up technological, socio-economic, and financial policies and requirements to demonstrate a commitment to the 1.5° C goal.
- It should take up the lead in ensuring the voice of the developing and under developed countries are heard in the climate change negotiations.

Make the set targets conditional:

- Some experts have pointed out that while it had become increasingly difficult for India to dodge the calls to announce a net zero date, India, however, should have said that it will reach net zero by 2070, only if other developed countries themselves commit to reaching net zero before 2050 and also offer financial and technological help to developing nations like itself. It should have taken up conditional targets.
 - * India should also argue for adequate adaptation measures to complement the mitigation efforts at the COP26.
 - * India, in enlightened self-interest, must stake its claim to a fair share of the global carbon budget and it should call for restriction of the future cumulative emissions by the big emitters, to their fair share of the global carbon budget. India should call for the developed countries to compensate for the legacy emissions.

Adopt green growth pathways:

- Given the global repercussions of emissions for all climate vulnerable nations including itself, the Indian government should not limit itself to a minimalist approach. India should seek green growth pathways. Notably, India stands to gain from such an energy transition given the economic growth prospects and the sustainability of such green growth pathways.
 - * The green growth pathway could involve widespread adoption of renewable energy while also averting long-term lock-in effects of fossil fuel dependence in energy generation, buildings, mobility and so on. India should formulate a clear plan for a multi-sectoral energy transition. The indirect carbon tax in the form of levies on automotive fuels should be used for renewable energy adoption and push for affordable electric mobility. This will help ease the financial challenges in the adoption of green growth pathways.

Structured approach towards net zero:

Net zero can be achieved only through a structured programme that relies on sharp emissions reduction, wide support for clean energy innovation and adoption of green technologies.

- Some of the major interventions that can help India move towards a net zero target include the following:
 - * India needs to create a legal mandate for climate impact assessment of all activities. Low carbon and green technologies must be adopted to reduce the environmental impact of manmade activities.
 - * Highly energy-efficient goods that last longer should be legally mandated by appropriate legislations. Also, the consumers should be given a legal right to repair goods they buy. This will help reduce the demand for goods.
- * The creation of dedicated green funds and channelling of adequate finances and investments through them into environmentally sustainable projects, processes, sectors would be inevitable.
- * The governments must support and incentivize the private sector for green innovation and adoption of the green economy.
- * Enhanced renewable energy adoption should be a top priority with equal emphasis on both centralized and decentralized power production.
- * The mainstreaming of green hydrogen provides an excellent alternative to decarbonize the critical power, industry and transport sectors.

- * India's urban solid waste management will need to modernise to curb methane emissions from unscientific landfills. Also, the adoption of electric vehicles and renewed cities promoting walking and cycling will help limit GHG emissions from cities
- * Arresting deforestation and the regeneration of forests can help prevent the release of stored carbon in the environment, such as trees and soil. Additionally, afforestation drives can help absorb carbon from the atmosphere.

<u>Recommendations for global climate action efforts:</u>

- The world must focus sharply on reducing emissions till 2030, rather than on net zero 2050. As a short term goal, there is the need for ambitious and verifiable 2030 targets. The world community should focus on reducing global emissions by 45% compared to 2010 levels by 2030 and then seek to achieve global net zero by 2050.
- The developed countries in the world should take the lead in the climate action effort Multilateral organizations like the G20 in particular should take the lead in this respect. The developed countries should support the developing nations through finance and technology transfer to make this transition.
 - * The developed world must urgently meet its commitment of at least \$100 billion in annual climate finance for developing countries.
 - * Donors and multilateral development banks need to allocate at least half their climate finance towards adaptation and resilience. Public and multilateral development banks must significantly increase their climate portfolios and intensify their efforts to help countries transition to net zero, resilient economies.
- The overall focus should be on decarbonisation of economies with emphasis on replacing the carbon intensive energy resources with renewable energy sources. This will require the shifting of subsidies from fossil fuels to renewable energy investment. There is the need to place a price on carbon in the form of imposition of pollution taxes. However this transition keeping in line with the principle of common but differentiated responsibilities can allow for different timeframes for the developed and developing countries of the world.
- As part of the adaptation measures, the nations should focus towards resilient infrastructures and jobs.
- There is the need for broad-based efforts towards climate action. Everyone including the private sector, general population have a role to play in this regard.

- * Businesses need to reduce their climate impact, and fully and credibly align their operations and financial flows to a net zero future. The investors should ensure responsible and environmentally sustainable investments.
- * Individuals in every society need to make better, more responsible choices in what they eat, how they travel, and what they buy.

HEALTH ISSUES

Diseases in news

1. Autism Spectrum Disorder (ASD)

» Prelims: Autism- Causes and manifestations

Context:

 Indian researchers from the Jawaharlal Nehru Centre for Advanced Scientific Research, an autonomous institute under DST, GOI have found a better solution to treat Autism Spectrum Disorder by using a compound called "6BIO".

About the Disorder:

- Autism Spectrum Disorder arises from impairment in brain development and it is accompanied by a series of symptoms and severity.
- This disorder impacts the behavioural patterns of the individuals, thus disturbing the potential to communicate and socialise.
- It includes conditions such as autism, Asperger's syndrome, childhood disintegrative disorder and pervasive developmental disorders.
- This is resulting in the rise of severe burden in the society as there is an unavailability of treatment and potent drugs for Autism Spectrum disorder. The existing treatments increase the adverse effects like epileptic seizures, sleep issues without addressing the root cause of the disorder.

Significance of the Research:

- The researchers employ the usage of a compound called 6BIO that enables the restoration of neuronal functions to treat ASD/Intellectual Disability. This offers a better therapeutic value.
- The research showed that the 6BIO compound helps in the improvement of learning, memory, sociability and reduces epileptic seizures.
- Restoration of neural functions by the compound (6BIO), in the middle stage of brain development (between 7-11 years) has been observed in the study.
- Therefore, this research provides a better understanding and a proper line of treatment with enormous compassion to improving the lives of autistic children, and children with other disabilities who face social challenges. This study reveals the growing importance of rare disorders and their treatment.

Initiatives//Programmes//schemes

2. Global Innovation Summit of the Pharmaceutical Sector

» Mains: Developing India as a hub for the Pharmaceutical sector- Potential; Significance and challenges

Context:

 The Prime Minister of India inaugurated the Global Innovation Summit of the Pharmaceutical Sector and invited the global partners to pour in their ideas, innovate in India under the ambit of Make in India and Make for the World.

About the Summit:

- The pandemic has enhanced the prominence of the pharmaceutical sector of India that gathered global attention and trust and thereby made India the pharmacy of the world.
- India's pharmaceutical potential was not only witnessed in its production capacity at the toughest hours but also in its humanitarian outreach in sharing vaccines.
- Over 150 countries benefited from the life-saving medicines and medical equipment exported from India in the early phase of the pandemic.
 65 million doses of COVID-19 vaccines were exported to 100 countries.
- This summit paved the way in creating an ecosystem of innovation in the field of drug discovery and medical devices, thus bringing together all the global partners for empowered healthcare assuring wellness for all.

Diseases//mediaines in news

3. Molnupiravir

» Prelims: Molnupiravir; error catastrophe; Prodrug

Context:

 Molnupiravir tablet has been approved by the United Kingdom for use as an antiviral medicine against COVID-19.

Molnupiravir:

- Molnupiravir is the first antiviral medicine that can be taken as a pill rather than being injected or administered intravenously for the treatment of the COVID-19 disease.
- Molnupiravir was originally developed to treat influenza and works by inhibiting the replication of certain RNA viruses.

- Molnupiravir is a nucleoside analogue, which means it mimics some of the building blocks of RNA. It exerts its antiviral action through introduction of copying errors during viral RNA replication.
 - * Molnupiravir gets incorporated into the growing RNA strands. Such RNA strands become faulty blueprints for the next round of viral genomes and when enough mutations occur, the viral population collapses. Thus the drug prevents the SARS-CoV-2 virus RNA replication process through "error catastrophe".
- Molnupiravir is a pro-drug, which means that it needs to undergo processing in the body to become active.
- Some experts have raised safety concerns over the compound's mutagenic potential in human cells — the possibility that it could incorporate itself into human DNA.

Diseases in News

4. MDRF opens centre to study monogenic diabetes

» Prelims: Monogenic diabetes; Sanger Sequencing

Context:

 A Centre for Monogenic Diabetes has been established by the Madras Diabetes Research Foundation (MDRF).

Details

- Monogenic diabetes is a kind of diabetes caused by a single gene mutation.
- Monogenic diabetes comes in a variety of types.
- Maturity onset diabetes of the young (MODY) and neonatal diabetes are the two most frequent types.

Maturity Onset diabetes of the young (MODY)

- MODY affects children and adolescents. It also affects the diabetes history of three or more generations.
- MODY is divided into various kinds, several of which may be managed with tablets.
- Insulin injections can be stopped in these instances, and the pills frequently function better than insulin.

Sanger Sequencing

- Sanger sequencing will be used for diagnostics of Monogenic Diabetes.
- Sanger sequencing is a 'first generation' DNA sequencing technique that is widely used in clinical genomics.
- It enables clinicians to decipher the human DNA code and determine how certain sequence differences affect the likelihood of diseases like monogenic diabetes.

Diseases in news

5. Norovirus: Kerala asks people to be vigilant

» Prelims: Norovirus

Context:

Norovirus cases were confirmed in the Wayanad district of Kerala.

What is Norovirus?

- It causes gastrointestinal illness, including inflammation of the lining of the stomach and intestines, severe vomiting and diarrhoea.
- Norovirus does not significantly affect healthy people but it can be serious in young children, the elderly and people with comorbidities.

Spread

- Norovirus is easily transmitted through close contact with people who have been infected, or by touching contaminated surfaces.
- It can also be spread by eating food that has been prepared or handled by someone with the stomach bug.
- The virus is spread through the excrement of an infected person.

What are the symptoms of norovirus?

- Diarrhoea, abdominal pain, vomiting, nausea, a high temperature, headache and body aches are some of the common symptoms of norovirus.
- Experts say acute vomiting and diarrhoea can lead to dehydration and further complications.

What are the guidelines to prevent norovirus?

- The Kerala health ministry's guidelines say those infected with norovirus should rest at home, drink Oral Rehydration Solutions (ORS) and boiled water.
- People should wash their hands thoroughly with soap and water before eating and after using the toilet.
- The guidelines said that drinking water sources, wells and storage tanks must be chlorinated with bleaching powder. People must use chlorinated water for domestic use and drink only boiled water
- Fruits and vegetables should be thoroughly washed before eating. According to the guidelines, sea fish and shellfish such as crab and mussels must only be eaten after they are well cooked.
- It added that stale and exposed foods must be avoided.

Government Initiatives/Programmes/schemes

6. <u>More a private sector primer than health-care</u> <u>pathway</u>

- » Prelims: Ayushman Bharat Pradhan Mantri Jan ArogyaYojana (AB-PMJAY)
- » Mains: Analysis of the functioning of the scheme; Lacunae/concerns and recommendations to improve it.

Context:

- NITI Aayog had recently released a report titled 'Health Insurance for India's Missing Middle'.
- The report brings out the gaps in health insurance coverage across the Indian population and offers solutions to address the situation.

Missing middle

- According to the report, the missing middle predominantly constitutes the self-employed (agriculture and non-agriculture) informal sector in rural areas, and a broad array of occupations

 informal, semi-formal, and formal – in urban areas.
- The 'missing middle' are the people sandwiched between the poor and the affluent.

A look at numbers

- The report pointed out that Ayushman Bharat Pradhan Mantri Jan ArogyaYojana (AB-PMJAY) launched in 2018, and state government extension schemes, provide comprehensive hospitalisation cover to the bottom 50 per cent of the population – around 70 crore individuals.
- Around 20 per cent of the population 25 crore individuals – are covered through social health insurance, and private voluntary health insurance.
- The remaining 30 per cent of the population is devoid of health insurance.

Recommendation by NitiAayog

The report has recommended three models for increasing the health insurance coverage in the country.

- The first model focuses on increasing consumer awareness of health insurance.
- The second model is about "developing a modified, standardized health insurance product" like 'ArogyaSanjeevani', a standardised health insurance product launched by the Insurance Regulatory Development Authority of India (IRDAI) in 2020.
- The third model is a "slightly modified version" of the standardisedAarogyaSanjeevani insurance product.

- * The modified product should have lower waiting periods.
- * The model should expand governmentsubsidized health insurance through the PMJAY scheme to a wider set of beneficiaries.

A combination of the three models, phased in at different times, can ensure coverage for the missing middle population.

- In the short term, the focus should be on expanding private voluntary insurance through commercial insurers.
- In the medium-term, once the supply-side and utilization of PMJAY and Employees' State Insurance Corporation (ESIC) is strengthened, their infrastructure can be leveraged to allow voluntary contributions to a PMJAY plus product, or to ESIC's existing medical benefits.
- In the long-term, once the low-cost voluntary contributory health insurance market is developed, the expansion of PMJAY to the uncovered poorer segments of the missing middle should be considered.

Issue Area

 The report fails to meet the expectations of a credible pathway to UHC for India.

Concerns

- Governmentsubsidies, if any at all, will be reserved for the very poor within the 'missing middle' and only at a later stage of the development of voluntary contributory insurance.
- UHC cannot be achieved by relying predominantly on private sources of financing health care.
- Evidence also shows that in countries such as India, with a large informal sector, contributory health insurance is not the best way forward and can be beset with complications.
 - * Evenifthereare examples where contributory social health insurance has been successful there are significant contributions made by the Govt, with participation from the NGOs and some important guarantees for health.
- The free-of-cost government health insurance for the poor has little penetration in the country despite being implemented for nearly two decades.
 - * Therefore in all likelihood, the contributory private health insurance with modestly lower premiums, for a target group may not be successful.

Way forward

 To achieve UHC we need a strong and overarching role for the Government in health care, particularly in developing countries.

- We can also take inspiration from the Switzerland Model.
 - * Despite relying predominantly on private insurers and a competitive model of insurance, certain important checks and balances exist:
 - » benefits are etched in legislation;
 - » basic insurance is mandatory and notfor-profit;
 - » Cream-skimming and riskdiscrimination are prohibited.

Diseases/mediaines in News

7. <u>'Paxlovid may be huge advancement for all Coronaviruses'</u>

» Prelims: Anti-viral drug paxlovid

Context:

• Pfizer announced encouraging results of an interim analysis of the antiviral drug paxlovid.

What is Paxlovid?

- Paxlovid is an antiviral medication that is taken orally and inhibits the capacity of SARS-CoV-2 to proliferate in the body.
- Ritonavir is believed to enable Paxlovid to stay in the human body for longer periods of time, allowing the medicine to retain larger concentrations to aid in the fight against the virus.
- The medicine is predicted to lessen the requirement for hospitalisation in COVID-19 patients.
- Paxlovid is being developed to treat nonhospitalized, symptomatic people with COVID-19 who are at high risk of developing severe disease that might lead to hospitalisation or death.
- These drugs will especially matter for those people in whom
 - * (i) an immune response to infection or vaccination is not mounted because of immunocompromise and
 - * (ii) for infection in the unvaccinated or breakthrough infection in the vaccinated.

Terminologies in News

8. Won't add to vaccine hesitancy: SC

» Mains: Vaccine Hesitancy- Challenges and counter strategies

Context:

 The Supreme Court made it clear that it will not do anything to bring on COVID-19 vaccine hesitancy.

What is Vaccine Hesitancy?

- Vaccine hesitation is defined by the World Health Organization (WHO) as "a delay in accepting or refusing immunisation notwithstanding the availability of vaccination services."
- Aspects of vaccination hesitancy:
 - * Despite the availability of vaccination services, there is a delay in accepting, or refusing immunizations.
 - * Is complicated and context-dependent, shifting according to time, place, and vaccination.
 - * Complacency, convenience, and confidence are all elements that impact this.

Vaccine Hesitancy Challenge For India

- Vaccine hesitancy has hampered a number of government programmes, including polio eradication, even before the Covid epidemic.
- For a number of causes, including a lack of health knowledge, it has been more frequent in rural regions.
- In India, misdirected scepticism and false information regarding vaccinations pose a significant threat to the pandemic's abolition and achievement of herd immunity.
- Due to a lack of information, a bigger share of the populace remains concerned about them.
- High vaccine hesitancy is fueled by a lack of trust in the safety and efficacy of newly developed vaccines, fear of side effects, rumours about infertility and death after receiving the vaccine, as well as the inconvenience of registration/ booking slots, low-risk perception from Covid-19, and the absence of incentives for rural and urban poor, among other factors.

Solutions to Overcome Vaccine Hesitancy in India:

- Need for Targeted Strategy: A targeted strategy focused on the needs and concerns of people, groups, and communities will be necessary to overcome Covid-19 vaccine hesitancy.
- Providing incentives and timely information:
 - * Local influencers, religious leaders, traditional healers, local NGOs, local physicians, panchayat heads, and others may play a role in increasing vaccination adoption.
 - * Vaccination sites might be set up in locations that people trust, such as temples and mosques, Election Commission offices, and so on.
- Raising Awareness through campaigns: There should be public campaigns like "I am pleased to be vaccinated" which can raise awareness and generate momentum for vaccines in low-uptake areas.

- Increasing Vaccination through Nationalism: Indelible ink, which is commonly used in elections, can be put to the fingertips of those who have been vaccinated. A programme like this may instil a sense of nationalism and inspire participation.
- · Compensating for Vaccination:
 - * Small incentives (1 kg rice and pulses, 1 litre cooking oil, etc.) can be given to compensate people for the time and money they spend getting the vaccine.
 - * Given that a large portion of the rural population works as daily wagers and is concerned about missing a day's pay as a result of vaccination, employees may be paid a one-day MGNREGA payment in exchange for getting the injection.
- Behavioural Change: The behaviour innovations such as announcing prize money (lucky draw) among those vaccinated in selected low-uptake centres can help to increase vaccination rates

Terminologies in News

9. Omicron new variant of concern

- » Prelims: Omicron; Mutations in micro-organisms; spike gene target failure
- » Mains: Concerns associated with the new variant; Strategy to counter the threat posed by it.

Context:

 Omicron, a new coronavirus variant, was recently recognised as a "variant of concern" by the World Health Organization (WHO).

What is Omicron?

- The number of new cases in South Africa has increased fourfold, corresponding with the introduction of the B.1.1.529 variant.
- The B.1.1.529 variant discovered in South Africa has been categorised as a SARS-CoV-2 "variant of concern" by the World Health Organization (WHO).
- The Omicron variant has a large number of mutations compared to other prevalent variants circulating across the world. This includes 32 mutations in the spike protein.

What is Variant of Concern (VOC)?

- There is evidence of increased transmissibility, more severe sickness, and a considerable reduction in neutralisation by antibodies developed from previous infection or immunisation for this variety.
- Besides that, it might be the result of decreased treatment or vaccination efficiency, or diagnostic detection failures.

Concerns:

- Given the fact that many of the mutations have been noticed in the receptor-binding domain of the spike protein, there are concerns that these mutations may cause increased transmission as well as lead to vaccine escape and breakthrough infections in already vaccinated individuals.
- From a diagnostic point of view, some of the mutations in the spike protein cause primers used in some of the RT-PCR kits to not function as expected. This leads To Spike Gene Target Failure (SGTF) which would make it difficult to diagnose COVID-19.

Way forward:

- Enhanced surveillance and genome sequencing of the variant should be undertaken to detect and track the prevalence of the Omicron variant.
- Rapid sharing of genome sequences of the virus and the epidemiological data linked with it should be made publicly available to help in developing a better understanding of the variant.
- Existing public health and social measures need to be strengthened to control and prevent transmission. Vaccination coverage has to be enhanced to slow down the emergence of any future variants.

Issues Relating to Health

10. <u>Per capita out-of-pocket health expenditure sees</u> decline: report

» Mains: Concerns associated with high levels of Out-of-pocket expenditure; Need for increasing government expenditure in the health sector

Context:

- Fifth edition of the National Health Accounts (NHA) estimates for India for 2017-18 has been released by Health Secretary.
 - * The NHA report is produced by National Health Systems Resource Centre.

Details:

Reduced Out-of-pocket expenditure:

- Out-of-pocket expenditure (OOPE) as a share of total health expenditure and the per capita OOPE has come down.
 - * As a share of total health expenditure, the OOPE has come down to 48.8% in 2017-18 from 64.2% in 2013-14.
- The decrease in OOPE can be attributed to the increase in utilisation and reduction in cost of services in Government health facilities and also the increase in social security expenditure on health in the form of health insurance programmeand medical reimbursements made to Government employees.

Increased government expenditure on health:

- The report notes an increase in the share of Government health expenditure in the total GDP of the country. It has increased from 1.15% in 2013-14 to 1.35% in 2017-18. This has helped increase the per capita Government health expenditure as well.
- Additionally, the share of Government Health Expenditure in total health expenditure has also increased over time. From being 28.6% in 2013-14, it has now increased to 40.8% in 2017-18.

Issues relating to development and management of Social Sector/Services relating to Health

11. National Family Health Survey

- » Prelims: Data on NFHS-5
- » Mains: Anaemia; Measures taken by Government; Health sector reforms

Context:

 Results of the National Family Health Survey (NFHS)-5 were made public.

National Family Health Survey

- The National Family Health Survey (NFHS) is a large-scale, multi-round survey conducted in a representative sample of households throughout India. Compared to the decadal Census, the NFHS surveys are smaller in terms of surveyed households.
- The survey provides state and national information for India on fertility, infant and child mortality, the practice of family planning, maternal and child health, reproductive health, nutrition, anaemia, utilization and quality of health and family planning services.
- NFHS has had two specific goals: a) to provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues.

Improvements:

Decreasing fertility rate:

- As per the latest National Family Health Survey, India's total fertility rate has slipped below the replacement level for the first time.
 - * As per the NFHS 5, India has hit a Total Fertility Rate (TFR) of 2.0. This marks a decrease from the 2.2 TFR in the NFHS-4.
 - * The urban TFR is 1.6 and rural 2.1.

- A TFR of about 2.1 children per woman is called Replacement-Level Fertility.
 - * The replacement-level fertility is the fertility rate that keeps a population stable over time by balancing births with deaths. If replacement level fertility is sustained over a sufficiently long period, each generation will exactly replace itself.
 - * The replacement-level fertility rate is considered essential to keep population growth in check, and has been linked to better education of women, less unmet need for family planning and reduced child mortality.
- This also marks a significant success for India's family-planning programme based on noncoercive measures of population control like the adoption of modern contraceptive methods.
- Despite the decreasing TFR, India is still poised to be the most populous country in the world, with the current projection by the United Nations population division forecasting that India's population will peak at 1.6 billion to 1.8 billion from 2040 to 2050.
 - * The Union government's report projects India overtaking China as the world's most populous country around 2031.

Institutional deliveries:

- The NFHS-5 notes an increase in the proportion of institutional births increased from 78.9% in NFHS-4 to the current level of 88.6%.
- This development augurs well for efforts to decrease the maternal mortality rate.
- The proportion of children (12-23 months) who were fully vaccinated and children under six months who were exclusively breastfed also showed a sharp improvement.

Concerns

Limited improvements in child nutrition:

- Despite some degree of improvement in childhood nutrition parameters, the gains are limited as compared to National Family Health Survey (NFHS) 4.
- Stunting and wasting in children have only dropped by a maximum of three percentage points, as compared to NFHS 4.

Increasing anaemia incidence:

 The proportion of anaemic children (6-59 months) has increased. Also, anaemia incidence in women and men has also increased as compared to the previous survey.

Anaemia:

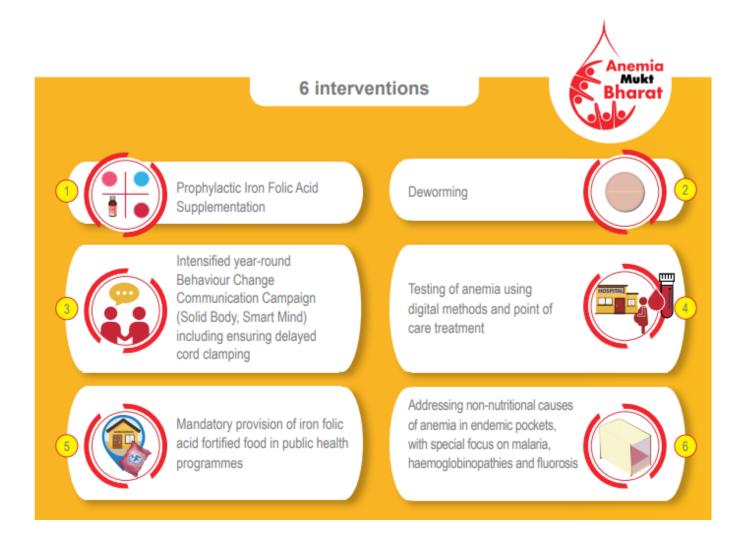
- Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Anaemia leads to reduced oxygen flow to the body's organs.
- Anaemia is commonly characterised by low levels of iron in the body.
- Anaemia can also be due to a lack of adequate and quality nutrition and inadequate intake of fresh fruits and vegetables as well as a deficiency of vitamin B-12.

Other important observations:

 Overweight (higher Body Mass Index than ideal) women and men (15-49) increased by around 4 percentage points. Abnormal BMIs are linked to an increase in obesity and other noncommunicable diseases.

Governmental initiatives:

- The reduction of anaemia is one of the important objectives of the POSHAN Abhiyaan. Complying with the targets of POSHAN Abhiyaan and National Nutrition Strategy set by NITI Aayog, the Anaemia Mukt Bharat strategy has been designed to reduce the prevalence of anaemia by 3 percentage points per year among children, adolescents and women in the reproductive age group (15–49 years), between the year 2018 and 2022.
- Anaemia Mukt Bharat (Anaemia-free India) aims to reduce the proportion of anaemia among children to 40%, pregnant women to 32% and lactating women to 40% by 2022.



Conclusion:

- The evidence is overwhelming that health should be a priority for all political parties and all levels of government, national and state. The survey reveals significant disparities in health outcomes.
- An action plan to enhance India's health must be comprehensive, resolute in its commitment, and well-funded.

SOCIAL ISSUES

Covernmental Initiatives

1. Nutrition Smart Villages

» Mains: Measures taken to improve the nutritional status in India

Context:

 The programme on 'Nutrition Smart Village' has been initiated to strengthen India's fight against malnutrition. This will also take the 'PoshanAbhiyan'flagship scheme towards further progress. It aims to improve the nutritional status of 75 villages across the country.

Objectives:

- The major purpose of this programme is to make the villages malnutrition free. Concepts such as Nutri-village/Nutri-food/ Nutri-Thali/Nutri-diet are important areas of focus.
- To create awareness about nutrition and behavioural change by educating farm women and school children in rural areas.
- The programme offers a platform for the exchange of traditional methods to fight malnutrition.
- To implement nutrition-sensitive agriculture by promoting homestead agriculture and nutrigarden and making use of technology.

This initiative will lead to the betterment of the overall nutritional profile of women and children in the rural areas who are vulnerable to the implications of malnutrition.

Covernmental initiatives

2. SafaiMitraSuraksha Challenge

» Prelims: About Safai Mitra Suraksha Challenge;

Context:

 The Ministry of Housing and Urban Development launched a week-long awareness campaign on the SafaiMitraSuraksha Challenge as a part of 'World Toilet Day' celebrations.

About the Campaign

- This campaign will witness the participation of 246 cities across the country to encourage them to build proper cleaning mechanisms for sewage treatment plants. This will ensure the safety of manual scavengers and prevent deaths.
- An awareness will be created to eliminate the practice of hazardous cleaning of sewers and

- septic tanks. The Ministry of Housing and Urban Development will flag off the field assessment of the SafaiMitraSuraksha challenge.
- There will be a range of awards and incentives across the country for the top performing states/ UTs.
- The Ministry also designed standard uniforms for different categories of sanitation workers in association with the National Institutes of Fashion Technology.
- Skill Development Trainings of SafaiMitras have been conducted which include theoretical and practical sessions by trainers of the Sector skills Council for Green Jobs.

Covernmental Initiatives

3. Mitigating hunger during a pandemic

- » Prelims: Pradhan Mantri Garib Kalyan Anna Yojana
- » Mains: Right to food; Protecting the right of all human beings to live in dignity

Context:

- The Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) comes to an end in November 2021.
- Food Secretary has stated that there were no plans to extend the scheme beyond November, as the government feels that the economy is reviving and there is no further need for the support scheme.

Pradhan Mantri Garib Kalyan Anna Yojana:

- The Pradhan MantriGaribKalyan Anna Yojana was started as part of the Centre's initial COVID-19 relief package announced at the onset of the first wave of the COVID-19 pandemic in March 2020.
- The scheme provides 5 kg of rice or wheat every month to be distributed free of cost to each of the 80-crore beneficiaries of the National Food Security Act (NFSA). This is over and above the 5 kg already provided to ration card holders at a subsidised rate.
- The scheme only provided grains for those families who held ration cards.
- Initially, one kg of pulses was also provided under the scheme, which was later discontinued.
- The scheme was initially meant to run from April to June 2020, but has since been extended.

 Recognizing the difficulty being faced by migrant workers and people without ration cards, in May and June 2020, the Centre allocated 8 lakh tonnes of foodgrains to be distributed by the States under the AtmaNirbhar Bharat scheme for stranded migrants and others without ration cards.

Arguments for extension of PMGKAY:

- The Right to Food Campaign points out the record levels of unemployment and widespread hunger among vulnerable communities and their dire need for support from the state.
- They also point out that the Union Government has sufficient grain stocks to extend the scheme.
 - * In the last few years, foodgrains have been produced at record levels and the government procurement from farmers at minimum support prices has also been on the rise implying sufficient food stocks with the Food Corporation of India (FCI).
- They also point out to the SC judgment in the suomoto case on the plight of migrant workers, where the SC had directed the Centre and the States to provide foodgrains to mitigate the impact of the pandemic.

Demand by the food rights activists:

- The Right to Food Campaign has called on the government to extend PMGKAY for another six months and also universalise the Public Distribution System (PDS) itself.
- They have also suggested that pulses and cooking oils be added to the monthly entitlements.

Sodal issues - Related to Women

4. Creating safe digital spaces

» Mains: Cyberbullying; eliminating online violence

<u>International Day against Violence and Bullying at</u> School

- School violence and bullying including cyberbullying is widespread and affects a significant number of children and adolescents.
 - * It is infringement of children's right to education and to health and well-being
- To raise awareness among students, parents, members of the school community, education authorities and others about the problem of online violence and cyberbullying, UNESCO Member States declared the first Thursday of November as the International Day against Violence and Bullying at School

What is cyberbullying?

 Cyberbullying is bullying with the use of digital technologies.

- It can take place on social media, messaging platforms, gaming platforms and mobile phones.
- It is repeated behaviour, aimed at scaring, angering or shaming those who are targeted

Examples include:

- spreading lies about or posting embarrassing photos of someone on social media
- sending hurtful messages or threats via messaging platforms
- Impersonating someone and sending mean messages to others on their behalf.

A look at numbers

India

- In India, an estimated 71 million children aged 5-11 years access the Internet on the devices of their family members, constituting about 14% of the country's active Internet user base of over 500 million.
- It should also be noted that two-thirds of Internet users in India are in the age group of 12-29 years.

Worldwide

- A 2020 study by Plan International, involving 14,000 women aged 15-25 from across 22 countries, revealed that 58% of girls in the Asia-Pacific region reported online harassment.
- Globally, of the girls who were harassed, 14% who self-identified as having a disability and 37% who identified themselves as from an ethnic minority said they get harassed because of it.

Issue Area

- Covid-19 had resulted in closure of Schools and offline classes, leading to students attending classes on the online mode. This meant unprecedented rise in unsupervised screen time for children and young people
- Reports have now indicated that children were exposed to online violence, cyberbullying and instances of child sexual exploitation

Negative impact

Online violence including cyber bullying has a negative effect on academic achievement, mental health, and quality of life of students.

- Children who are frequently bullied are nearly three times as likely to feel left out at school as those who are not.
- They are also twice as likely to miss out on school and have a higher tendency to leave formal education after finishing secondary school.

Therefore, cyberbullying prevention interventions should aim at tackling all types of bullying and victimisation experiences at the same time, as opposed to each in silo.

Tackling the menace

- Efforts must be made to explain children about cyberbullying by giving them examples in a way they understand so that they can protect themselves from its different forms, whether perpetrated by peers or adults.
- Schools should establish a school safety committee that will control and discuss the problems of online bullying.
- Teachers should teach students how to use digital media in respectful and safe ways.
- Information booklet brought out by UNESCO in partnership with NCERT on Safe Online Learning in Times of COVID-19 can be a useful reference for schools to start with.
 - * It supports the creation of safe digital spaces and addresses the nuances of security.
- Similarly, to prevent the adverse effect of online gaming and the psycho-emotional stress that children could be undergoing, the Department of School Education and Literacy has circulated exhaustive guidelines to raise children and parental awareness.

Conclusion

 Cyber bullying may take place in a virtual world but has real impact on children's health. Therefore to ensure access to safe, inclusive and health-promoting learning environments for all children we must redouble our efforts to tackle this menace

Poverty and Developmental Issues

5. <u>SC gives 3 weeks to Govt. to frame policy on community kitchens</u>

» Mains: Role of community kitchens in combating hunger

Context:

- While hearing a petition on the issue of hunger and starvation deaths in India, the Supreme Court has asked the Union government to come up with a comprehensive policy framework for the establishment of community kitchens.
 - * The petition urges the government to set up community kitchens across the country to feed the poor and the hungry.
 - * The petition also urges for the creation of a national food grid by the Government.

Background:

Undernourishment:

 Food and Agriculture Report of 2018 states that India houses 195.9 million of the 821 million undernourished people in the world, accounting for approximately 24% of the world's hungry.

- The report also notes that the prevalence of undernourishment in India is 14.8% which is higher than both the global and Asian average.
- Undernourishment is a major cause of stunting and wasting in children and anaemia in women.
 This acts as a major impediment to the child's growth and development and the right of the child to self-realization and fulfilment.
- Malnutrition adversely impacts the health of the person and is found to cause malnutrition deaths in children and adults in the country.

Starvation deaths:

- There are no official numbers available on the number of starvation deaths in India. But starvation deaths continue to be reported.
- The COVID-19 pandemic with its adverse economic and social impacts has only worsened the situation in terms of starvation and associated deaths.
- Starvation deaths go against the right to life and dignity of individuals.

Details:

- The Supreme Court has asked the Union government to come up with a comprehensive policy framework for the establishment of community kitchens. It said that such a new approach could help fight the issue of hunger in India.
- The Supreme Court pointed out that one of the main jobs of a welfare state was to ensure adequate food to people to avoid undernourishment and starvation deaths.

Conclusion

- Various states have undertaken community kitchen initiatives to tackle the hunger and starvation issue. Some of them are as follows:
 - * Tamil Nadu: AmmaUnavagam
 - * Rajasthan: Annapurna Rasoi
 - * Karnataka: Indira Canteen
 - * Delhi: AamAadmi Canteen
 - * Andhra Pradesh: Anna Canteen
 - * Jharkhand: Mukhyamantri Dal Bhat
 - * Odisha: Ahaar Centre

Sodal issues - Related to Taibals

6. The path to righting historical wrongs

- » Prelims: About Irula Tribe; Mungekar Committee; Dhebar Commission
- » Mains: Police Excess; suffering of Adivasi communities

Irula tribe

- They are a Dravidian ethnic group that live along the borders of Tamil Nadu and Kerala.
- They are specialists in traditional herbal medicine and healing practices.
- They are known for capturing snakes, especially venomous ones.
- Today they primarily migrate to different places to work in brick kilns, rice mills, etc.
- They speak Irula, a language that belongs to the Dravidian family that is closely related to Tamil.

Issue Area

 Like many Adivasi groups in India, the Irulas also continue to suffer the stigma of criminality due to the Habitual Offenders Act, 1952, which replaced the colonial Criminal Tribes Act, 1871.

Criminal Tribes Act

- It was passed by the Governor-General of India under British rule in 1871.
- Under this law members of nomadic communities were automatically classified as having a criminal occupation by virtue of their very existence.
- This Statute set a precedent that any local government could classify any tribe as 'criminal' if it felt "the tribe, gang or class of persons is addicted to the systematic commission of non-bailable offences."
- After independence, the Indian government replaced this Act with the Habitual Offenders Act, 1952.

Habitual Offenders Act

 Instead of improving the lives of tribes, the new Act re-stigmatised the marginalised tribes.

Recommendation

- The National Human Rights Commission has recommended the repeal of the Habitual Offenders Act, 1952.
- In 2007, the UN's Committee on the Elimination of Racial Discrimination said: "The so-called de-notified and nomadic people which are listed for their alleged 'criminal tendencies' under the former Criminal Tribes Act (1871), continue to be stigmatised under the Habitual Offenders...," and asked India to repeal the

Habitual Offenders Act and rehabilitate the denotified and nomadic tribes.

Since this law is a "crude colonial construct", it should be repealed at the earliest

Other issues faced by the tribes

- The members of such tribes become easy replacements for criminals whom the police fail to apprehend.
- Many people remain outside the reach of affirmative action of the State as they constantly travel and do not possess any residential proof.
- Resource-rich tribal areas are encroached upon, the tribes are displaced and the promise of rehabilitation has also failed.
- The "development-induced displacement" trajectory adopted by the country has often been at the expense of the Scheduled Tribes (STs), either by way of exclusion or forced "inclusion" in a "mainstream" that is completely alien to their "world view" through what the Xaxa Committee in 2014 had called the "ashramisation" of the tribal.

Constitutional Safeguards for Scheduled Tribes

The makers of the Constitution wanted to prevent discrimination against people belonging to Scheduled Tribes, protect their rights and provide a certain degree of autonomy to them to have a say in their development pursuit.

 Accordingly, the Fifth and Sixth Schedules, which are governed by Articles 244 (1) and (2) of the Constitution, provides certain rights to tribes in the northeast and across India.

Fifth Schedule

- The Fifth Schedule had been also termed by the Mungekar Committee in 2009 for tribal development as a "Constitution within Constitution". It allows for the creation of Scheduled Areas by the President of India.
- There are no fixed criteria for the creation of Scheduled Areas. However, factors considered by the Dhebar Commission (1960-61) has been followed. This includes:
 - * preponderance of the tribes in the population;
 - * compact and reasonable size;
 - * underdeveloped nature of the area; and
 - * Marked disparity in the economic standards of the people.

Way forward

 Compact tribal areas of reasonable size, constituting villages with no less than 50% tribal population, can be identified in Community Development (CD) blocks with a significant tribal population to demarcate new administrative areas, which can then be brought under the purview of the Fifth Schedule by declaring them Scheduled Areas.

- * This would be only fulfilling a commitment made in 1976 by the Government of India and reiterated by the Mungekar Committee.
- Apart from the Scheduled Areas, villages, where STs are in minority but still in sizeable numbers, should be brought under already existing Integrated Tribal Development Project (ITDP) areas, which are being governed in Tamil Nadu with the advice of the Tribes Advisory Council (TAC).
- The TAC is an advisory body and thee-fourth of its members must be from ST communities.

Conclusion

- The Government should show the political will and set aside its electoral interest to create a selfgoverned path for tribal development.
 - * It should be complemented with clear policies and a plan for tribal development reflected in the yearly Tribal Sub-Plan (TSP).
 - * The formulation of such a plan must be drafted by taking the viewpoints of representatives of different tribes.

Sodal issues - Related to Taibals

7. <u>Post NEP, Odisha all set to teach in tribal languages</u>

- » Prelims: Samhati Project;
- » Mains: Importance of teaching students in indigenous languages; educational needs of tribal children

Context:

 Odisha government has decided to teach in indigenous languages in schools on the basis of the New Education Policy.

Details:

- Odisha's ten-year experience in multilingual education may be useful in meeting the challenge posed by the new National Education Policy to affect education in the tribal language.
- The 'Samhati' project aims to alleviate the linguistic barriers that tribal pupils confront in early grades or elementary school.

Tribal Education in India

Background

- Tribal education in India focuses on empowering and creating confidence and bravery in tribal students to tackle the obstacles in their daily lives with the aid of education.
- In India, tribal people are marginalised, poor, and deprived in some way. They are yet to enjoy the benefits of modernisation and technological advancement.

 Only through education, they will be able to break free from centuries of tyranny and enjoy the benefits of socio-economic prosperity.

Constitutional Safeguards:

- Article 29(1): This provides all citizen groups that reside in India having a distinct culture, language, and script, the right to conserve their culture and language.
- Article 46 of the Indian Constitution lays down that the state is responsible for promoting the educational and economic interests of the poorer parts of the population, particularly the scheduled castes and tribes.

Government Measures for Tribal Education:-

- Ministry of Tribal Affairs: The Ministry of Tribal Affairs was established in order to guarantee a coordinated and planned approach to the development of scheduled tribes.
- Ashram Schools: Tribal children's educational requirements are mostly met by ashram schools, which are residential institutions. These institutions provide boarding and accommodation for students from native communities.
- Eklavya Model Residential Schools: 197 Eklavya Model Residential Schools, modelled after Kasturba Gandhi Balika Vidyalayas (KGBVs) and Navodaya Vidyalayas, have also been established by the Ministry of Tribal Affairs.

Different Aspects of Tribal Education

- Teacher-Student Relationship: One of the most important variables in promoting meaningful learning in classrooms is a positive relationship between indigenous students and their instructors.
- Potential of Youth: In tribal societies, development should be centred on educational programmes that encourage tribal youngsters to remain immersed in their own culture.
- Tribal Leadership: Working with tribal leaders is essential for ensuring their active involvement and cooperation in educational awareness campaigns.
- The role of the United Nations: United Nations Children's Fund (UNICEF) has been promoting quality education and employability amongst marginalised children.

What are the challenges to Tribal Education?

- The majority of ashram schools do not meet minimum requirements.
- There is little consistency in ashram school management, primary school coverage, or infrastructure quality between states.
- Inadequate infrastructure resulted in shortages, neglect, and, in some cases, abuse by school employees.

- Children, particularly females, are in danger due to a lack of electricity and/or lighting, as well as the distance between usable restrooms and residential areas.
- Years of geographical isolation and cultural variations have resulted in substantial disparities in communication, learning, and interaction styles, as well as gaps in contextual information.

Sodal lisus - Related to Children

8. Error corrected

- » Prelims: Important provisions of POCSO act
- » Mains: Judicial ruling to Protect minors from sexual offences

Background

- A Single Judge of the Bombay High Court's Nagpur Bench created an uproar by acquitting a man under the POCSO Act and holding that an act against a minor would amount to groping or sexual assault only if there was "skin-to-skin" contact.
- The High Court had concluded that mere touching or pressing of a clothed body of a child did not amount to sexual assault.

Context

 The Supreme Court has quashed a Bombay High Court decision to acquit a man charged with assault under the Protection of Children from Sexual Offences Act (POCSO) solely on the grounds that he groped the child over her clothes without 'skin-to-skin' contact.

Section 7 of POCSO

Sexual assault.

 "Whoever with sexual intent touches the vagina, penis, anus or breast of the child or makes the child touch the vagina, penis, anus or breast of such person or any other person, or does any other act with sexual intent which involves physical contact without penetration is said to commit sexual assault".

SC observation

- The most important ingredient in Section 7 was the sexual intent of the offender and not skin-toskin contact.
- The court, while setting aside the High Court decision, confirmed the guilt of the offender in the case and sentenced him to three years of rigorous imprisonment subject to the period he has already undergone.

Conclusion

 Therefore, the act of touching the sexual part of the body or any other act involving physical contact, if done with "sexual intent" would amount to "Sexual assault" within the meaning of Section 7 of the POCSO Act.

Poverty and developmental issues

9. A vital cog in Bongaigaon's response to malnutrition

» Mains: Nutrition Challenges in India; Project Sampoorna

Context:

 Project Sampoorna was successfully implemented in the Bongaigaon district of Assam

What is Project Sampoorna?

- Project Sampoorna was developed by the Bongaigaon District Administration to combat malnutrition with the goal of empowering mothers and raising healthy children.
- Under the initiative, 2 numbers of 200 ml milk packets and 3 eggs were provided weekly to the district's total of 2500 malnourished children.
- In addition, 140 mothers of malnourished children were given two large and four little chicks to help them maintain their families. This was gradually passed on to the remaining mothers.

Significance of Project Sampoorna:

- The Sampoorna project has resulted in a reduction in child malnutrition with an almost minimal financial commitment.
- Sampoorna is in line with the United Nations' Sustainable Development Goals, as well as those laid out by UN Secretary General António Guterres at the Food Systems Summit.
- It focuses on the need for resilient food systems and social protection.

Other Measures taken by Bongaigaon District to Reduce Malnutrition:

- POSHAN Abhiyaan: Poshan Abhiyaan, also known as the National Nutrition Mission (NNM), was launched in 2018 with the aim of tackling the malnutrition problem prevalent in India.
- Project Saubhagya: It was designed to reduce the maternal mortality rate and infant mortality rate of the district.

<u>Challenges in addressing Child Nutrition:</u>

- 1. Health Concerns: The highest risk factor for a high-risk pregnancy is anaemia which is usually nutritional.
- 2. Vicious Cycle of Malnutrition: A malnourished child grows into an unhealthy adolescent, and then an anaemic pregnant young woman gives birth to an asphyxiated low birth weight baby. This becomes a vicious cycle.
- 3. Social Evils: The child struggles further for nutrition. The major hindrance to the project was patriarchy which affects the mother's decision making powers indirectly affecting the child's nutrition levels also.

4. Structural Challenges: District Nutritional Rehabilitation Centres (NRCs) typically contain up to 20 beds, and taking in 200 children with severe acute malnutrition on a monthly basis is not feasible. After being discharged and if not properly managed, the treated youngster may revert to a Severe Acute Malnutrition (SAM) condition.

EDUCATION

Issues relating to development and management of Sodal Sector/Services relating to Health, Education, Human Resources

1. Annual Status of Education Report 2021

- » Prelims: Annual Status of Education Report
- » Mains: COVID-19 pandemic's impact on school education

Context:

- Annual Status of Education Report (ASER) 2021 was released by Pratham, the educational NGO.
 - * This is an annual survey that aims to provide reliable annual estimates of children's schooling status and basic learning levels in India at the elementary level.

Details:

- Due to the pandemic, ASER's 16th annual report was based on a phone survey assessing enrolment in schools and tuition classes, and access to devices and learning resources, rather than the organisation's usual face-to-face survey which assesses learning outcomes and children's competencies in reading and arithmetic skills.
- Some of the important observations made in the report are as follows:

Non-enrolled children:

- The percentage of rural children who were not enrolled in school doubled during the pandemic. The proportion of children currently not enrolled in school is higher in 2020 and 2021 as compared to 2018. Between 2020 and 2021 the numbers are relatively unchanged.
 - * In 2018, only 2.5% of children were not enrolled in school. However, in 2021 it is at 4.6%.
- This might be indicative of higher school dropouts or even a lower number of new enrolments.

Increase in proportion of children enrolled in government schools:

- Overall, there is an increase in the proportion of children enrolled in government schools between 2018 and 2021.
 - * Government school enrolment spiked significantly from 64.3% in 2018 to 70.3% in 2021, while private school enrolment dropped from 32.5% to 24.4% over the same period.

- * The incidence of private schooling in India had been rising overtime. From 2006 to 2014 there was a steady increase. After plateauing around 30% for a few years, there has been a significant decline in the pandemic years.
- The shift to government school enrolment could be a result of financial distress and lowerincome levels during the pandemic, the closure of affordable private schools and the movement of migrants to rural areas.

Increase in the proportion of children taking paid tuition classes:

- There has been a big increase in the proportion of children taking tuition in the pandemic period across grades and types of school. By 2021, close to 40% of children attend tuition classes.
- This is indicative of the disruption caused to classroom teaching or the inability to adapt to online education.
- Students, especially those from poor families, are dependent more than ever on private tuition, the survey found. This development adds to the cost of education of children which could put an extra burden on poor families.

Access to learning material:

 Although the access to relevant learning material like textbooks has increased compared to the 2020 only a third of those surveyed had access to any other learning resources or support.

Access to online education:

- The pandemic induced lockdowns pushed schools to online education mode. However, smartphone access has been a challenge in the delivery of online education.
- Although the availability of smartphones in households has almost doubled since 2018, having a smartphone at home however does not automatically translate to children having access to the device.
 - * All India 67.6% of children have a smartphone at home. But even in such households, 1% of children still have no access to smartphones.
- There is a marked difference among the different states with respect to access to online education.
 91% of students from Kerala and almost 80% from Himachal Pradesh had online education, but only 10% from Bihar and 13% from West Bengal had.

Wide gap In only five out of 26 States, more than half of the enrolled children did online learning activities at home in 2021 in rural areas. The share was less than 20% in five States % of children who did online learning activities in rural areas Uttar Pradesh 13.9 0-20 21-40 41-60 61-80 Maharashtra 45.5 <---West Bengal Karnataka 13.3 34.1 <-Tamil Nadu Kerala 91 <

 This stark digital divide carries the risk of severely affecting the learning abilities of primary grade students.

Severe disruption at the entry level:

- Over a third of children enrolled in Classes 1 and 2 have never attended school in person.
- These students who are entering the school system after the pandemic will require time to settle down, get ready for the formal education system. This is essential as these students do not even have the experience of pre-primary schools, or anganwadis.
- From having no experience of pre-primary class to the lack of access to digital devices, the pandemic has left the youngest entrants in India's formal education system particularly vulnerable, and not addressing their specific needs can have grave consequences on the educational process of these children.

Impact on educational outcomes:

- Notably, enrolment in schools does not necessarily mean that learning took place.
- 4 per cent of teachers have flagged the problem of children being "unable to catch up" as one of their biggest challenges — which is also a warning that their learning outcomes are set to be affected.
- While the ASER survey does not shed light on learning outcomes, a sample assessment done by it has found steep drops in foundational skills, especially in lower primary grades.
- Even the recent National Achievement Survey (NAS) of the central government has noted a drop in the learning outcomes of students.

Recommendations:

- The report's findings confirm the COVID-19 pandemic's impact on school education.
- The habit of going to school, sitting in a classroom, and teaching in a classroom has been disrupted significantly. Such disruption cannot be repaired simply by reopening schools. A "business as usual" approach cannot be sufficient. There need to be some focused actions to address this severe disruption.
- Some of the major interventions needed are as follows:
 - * Given the indicators of the adverse impact on the learning outcome of students especially in lower primary grades, there needs to be special attention to children of primary classes as they return to, or enter schools for the first time. Specific attention is needed to help make up learning losses, especially in the lowest classes.
 - * Given the increased enrolment in government schools, it is important to ensure that government schools and teachers are equipped and given the necessary resources for this surge in enrolment.
 - * Given the stark differences in access to digital device based online education, these factors have to be taken into account as future plans are made for remote learning or the use of digital content and devices. Also to address the issue of access to digital devices, there is a need for digital device libraries, so all children can have access to them.

DISASTER MANAGEMENT

Disaster Management

1. <u>World Congress on Disaster Management</u> (WCDM)

- » Mains: Disaster management- Risk management strategy, building resilience.
- It is a unique initiative of Disaster Management Initiatives and Convergence Society (DMICS) to bring researchers, policy makers and practitioners from around the world in the same platform to discuss various challenging issues of disaster risk management.
- The mission of WCDM is to promote interaction of science, policy and practices to enhance understanding of risks and advance actions for reducing risks and building resilience to disasters.
- WCDM has emerged as the largest global conference on disaster management outside the UN system.

Context:

 The 5th World Congress on Disaster Management was organised by DMICS with a central theme of Technology, Finance and Capacity for Building Resilience to Disasters in the contexts of COVID-19.

Background:

 The first World Congress on Disaster Management was organised in the year 2008 in Hyderabad with an intention to build a strong network of tackling the disasters with the involvement of its various stakeholders across the scientific community and government.

HISTORY

Modern Indian History- Important Personalities

1. Acharya Kripalani

- » Prelims: Jivatram Bhagwandas Kripalani- pre and post independence contributions
- Kripalani was born in Hyderabad in the Sindh region of present-day Pakistan on 11 November 1888 in an upper-middle-class family. He was educated at Pune's Fergusson College.
- He worked as a teacher for a while but later quit that job to join the freedom movement of the country. He was greatly inspired by the principles of Mahatma Gandhi.
- He took part in the non-cooperation movement of the 1920s. He also joined Gandhi's ashrams in Maharashtra and Gujarat to work in the fields of education and social reform.
- He actively took part in various movements like the civil disobedience movement, Quit India Movement and so on. He was also imprisoned many times.
- From 1920 to 1927, he worked as the principal of Gujarat Vidyapeeth which was an educational institution set up by Gandhi. There, he earned the epithet 'Acharya'.
- He was elected the General Secretary of the Indian National Congress (INC) in 1934 and continued to serve in that post for a long time till 1945.
- In November 1946, he was elected the President of the Congress Party and steered the party in that position during the crucial partition period and the transfer of power.
- He was involved in a number of committees in the Constituent Assembly of India.
- As a congressman, he was an outspoken leader and not a meek follower of Gandhi despite being a Gandhian himself. He was a true democrat in that respect and held the view that this should be the basis of the political party.
- After 1947, differences cropped up between Kripalani and Nehru and other leaders. He resigned from the party in 1950 and formed his own party, the KisanMazdoorPraja Party. Later, this party joined forces with the Socialist Party of India to form the Praja Socialist Party.
- He was elected as an MP to the LokSabha in 1952, 1957, 1963 and 1967. Despite being an independent MP, he was given front benches in the House.

- His wife, SuchetaKripalani was also a politician although she remained loyal to the INC and even became the first woman chief minister of a state when she was elected the CM of Uttar Pradesh.
- Kripalani was an astute parliamentarian and even became the first person to introduce a noconfidence motion on the floor of the House. This was in 1963 immediately after the Sino-Indian War.
- During the Indira Gandhi years, he agitated against her autocratic methods and was also arrested during the Emergency.
- Acharya Kripalani passed away on 19 March 1982 in an Ahmedabad hospital.

Misællaneous

2. GhareBaire

» Prelims: Ghare Baire

Context:

 An announcement was made to shut down the popular museum-exhibition GhareBaire in Kolkata.

Details:

- GhareBaire is a notable Kolkata museum exhibition that presents two centuries of Bengali art.
- The museum-exhibition opened on January 11, 2020, on BBD Bagh, popularly known as Dalhousie Square, in the refurbished Currency Building, which was established in 1833 and nearly demolished in 1996.
- The name GhareBaire comes from the title of Rabindranath Tagore's famous work, which prompted Satyajit Ray to produce a film with the same name.
- The art museum GhareBaire focuses on Bengali art from the 18th to the 20th century.

The Freedom Struggle — its various stages and important contributors/contributions from different parts of the country

3. Janjatiya Gaurav Diwas

» Prelims: Tribal freedom fighters from India; Birsa Munda; Ulgulan; Chhotanagpur Tenancy Act, 1908. » Mains: Participation of the tribal community in the freedom struggle-Reasons and its impacts

Context:

• The government has decided to celebrate the birth anniversary of freedom fighter BirsaMunda as 'Janjatiya Gaurav Diwas'.

Details:

- The Prime Minister inaugurated the BhagwanBirsaMunda Memorial Udyan cum Freedom Fighter Museum at Ranchi, Jharkhand.
- The government also instituted the 'Janjatiya Gaurav Diwas' to commemorate the achievements and contributions of the various tribal freedom fighters from India.
 - * This day will be observed on November 15, the birth anniversary of BirsaMunda.

BirsaMunda Biography

- BirsaMunda's parents were SuganaMunda, an agricultural labourer and KarmiHatu. He belonged to the Munda tribe.
- During the 1890s he started creating awareness among his people about the British exploitative policies and practices.
- He took on the twin problems of agrarian crisis and cultural belittlement by the British.
- The Mundas traditionally had a system known as Khunkhatti which was a system of joint landholding. The coming of the British replaced this system with an exploitative system involving Zamindars and other farmers and middlemen. This made the peasants suffer in poverty and indebtedness. They became forced farm labourers.
- BirsaMunda proclaimed his rebellion in 1894 which was directed against the British and the dikus (outsiders). This is called the MundaUlgulan.
- He asked people to stop paying rent and taxes.
- He also became a religious leader of his people.
 He exhorted the tribal people to return to their
 roots and shun Christianity. He asked people to
 renounce alcohol. People started referring to
 him as 'Dharti Abba'. He was also believed to be
 a prophet. His new religion was called Birsait.
 Many Mundas and Oraons became Birsaits.
- He was arrested by the government and imprisoned for 2 years before being released in 1897.
- Munda launched his armed struggle in 1899.
 Under his leadership, the people burned police stations, houses of the landlords, churches and British property.
- His slogan was 'Abua raj seterjana, maharani raj tundujana'. This meant 'Let the kingdom of the queen be ended and our kingdom be established'.

- He was arrested in March 1900 in Jamkopai forest, Chakradharpur. He died in prison on 9 June 1900.
 The British said he died of cholera. It is suspected that he was poisoned. He was only 25 years old at the time of his death.
- His rebellion forced the government to enact the Chhotanagpur Tenancy Act, 1908. This law put restrictions on tribal land being passed on to non-tribals.
- BirsaMunda's birth anniversary is celebrated officially at his Samadhi at Kokar Ranchi, Jharkhand.
- He is revered as a great freedom fighter by tribals and non-tribals alike. He is also a figure of empowerment for the tribal community in India.
- Many folk songs have been created to commemorate his life and bravery. India Post released a stamp in his honour in 1988.

Mediaval Indian History - Important personalities

4. LachitDiwas

» Prelims: Lachit Borphukanon; Ahom Kingdom

Context:

 The Prime Minister paid tribute to the bravery of Lachit Borphukanon the occasion of Lachit Diwas which is celebrated in several parts of the country on November 24.

Who was LachitBorphukan?

- LachitBorphukan was a military commander in the Ahom kingdom and he is known for his immense contribution in leading the Battle of Saraighat in 1671 defeating the Mughals.
- He was given the title Borphukan which means one of the five councillors in the Ahom kingdom having both executive and judicial powers.
- He is regarded as the protector of Assamese culture and tradition for his remarkable contributions towards preserving the unique culture.
- Lachit conducted training sessions on guerrilla tactics to empower his troops and prevented the expansion of the Mughal Empire in Assam.

LachitDiwas:

 Every year the birth anniversary of LachitBorphukan is celebrated as LachitDiwas to pay homage to his heroic leadership and compassion for the downtrodden sections of society.

Medieval Indian History- Important personalities

5. Rani Kamalapati

» Prelims: Queen Kamalapati of the Gond kingdom

Context:

 PM announced the inauguration of the redeveloped Rani Kamalapati Railway Station at Madhya Pradesh.

Details:

- The redeveloped Rani Kamalapati Railway station was named after brave and fearless Queen Kamalapati of the Gond kingdom.
- It is redeveloped in Public Private Partnership (PPP) mode.The station is also developed as a hub for integrated multi-modal transport.

Rani Kamalapati

- Rani Kamlapati was the widow of Nizam Shah who belonged to the Gond dynasty.
- Nizam Shah built the famous seven-storeyed Kamlapati Palace in her name in Bhopal.
- Kampalati is known to have shown great bravery in facing aggressors during her reign after her husband was killed.

Renaming of the Railway Station:

- Indian Railways can change the name of its stations on the discretion of the state government concerned.
- Change of station names is entirely a state subject even though Railways belong to the Union government.
- The state governments send the request to the Ministry of Home Affairs, the nodal ministry for these matters, which then accords its approval, keeping the Ministry of Railways in the loop.
- Once the name change is notified by the state government following all due process, Indian Railways steps in to do the necessary work.

Modern Indian History - Important personalities

6. Rani Laxmibai

- » Prelims: Rani Laxmibai; Doctrine of lapse
- » Mains: Important women personalities in India's freedom struggle
- Lord Dalhousie sought to annex Jhansi when the Maharaja died applying the Doctrine of Lapse since the king did not have any natural heir.
- As per this, the Rani was granted an annual pension and asked to leave the fort of Jhansi.
- The Revolt of 1857 had broken out in Meerut and the Rani was ruling over Jhansi as regent for her minor son.

- British forces under the command of Sir Hugh Rose arrived at Jhansi fort with the intention of capturing it in 1858. He demanded that the city surrender to him or else it would be destroyed.
- Rani Laxmibai refused and proclaimed, "We fight for independence. In the words of Lord Krishna, we will if we are victorious, enjoy the fruits of victory, if defeated and killed on the field of battle, we shall surely earn eternal glory and salvation."
- For two weeks the battle went on where the Rani led her army of men and women valiantly against the British. Despite courageous fighting, Jhansi lost the battle.
- The Rani, tying her infant son on her back, escaped to Kalpi on horseback.
- Along with Tatya Tope and other rebel soldiers, the Rani captured the fort of Gwalior.
- Afterwards, she proceeded to Morar, Gwalior to fight the British.
- Rani Laxmibai died while fighting in Gwalior on 18th June 1858, aged 29. She was dressed as a soldier when she died.

Context:

 In order to pay homage to the gallantry of Rani LaxmiBai on her birth anniversary, a three-daylong celebration has been organised wherein the Ministry of Defence will announce important initiatives.

Key Highlights:

- The progress of the national security apparatus has been provided with special attention as an essential objective of the RashtraRakshaSamarpanParv.
- The government is geared up to develop a modern and well-equipped military and a selfreliant defence industry that heads towards AtmaNirbhar Bharat.
- A major focus has been applied to promote 'Make in India, Make for the World'.

The Freedom Struggle — its various stages and important contributors/contributions from different parts of the country

7. Rani Gaidinliu Tribal Freedom Fighters Museum

- » Prelims: Rani Gaidinliu; Heraka movement
- » Mains: Important women personalities in India's freedom struggle

Context

 The Union Minister will lay the Foundation Stone of the Rani Gaidinliu Tribal Freedom Fighters Museum at Manipur.

Rani Gaidinliu

Background:

- Rani Gaidinliu was born on January 26, 1915 in Luangkao Village now in Manipur.
- She met Jadonang at the age of 13 and became his lieutenant in his social, religious, and political movement.
- Following Jadonang's death, Gaidinliu assumed leadership of the movement.
- After the martyrdom of Jadonang, Gaidinliu launched a strong insurrection against the British, for which she was imprisoned by the British for 14 years until being freed in 1947.
- Recognizing her role in the fight against the British, she was referred to as "Rani".

Heraka movement

- Heraka was a socio-religious movement that originated in the Zeliangrong area in the 1920s.
- Heraka, which means "pure," is a monotheistic religion whose adherents worshipped TingkaoRagwang.
- It was founded by Jadonang to oppose the entrance of Christian missionaries as well as the British government's reforms.
- He observed the persecution by British officials, who forced tribals to work in difficult conditions and levied a large monthly revenue levy on every home.
- Gaidinliu was a pioneer in the Heraka movement, which was founded by her cousin HaipouJadonang.

Indian Freedom Movement

- Gaidinliu launched her own Non-cooperation Movement among Naga tribes.
- She made it impossible for the British government to operate in the region by ordering that all families refrain from paying taxes.
- She linked her spiritual position as a leader of the socio-religious movement to her role as a nationalist.
- She regularly invoked Mahatma Gandhi's national efforts to inspire her people to oppose the British.
- "Loss of religion is loss of culture, and loss of culture equals loss of identity," Gaidinliu argues.

Post independence and death

- Gaidinliu was opposed to the Naga National Council's (NNC) desire for sovereignty and independence of Naga territories from India in independent India.
- In reality, she advocated for a distinct Zeliangrong region inside the Union of India.

- She was compelled to go underground in 1960 due to opposition from other Naga leaders to her demand.
- She subsequently made an agreement with the Indian government and disbanded the movement.
- Rani Gaidinliu died on February 17, 1993, at the age of 79.

Medieval Indian History - Important Monuments

8. SabzBurj restored to its Mughal-era glory

- » Prelims: Sabz Burj; Floral motifs of the mughal era
- » Mains: Characteristic features of Mughal architecture

SabzBurj:

- SabzBurj is one of Delhi's earliest Mughal-era monuments. The monument stands at the entrance to Humayun's Tomb.
- It is basically a tomb. The tomb is believed to be built in 1530. Notably, it does not have any markings pointing to the identity of those buried under it.
- The architecture holds immense significance due to the ceiling on its double dome structure painted in pure gold and lapis. It is thought to be the earliest surviving painted ceiling for any monument in India.
- Conservationists believe that the painting on the ceiling that has floral motifs predates similar work that was seen in miniature paintings and textiles from the Mughal era.

Context:

 SabzBurj has been conserved and restored over the last four years using traditional materials and building-craft techniques.

Andent Indian History - Indus Valley Civilization

9. Were there domestic horses in ancient India?

» Prelims: Animals found in Indus valley civilization

Context:

 A recent report in Nature has been able to collect bones and teeth samples from regions from where domestic horses could have originated.

Background:

- The horses with the modern domestic DNA profile lived in the Western Eurasian Steppes, particularly the Volga-Don River region.
- These horses spread out to Bohemia (the Czech Republic of today and Ukraine), and Central Asia and Mongolia.

Indian story

Which Animals are Native to India?

- The Report by "World Atlas" says that the only animals native to India are the Asian elephant, snow leopard, rhinoceros, Bengal tiger, Sloth bear, Himalayan wolf, Gaur bison, red panda, crocodile, and the birds peacock and flamingo.
- The website ThoughtCo lists the antelope, Nilgiritahr, elephant, langur, Macaque monkey, rhinoceros, dolphin, Gharial crocodile, leopard, bear, tiger, bustard (heaviest flying bird), squirrel, cobra, and peacock.
- Thus, it seems clear from these sources that horses are not native to India.

How did horses come to India?

 Horses must have come into India through interregional trading between countries. Indians might have traded their elephants, tigers, monkeys, birds to their neighbours and imported horses for our use.

When did India get its horses?

- Evidence during Harappan Age: It points out that horse-related remains and artefacts have been found in Late Harappan sites (1900-1300 BCE), and that horses did not seem to have played an essential role in the Harappan civilisation.
- Evidence during Vedic Period: This is in contrast to the Vedic Period, which is a little later (1500-500 BCE). The Sanskrit word for horse is Ashwa, which is mentioned in the Vedas and Hindu Scriptures. These are roughly towards the end of the late Bronze Age.
- Debate in literature: 'Early Indians: The Story of our Ancestors and Where We Came From' by Tony Joseph and the other by Yashaswini Chandra, titled, 'The Tale of the Horse'.
 - * Dr. Joseph's article examines the evidence to the 'Aryan' migrations to India. It suggested that the horses found in India came from the 'Stans' mentioned above.
 - * And Dr. Yashaswini Chandra suggests that Indian native horses disappeared by 8000 BCE.

Conclusion

 Given this background, it will be interesting to check whether in the Harappan sites, there are any remnant bones, teeth or skulls of horses, and perform DNA sequencing on them.

GOVERNANCE

Miscellaneous

1. National Press Day

» Mains: Media as fourth pillar of democracy; Issues such as fake news and yellow journalism

Context:

 Every 16th day of November is commemorated as the National Press Day in order to honour the historic establishment of the Press Council of India. The central theme for the year 2021 was 'Who is not afraid of the Media?'

History:

 To regulate the Indian press, the Press Council was first established on the 4th of July, 1966 with Justice J R Mudholkar as the first chairperson. This body became functional on 16th November 1966 after which this day is celebrated as National Press Day every year.

Significance:

- This day reminds our conscience about the importance of the fourth pillar of democracy and its role in igniting the spirit of nationalism across the country during British rule.
- The event focuses on the key objectives of establishing an accurate, authentic and unbiased distribution of information in the present day of fake news and yellow journalism.

Covernment Polities and Interventions and Issues arising out of their Design and Implementation

2. The case of demonetisation in India

» Mains: Intended objectives and actual impact of demonetization;

Context:

 An assessment of popular narratives vs economic facts on the fifth anniversary of Demonetisation in India.

A popular narrative - What does it mean?

 Narratives are the description of events, processes or stories often intertwined in the cultural belief systems of the society. These may be grounded more in myth than reality and thereby policy decisions based on these have devastating impacts at times on society.

Demonetisation – The story so far

 The November 8, 2016 decision to demonetise large denomination currency to flush out undeclared hoards of cash was nothing new. It was experimented earlier on two previous occasions, in 1946 and 1978, with dismal results.

The stated objectives

- 1. Eliminating black money and corruption;
- 2. Moving towards "less cash and more digital economy";
- 3. Increased tax compliance;
- 4. A windfall gain of ₹2 trillion ₹3 trillion.

Results and the impacts

- Unlike the limited impact of similar events in 1946 and 1978, the latest demonetisation in 2016 resulted in widespread disruption in the economy, whose aftershocks are still being felt by society.
- The majority of observers have opined that this policy was a failure as only a fraction of its declared objectives could be achieved.
- Interestingly, more than 99.3% of cash returned to the system, pointing towards money laundering routes.
- Rubbing more salt to the wound, data shows that the cash in circulation now exceeds even the pre-demonetisation levels.

<u>The euphoria surrounding the crackdown on "Black Money"</u>

- The deeply satisfying idea of striking a powerful blow through dramatic action against black money has always been in the psyche of the public. More often than not, it has been influenced by the stuff of epics, cinematic experiences and moral terms.
- Contrary to the popular belief, the lion's share of black money is earned through perfectly legal activities rather than income from corruption or criminal activities.
- Moreover, black money is not mostly kept, in stacks of currency notes and gold, hoarded in safes, boxes, or secret cupboards, except in small quantities, but is mostly accumulated through real estate and other assets.
- We observed seemingly the narrative getting changed and focus from black money and fake currency to digital/cashless payments being elevated and taking the centre stage.

Capitalising on the moral economy of the poor

 The ideals of collective sacrifice, nationalism and patriotism have always been at the deeply entrenched soft corners among the masses and invoking high moral values is a low hanging fruit for policymakers. For the poor, any endeavour towards penalising the rich is far more attractive than achieving social justice and equity.

Conclusion

 Falling prey to the popular narratives has shown to influence a much bigger role in economic policymaking historically than economists acknowledge. The case of demonetisation adds to the long list of such decisions which demonstrates that popular narratives can trump economic facts. An auto-immune shock for the otherwise steady and growing economy, leading to a plethora of hardships being faced to date, presents a case of pondering upon and learning a lesson for the future.

Davelopment Processes and the Davelopment Industry — the Role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders

3. Why is MHA tasked to monitor foreign funds for NGOs, asks SC

- » Prelims: FCRA provisions
- » Mains: New amendments- concerns and the need for strict regulation of the flow of foreign funds to NGOs in India

Context

- A three-judge Bench of the Supreme Court is currently hearing petitions challenging the amendments to the Foreign Contributions Regulations law in 2020.
- The bench has questioned the government as to why the Ministry of Home Affairs (MHA) and not the Finance Ministry has been tasked to monitor the inflow and subsequent outflow of foreign funds to NGOs under the concerned law.

Background:

- The government had moved certain amendments to the Foreign Contribution Regulation Act (FCRA) in 2020.
- Several NGOs have argued that the amendment severely restricted the use of foreign funds by them for their activities and also restricts their ability to transfer funds to other philanthropic organisations within the country.

Government's argument:

The government represented by the Solicitor General defended the FCRA and its provisions based on the following arguments.

 There have been Intelligence Bureau (IB) inputs showing the utilization of incoming foreign funds for funding activities that destabilise national peace and security. The inputs even indicated that the money was used to train naxals. The

- element of national security and integrity of the nation involved in the inflow of foreign funds necessitates the involvement of the Ministry of Home Affairs in the regulation of foreign funding to NGOs.
- The provision to make Aadhaar mandatory for the registration of NGOs will make it easy to identify the recipients of foreign funds.
- The amendments will bring in much-needed transparency and accountability in the functioning of NGOs by letting the government monitor the flow of foreign funds to NGOs.
- The law mandating the NGOs to use foreign funds they receive for the registered purposes or activities — social, educational, religious, cultural and economic — avoids possible misutilization of the funds. The amendment also helps prevent NGOs from acting as "middlemen" between foreign contributors and local, unregistered NGOs.
- The provision to decrease administrative expenses by an organisation to 20% from 50% earlier also helps ensure that a greater part of the foreign funds is actually used by NGOs for their registered objectives.

Covernment schemes

4. Will MPLADS be changed for post-pandemic needs?

- » Prelims: MPLADS- provisions and workings
- » Mains: Concerns associated with the implementation of the scheme; recommendations to improve it

Context

• The Union government announced the restoration of the Member of Parliament Local Area Development Scheme (MPLADS Scheme).

<u>Member of Parliament Local Area Development</u> <u>Scheme (MPLADS Scheme)</u>

Background:

- It was established in 1993 by the Narasimha Rao government, with each MP receiving a yearly payment of Rs. 50 lakh.
 - * This core sector project was established to enable parliamentarians to push for development projects in their constituencies based on locally identified needs.
 - * The majority of these development initiatives concentrated on national issues including drinking water, education, public health, sanitation, and roads, among others.
- In 2011-12, the UPA government increased the yearly entitlement to 5 crore rupees.

 This initiative, which was previously administered by the Ministry of Rural Development, is now overseen by the Ministry of Statistics and Implementation.

Fund Allocation and Utilisation:

- Every MP is entitled to 5 crore each year under the Member of Parliament Local Area Development Scheme, totaling 3,950 crore for the 790 MPs.
- The money will be used to "create long-term community assets and provide basic services, such as community infrastructure, based on locally perceived needs."
- This money does not go straight to the MPs' accounts. They are only able to suggest works.
 Following that, the district authorities are responsible for sanctioning, and completing the works within the specified time frame.
- More money is issued only when the completion certificate is received.

Working of the MPLADS Scheme:

- The District Magistrate is in charge of managing the funding and overseeing the projects that have been approved under the plan.
- A LokSabha member can only approve projects in his or her own area, but a RajyaSabha member can utilise the funds for projects throughout the state.
- In the event of a natural disaster, MPs from nonaffected districts in both Houses of Parliament can suggest works in disaster-affected areas for up to Rs. 25 lakh each year.

Controversies over MPLADS Scheme:

- Misuse of Funds: The scheme was first challenged in 1999 by Jammu and Kashmir National Panthers Party chief Bhim Singh and an NGO, Common Cause. They alleged that in the absence of any guidelines, the funds were misused by MPs.
- Challenge to Constitutional Validity: From 1999 until 2005, the constitutional validity of MPLADS was contested in India's Supreme Court. In 2010, the Supreme Court issued a combined ruling on all of these cases, upholding the scheme's constitutional validity. The Supreme Court said in its judgment that mere allegations that the funds were prone to misuse could not be the ground for scrapping the scheme. It did, however, advise certain changes to the system.
- Suspension during COVID-19: The plan was halted for two years on April 6, 2020, with the justification that money is required to combat the COVID-19 Pandemic.
 - * The scheme's budget of Rs 7,900 crore was to be absorbed into the Consolidated Fund of India over a two-year period. Opposition MPs slammed the action, claiming that

the state governments were already cashstrapped and in desperate need of the money provided under the plan.

<u>Improvements Suggested in MPLADS Scheme Post-</u> Pandemic

- The MPLADS Scheme should be modified by the government to fit the post-pandemic environment and policy decisions.
- At the moment, the money may only be used for "durable assets." There is a requirement for expansion to other assets.
- There should be a constitution of a monitoring committee comprising MPs to oversee the scheme at the district level, apart from the issue of pending installments.

Important Judidal observations

5. Pegasus inquiry must reverse the Chilling effect

- » Prelims: Pegasus spyware
- » Mains: Concerns over infringement of Right to Privacy; Balancing the right to privacy and security of the state

Context:

 The article discusses the Pegasus controversy, the silence of the government, and various aspects of the issue.

Background:

- The purchase of a very expensive Israeli software named Pegasus by the Government of India and its misuse has shaken the whole world.
- The government refused to answer any query on this issue
- The Pegasus Scandal has a similarity with the Watergate scandal of the USA in which US President Richard Nixon was brought down in the 1970s.
- The Royal Courts of Justice Strand, London made a judgment in the case in which a Princess has claimed that the Pegasus spyware has been installed in her phone as well in the phones of her personal assistant, solicitors, etc. by her husband for the sake of the welfare of their children. This shows that royal phones can also be hacked by the Pegasus.
- The United States blacklisted the NSO group by putting it on an 'entity list' because they found that Pegasus was not complying with the foreign policy and national security interests of the US.
- But, in India, no action has been taken against hackers.

The Supreme Court:

- Denial of right to information, no response to the Public Interest Litigation (PIL), unanswered questions in the Parliament, and no action from the government have compelled the Supreme Court of India to intervene.
- A three-member committee was appointed by the Supreme Court to look into allegations of unauthorized surveillance using Pegasus, spyware developed by Israeli firm NSO Group.
- This is the first-ever inquiry called by the Chief Justice of India.

A worrying silence:

- The silence of the Union government on invading the privacy of Indian citizens and the use of collected intelligence is extremely worrisome.
- The government of India requested the Supreme Court to set up an inquiry committee but the Supreme Court has denied it because it will violate the judicial principle against bias which says that 'justice must not only be done but also be seen to be done'.

Right to privacy:

- In 2017, the Supreme Court declared privacy as an integral component of Part III of the Constitution of India, and protecting this privacy is the responsibility of the court.
 - * Part III of the Constitution lays down our fundamental rights, ranging from rights relating to equality, freedom of speech and expression, freedom of movement, protection of life and personal liberty, and others.
- Snooping can be justified only on three counts:
 - * the restriction must be by law;
 - * it must be necessary and only if other means are not available, and proportionate (only as much as needed); and
 - * it must promote a legitimate state interest (e.g., national security), according to paragraph 325 of the nine-judge Bench judgment on privacy).
- If the government wants to use the abovementioned cases as an excuse for the use of Pegasus then it must have to establish the justification because the surveillance directly violates the right to privacy.
- If the Government wants to justify the surveillance as authorized then it has to answer the question of whether anybody has been prosecuted for terrorism with evidence procured by snooping.
- Without providing accurate information, the government cannot rely on the excuse of 'national security' because the victims can raise the issue of misuse of surveillance power.

Freedom of Speech:

- It is observed by the bench led by the Chief Justice of India that surveillance hurts the freedom of speech.
- In the context of the press, it undermines the ability of the press to provide accurate and reliable information which is needed for people to know about the acts of their elected government.
- The ignorance of the government about the dangers or difficulties created by Pegasus is worse than its alleged involvement that needs to be probed.

Inquiry by the bench:

- The bench of Chief Justice of India N V Ramana, Justices Surya Kant, and HimaKohli said "the Petitioners have placed on record certain material that prima facie merits consideration by this Court".
- There has been no specific denial of any of the facts averred by the Petitioners by the Respondent (Union of India). There has only been an omnibus and vague denial in the 'limited affidavit' filed by the Respondent (Union of India), which cannot be sufficient.
- In such circumstances, the bench has no option but to accept the prima facie case made out by the Petitioners to examine the allegations made.
- The Supreme Court made it clear that the State cannot get "a free pass every time the spectre of national security is raised". The reasons that compelled the Court to act are as follows:
 - * Right to privacy and freedom of speech are alleged to be impacted, which needs to be examined.
 - * The entire citizenry is affected by such allegations due to the potential chilling effect.
 - * No clear stand was taken by the Respondent-¬Union of India regarding actions taken by it
 - * Seriousness accorded to the allegations by foreign countries and involvement of foreign parties.
 - * The possibility that some foreign authority, agency, or private entity is involved in placing citizens of this country under surveillance.
 - * Allegations that the Union or State Governments are parties to the rights.

Way Forward:

 The use of criminal spyware not only violates the fundamental rights of the citizens but also injures freedom of the press, expression of dissent by the Opposition, and fearlessness of lawyers to challenge in courts the unconstitutional actions of the state.

- It weakens democracy and also converts elected officials into absolute dictators.
- The burden of protecting the constitutional laws is on the shoulders of the Supreme Court Committee and the bench.

Conclusion:

 The Pegasus controversy has shaken the confidence of the citizens in the government and it is expected that the bench by the Chief Justice of India will come up with a fair judgment.

Important Aspects of Governance

6. Sliding rank

» Prelims: Global bribery risk rankings

Context:

• India has been ranked 82nd out of 194 countries in the global bribery risk rankings in 2021.

Details

- The list has been prepared by TRACE, an antibribery standard setting organisation.
 - * It measures business bribery risk in 194 countries, territories, and autonomous and semi-autonomous regions.
- This score is based on four factors business interactions with the government, anti-bribery deterrence and enforcement, government and civil service transparency, and capacity for civil society oversight which includes the role of the media.
- It was originally published in 2014 to meet a need in the business community for more reliable and nuanced information about the risks of commercial bribery worldwide.

India

- In 2020, India ranked 77 with a score of 45. In 2021 the country stood at 82nd position with a score of 44
- India fared better than its neighbours Pakistan, China, Nepal and Bangladesh

Global Ranking

 The three most high bribery risk countries are North Korea, Turkmenistan and Venezuela while the three most low-risk nations are Finland, Sweden and New Zealand.

Important Judidal observations

7. <u>JPC retains exemption clause, adopts personal</u> data Bill

- » Prelims: Justice Srikrishna Committee; Ripple and INSTEX
- » Mains: Personal Data Protection (PDP) Bill, 2019provisions, concerns and recommendations to improve it

Context:

 The report on the Personal Data Protection (PDP) Bill, 2019 was adopted recently at the Joint Parliamentary Committee (JPC) meeting.

Background:

- The draft Bill on personal data protection was prepared by the Justice Srikrishna Committee and submitted to the Ministry of Electronics and Information Technology in 2018.
- A Joint Parliamentary Committee was set up to scrutinize another version — the Personal Data Protection Bill (PDPB), 2019 proposed by the government.

Key recommendations:

Exemption for the government agencies:

- The committee has retained clause 35 of the PDP bill.
 - * Clause 35 of the PDP bill allows for an exemption for any agency under the Union Government from all or any provisions of the law in the name of "public order", "sovereignty", "friendly relations with foreign states" and "security of the state".
- The report while acknowledging the need to balance between the concerns regarding national security, liberty and privacy of an individual, notes that only a secure nation can provide an atmosphere that ensures personal liberty and privacy of an individual and hence places security and public order as a higher priority.
- The report argues that the clause 35 is for certain legitimate purposes and it is justifiable given the provision for reasonable restrictions imposed upon the liberty of an individual, as guaranteed under Article 19 of the Constitution and the Puttaswamy judgment.
- However acknowledging the potential for misuse, the committee, emphasizes that this power must be used only under exceptional circumstances and subject to conditions as laid out in the Act.

Social media platforms:

- The committee calls for stricter regulations for social media platforms.
 - * It recommended that all social media platforms, which did not act as intermediaries, should be treated as publishers and be held accountable for the content they host meaning they should be held responsible for the content from unverified accounts on their platforms.
 - * It recommends a statutory media regulatory authority, on the lines of the Press Council of India for the regulation of the contents on the social media platforms.

* It also recommended that no social media platform should be allowed to operate unless the parent company sets up an office in India.

Other recommendations:

- It recommends the setting up of a dedicated lab for certification of all digital devices in the country.
- The committee suggests that in case of cross border transfer of data, a mirror copy of sensitive and critical personal data needs to be mandatorily maintained in India.
- The committee recommends the development of an alternative indigenous financial system for cross-border payments on the lines of Ripple (U.S.) and INSTEX (European Union).

Concerns:

- Some members of the committee have expressed concerns over clause 35 of the bill.
 - * This they argue could be ultra vires of the Fundamental Right to privacy as laid down in the Puttaswamy (2017) judgment as the bill did not provide adequate safeguards to protect the right to privacy and gave unqualified powers to the Government which could be misused.
- The PDP bill also considerably diverges from the Justice Srikrishna Committee's draft Bill.
 - * The selection of the chairperson and members of the Data Protection Authority (DPA) will be made by members of the executive.
- Suggestions by some members of the committee to remove "public order" as a ground for exemption, suggestions for "judicial or parliamentary oversight" for granting of exemptions and the mandatory written orders for granting exemptions have been overlooked.

Way forward:

- The recommendations made during the Global Privacy Assembly could be an ideal way forward on this issue.
 - * There should be clearly laid principles based on a legal basis for government access to personal data.
 - * There should also be clear and precise rules, proportionality and transparency, data subject rights, independent oversight, and effective remedies and redress to the individuals affected.

<u>Additional Information- Joint Parliamentary</u> Committee (JPC)

- There are two kinds of committees that Parliament may set up: standing committees and ad-hoc committees.
 JPCs belong to the category of ad-hoc committees.
- A Joint Parliamentary Committee (JPC) is set up to examine a particular bill presented before the Parliament, or for the purpose of investigating cases of financial irregularities in any government activity.
 - * They are called 'joint' committees because members of both the Houses of Parliament can be nominated or elected to them
 - * The committee's members are decided by Parliament.
 - * There are twice as many Lok Sabha members as the Rajya Sabha.
- A JPC is authorised to collect evidence in oral or written form or demand documents in connection with the matter.
 - * The committee gets disbanded following the submission of its report to Parliament.

GEOGRAPHY

Geography - Climatology

1. ACROSS

- » Prelims: ACROSS scheme
- » Mains: Significance of weather forecasting

Context

 The Atmosphere and Climate Research Modelling Observing Systems and Services (ACROSS) scheme has been extended by the cabinet

Important Facts:

- The Ministry of Earth Sciences took an integrated approach to control extreme weather events and brought programs like India Meteorological Department (IMD), INCOIS, IITM under the umbrella scheme "ACROSS".
- There are eight sub-schemes under "ACROSS" scheme and they are implemented through the operating units: IMD, IITM (Institute of Tropical Meteorology), NCMRWF (National Centre for Medium Range Weather Forecasting), INCOIS (Indian National Centre for Ocean Information Services).

Significance:

- This scheme offers highly advanced Monitoring, Detection and Early Warning of calamities like tropical cyclones, thunderstorms, dust storms, heavy rain, snow fall, cold and heat waves.
- The climate services provided by the umbrella scheme benefit agriculture, aviation, tourism industries. Besides public weather services, environmental services, hydro meteorological services are also provided under the scheme.
- The whole process from forecast to delivery requires huge labour thereby resulting in employment generation.

Geography - Oceanography

2. O - SMART Scheme

» Prelims: O-SMART Scheme

» Mains: Blue economy- Significance, potential and challenges

Context

 The continuation of the Ocean Services, Modelling, Applications, Resources and Technology (O-SMART) has been approved by the cabinet. This scheme operates under the Ministry of Earth Sciences.

Schemes under O-SMART

 Ocean Technology, Ocean Modelling and Advisory Services (OMAS)

- · Ocean Observation Network
- · Ocean Non-living Resources
- Marine living resources and ecology
- Coastal research
- Operation and Maintenance of Research Vessels

Objectives:

- To improve oceanographic research and forecasting services
- Exploratory surveys for sustainable use of ocean resources
- To develop technologies to tap the marine bio resources,
- To develop technologies generating freshwater and energy from ocean,
- To develop underwater vehicles and technologies

Important Achievements under the scheme

- India has been considered as the pioneer for investing in the International Seabed Authority to carry out research in deep sea mining of polymetallic nodules and hydrothermal sulphides in the Indian Ocean Region.
- A low-temperature thermal desalination facility has been installed in the Lakshadweep islands.
- The O-SMART scheme has enabled the expansion of ocean activities of India from the Arctic to the Antarctic region accompanied by satellite based monitoring systems and observations.
- An early warning system to detect oceanic disasters like tsunami, storm surges has been established at INCOIS, Hyderabad that extends services to the countries of the Indian Ocean region. This was recognised by UNESCO.

Geography - Geomorphology

3. Glacial Tectonic Interaction

- » Prelims: Glacitectonics
- » Mains: Vulnerability of the Himalayan region to geophysical phenomenon and concerns

Context

 A change in the course of the Himalayan glacier has been observed by a group of scientists from Wadia Institute of Himalayan Geology, Dehradun which is an autonomous institute under the Department of Science and Technology, Government of India.

Important Observations:

This is for the first time that an abrupt change has occurred in the Himalayan glacier and the scientists believe that this is a consequence of climate and tectonics. The observation was made in the upper Kali Ganga valley in the Pithoragarh district of Uttarakhand.

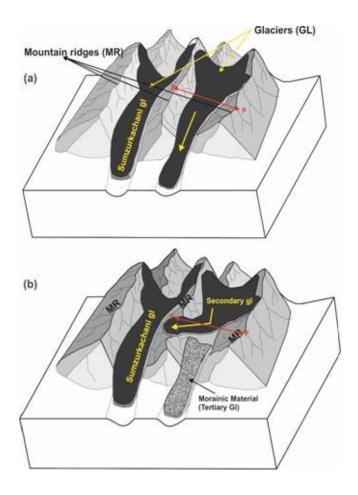
- The change in the course of the glacier is associated with the disaster that took place in Rishiganga.
- The rock mass on which the glacier was placed became fragile because of weathering, percolation of meltwater in joints and cracks, freezing, thawing, snowfall, overloading. All these contribute to the mechanical disintegration of the glacier from the source rock.
- Therefore the scientists found that the northeast moving glacier abruptly changed the direction towards the southeast due to climatic factors and tectonics.
- The active fault on the glacier was confirmed by remote sensing and an old survey map.

Significance:

- This study helps in understanding the factors that result in disastrous events in the Himalayan region.
- It is inferred that not only the climatic factors but the glacial-tectonic interactions play a significant role in the evolution of new landforms.
- A clear idea about the unique behaviour of glaciers has been offered by the study which can be essential in future studies related to glacial events and Himalayan disasters.

What is Glacitectonics?

- The deformation involving folding and thrusting caused by a glacier or ice-sheet that forces into the existing sedimentary bedrock is known as Glacitectonics.
- This phenomenon results in the dynamic nature of glaciers and ice sheets leading to their advancement, retreat, folding and faulting.



(a) Depicts past scenario and (b) depicts the present scenario

Geography-Important Phenomena

4. The Sun lights up aurorae in high-latitude countries

- » Prelims: Aurora, sunspots and solar flares
- » Mains: Solar phenomenon and its impact on earth

Context:

The Indian scientists had predicted a magnetic storm

Details:

- A solar flare on the Sun generated a magnetic storm of enough amplitude to cause stunning aurora displays in high-latitude and polar locations.
- This prediction was based on models developed by them as well as data from NASA's observatories.
- Aurora: Aurora are the coloured bands of light seen in the North and South poles.
- Sunspots: The solar magnetic cycle that works in the deep interior of the Sun creates regions that rise to the surface and appear like dark spots. These are the sunspots.

Solar flares

- Solar flares are very energetic events that occur within sunspots.
- The energy contained in the Sun's magnetic structures is turned into light and heat energy during a solar flare.
- Coronal Mass Ejection (CME) occurs when solar flares force heated plasma to be expelled from the Sun, resulting in a solar storm.

Impact of the Solar Flares

- Sharp increase in transverse magnetic fields, density, and plasma wind velocity.
- The flares can have an impact on Earth-bound items and life.
- Coronal mass ejections can disrupt electrical systems as well as oil pipelines and deep-sea cables.
- They may also produce beautiful auroras in highlatitude and Polar Regions.

Geography - Celestial Bodies

5. Was it really a black hole that the EHT imaged in 2019?

» Prelims: Event horizon; Singularity

Context:

 A recently published paper provides an alternative explanation of the image of the Black hole (M87*) taken by the Event Horizon Telescope.

Background

- In 2019, researchers using the Event Horizon Telescope acquired the first photograph of a supermassive black hole (M87*) at the galaxy's centre, Messier 87. (M87).
- Now, an article published in The European Physical Journal C proposes a new theory for the compact object observed by the Event Horizon Telescope.
- It (M87*) might be a "bare singularity with a gravitomagnetic monopole," according to the scientists, rather than a black hole.

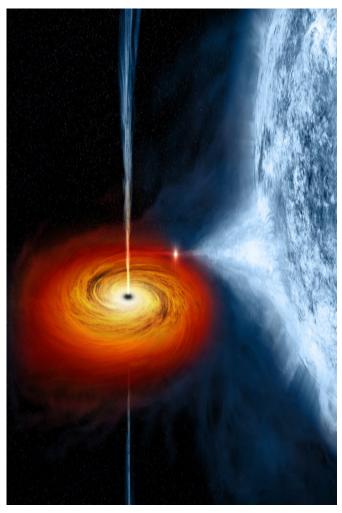
Additional Information

Black Hole:

- A black hole is a region of space in which gravity is so strong that even light cannot escape.
 Because matter has been crammed into such a small space, gravity is extremely powerful.
- When stars reach the end of their lives, they collapse under their own gravity, and the product of this collapse, most astronomers believe, is a black hole.

- A black hole has two parts:
 - * Singularity: At its core is a singularity which is a point that is infinitely dense. The remnant mass of the star is compressed into this point.
 - * Event Horizon: The event horizon is an imaginary surface surrounding the singularity, and the gravity of the object is such that once anything enters this surface, it is trapped forever. Not even light can escape the pull of the singularity once it crosses the event horizon.

That is why, we cannot see the singularity at the heart of a black hole but only see points outside the event horizon.



Black Hole singularity

- A gravitational singularity is a one-dimensional point in the core of a black hole that holds a massive mass in an endlessly tiny space.
- Here the rules of physics as we know them cease to apply.
- The presence of a singularity is frequently viewed as proof that general relativity theory has failed.
- It is probably unsurprising given that it happens in situations when quantum effects should become significant.

MISCELLANEOUS

1. <u>Biotechnology Centre for Northeast Tribals in Kimim, Arunachal Pradesh</u>

Context:

 The Union Minister of State for Science and Technology has inaugurated a new Biotech centre for Northeast tribals in the remote area of Arunachal Pradesh.

Details

- The Centre will result in the betterment of the socio-economic conditions of the tribal people of Arunachal Pradesh.
- A focus to promote research in the field of biotechnology has been ensured.
- This would help in the generation of employment opportunities in the region.
- The centre would look forward to conducting various training programmes such as Students Training, Technician Training, Faculty Training and Entrepreneurship Development. This will further the progress of Vigyan initiatives of the Government of India and benefit the local communities.

Key areas and programs for the benefit of the region:

- Establishment of Orchidarium to conserve and multiply certain orchid species with the help of satellite units.
- Banana fibre extraction.
- Aroma units for the cultivation of aromatic crops.

Significance:

- This will act as a boost for the life science graduates and encourage entrepreneurship.
- It is seen as a welcome step towards the development of the Northeast Region.

2. Clean Green Village Week

Context:

 The Clean Green village Week is an activity under Mahatma Gandhi NREGA and also a part of Azadi ka Amrit Mahotsav.

About:

 This activity led to the identification and construction of soak pits and other waste to wealth initiatives like vermicomposting, recycling of non-biodegradable waste involving villagers across the country.

- The activity included various meetings, workshops and onsite demos at the gram panchayats.
- The Ministry of Rural Development has shown active participation in spreading awareness about cleanliness that can improve the livelihood of the villagers.
- The Ministry has also worked towards building proper drainage channels, recharge pits, bettering the Anganwadi toilets and stabilization ponds.

Therefore, this village week initiative would take India closer to the recognition of the ethos that 'India lives in its villages' that exemplifies the Gandhian ideology.

3. 'HarGharDastak' Campaign

Context:

 A national webinar was organised by the Union Health Ministry to propagate awareness about health especially about vaccination in the wake of the COVID-19 pandemic. The ministry employs media as a vital tool for spreading such awareness.

About the 'HarGharDastak' Campaign:

- The campaign aims at ensuring that the entire adult population has completed the first dose of the COVID-19 vaccine and must complete the second dose.
- As a part of the awareness campaign, the healthcare workers will provide a door to door vaccination facility for eligible people.
- This determines the current vaccine delivery capacity of India which is a commendable achievement.
- There will be multimedia information, education and communication to prevent rumours that promote vaccine hesitancy among the citizens.

4. National Ayurveda Day 2021

Context:

National Ayurveda Day is observed on the occasion of Dhanteras in India.

About National Ayurveda Day 2021:

- As the festival of Dhanteras (Dhanwantri Jayanti) falls on Nov 2 in 2021, the National Ayurveda Day 2021 is observed on this date.
- This day has been marked from 2016 to spread awareness on the importance of Ayurveda in our daily lives.

- * It is observed to focus on the strengths of Ayurveda and its unique treatment principles.
- Theme of National Ayurveda Day 2021: 'Ayurveda for Poshan'

5. National Sports Awards 2021

Context:

• National Sports Awards 2021 announced.

Details:

- The National Sports Awards are given every year to recognize and reward excellence in sports.
- 'Major Dhyan Chand Khel Ratna Award' is given for the spectacular and most outstanding performance in the field of sports by a sportsperson over a period of the previous four years.
 - * 12 people have been declared winners of this award including Tokyo Olympics Gold medallist Neeraj Chopra.
- 'Arjuna Award for outstanding performance in Sports and Games' is given for good performance over a period of previous four years and showing qualities of leadership, sportsmanship and a sense of discipline.
 - * 35 people have been selected for the award.
- 'Dronacharya Award for outstanding coaches in Sports and Games' is given to coaches for doing outstanding and meritorious work on a consistent basis and enabling sportspersons to excel in international events.
- 'Dhyan Chand Award for Lifetime achievement in Sports and Games' is given to honour sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports event after their retirement.
- 'Rashtriya Khel Protsahan Puraskar' is given to corporate entities (both in private and public sector), sports control boards, NGOs including sports bodies at the State and National levels who have played a visible role in the area of sports promotion and development.
- Overall top performing university in interuniversity tournaments is given the Maulana Abul Kalam Azad (MAKA) Trophy.

6. Solar Iron Cart

Context:

 A teenage girl was recognised for her innovative idea of the Solar Iron Cart at the Earth Day Network Rising Star 2021 organised by the global NGO Earth Day Network that works towards environmental issues. This idea is an exemplary move towards clean energy which is presently the central theme of every discussion.

Benefits of Solar Iron Cart:

- Eliminates the use of coal for steam iron boxes and uses solar energy.
- The end users can move door to door and increase their daily earning.
- This cart can be fitted with USB charging points, pre-charged batteries, electricity and benefit the workers.

Therefore, the solar carts can be replicated and scaled up as a welcoming move towards clean energy.

7. Food Corporation of India's first state of the art laboratory

Context:

- The first state of the art laboratory of Food Corporation of India was launched in Gurugram.
 FCI operates under the department of Food and Public Distribution.
- The Quality Control laboratory for the in house testing of food grains was inaugurated at the Institute of Food Security, FCI, Gurugram.

About the Event:

- The quality control laboratory offers a well equipped facility to assure food safety attending to the health requirements of consumers.
- There was a short film on 'Fortification of Rice' to spread awareness about fortified rice and dispelling all myths about the same.
- Rice fortification involves the addition of micronutrients to regular rice enhancing the nutritive quality of food.
- The government paid considerable attention to malnutrition, anaemia in children and women and stepped ahead to expand the ambit of the Public Distribution System and Mid Day Meal with a special aim to promote fortified rice.
- It was pointed out that the food grains to be issued from FCI depots for various government schemes will be checked in house to determine the pesticides level, mycotoxin(Fungal toxins), Uric acid and fortification levels of vitamins.

8. Kongthong

- Kongthong village is located in the East Khasi Hills district, which is 60 km from Meghalaya's capital city Shillong.
- The 'Whistling Village,' as Kongthong is known, is a famous tourist destination.
- Women in the village have a very unique tradition of calling their children by a melody rather than a name.

- The villagers here have two names: one is a conventional name, and the other is a song name, such as Eeooow or Ooeeo. This unique tradition is called 'Jingrwai lawbei'.
- Jingrwai iawbei is a tune (jingrwai) sung in honour of the clan's first mother or root ancestress (iawbei).

Context:

 Recently, the PM expressed gratitude to the people of Kongthong for promoting the village as a prime tourism destination.

Village Tourism

- Village tourism is becoming more popular as a more environmentally friendly option, since it stresses the active participation of the local population as a driver for tourism growth.
- It is relevant to the new tourist development model, which emphasises social, ecological, and community-based tourism.
- With the growing popularity of village tourism, numerous villages in India that were formerly completely unknown to the nation and the rest of the world have risen to prominence and are now visited by visitors every year. This has resulted in the village communities' economic progress.
- The following are the main benefits of village tourism:
 - * Learning something different from urbanization.
 - * Getting an opportunity to visit farmlands.
 - * Getting introduced to artisans and even purchasing locally manufactured handicrafts.
 - * Socio-economic development of the village.

Challenges to Village Tourism

- The locals are generally not fluent in the language of the clients they will be serving, which can cause a significant loss for the tourist business.
- Lack of government support, trained manpower, physical communications are major impediments hindering the success of the rural tourism model in India.

Way Forward:

- Because the majority of international tourists are interested in cultural and health tourism, tour operators must highlight them as their top items while offering village tourism products to them.
- High focus must be given to making the best use of local resources and circumstances. Sustainability is seen as a noble goal, and as such, it must be considered while establishing and constructing any strategy with respect to rural tourism.

- Local culture must be prioritised since it has the potential to contribute significantly to the success of rural tourism development. Local culture may also be employed as a major tourist attraction.
- The success of rural tourism depends heavily on the basic education of the inhabitants. If the people are ignorant, there will be a significant skill gap, which will undoubtedly jeopardise the rural tourist development approach. The locals should be provided required language education and also be imparted with requisite skill sets.

9. Namda Craft

Context:

 The Ministry of Skill Development and Entrepreneurship launched two pilot projects in Jammu and Kashmir.

Pilot Projects that were launched:

- Revive the traditional Namda craft under Pradhan Mantri Kaushal Vikas Yojana (PMKVY).
- Upskilling the artisans and weavers of Kashmir under Recognition of Prior Learning (RPL) which is a component of the Pradhan Mantri Kaushal Vikas Yojana.

Aim of the projects:

- To strengthen the local weavers and artisans of kashmir with enhanced productivity through learning, assessments and certifications.
- To preserve the traditional crafts of the region. The Namda project aims to benefit many craftsmen across 30 clusters in Kashmir.
- Therefore the major aim is to establish a linkage between industry and market that will empower micro-entrepreneurship in Kashmir.

About Namda Craft:

- Namda craft involves a rug made of sheep wool through felting technique instead of normal weaving techniques.
- Felting is a process of converting a protein fiber derived from animals like sheep, alpaca, and yak into a fabric by interconnecting the individual fibers. These felts can be shaped, cut and sewn.
- They have high resistance towards water absorption with high durability.
- The Namda craft traces its origin from the 11th century Mughal reign of Akbar when a man named Nubi for the first time created a felted cloth from sheep wool. Since then this craft has been practiced by Pinjara, Mansuri communities and Sama muslims of Kachchh. Over a period of time it spread across Kashmir, Himachal Pradesh and Rajasthan.

- The Namda craft includes a detailed procedure that involves steps such as carding, creating borders, creating layers, sprinkling soap solution, rolling the Namda (fibre to fibre fusion) and Drying.
- After drying the Namda is beautified with aari work which is a type of embroidery.
- Due to the unavailability of raw materials, human resources, marketing support and design upgradation the Namda craft declined completely.
- This present initiative of the Ministry of Skill Development and Entrepreneurship will encourage the craftsmen to refurbish this beautiful traditional craft.

10. NITI - BMZ Dialogue

Context:

 In order to expand the areas of developmental cooperation between India and Germany, the NITI Aayog and the Federal Ministry for Economic Cooperation and Development (BMZ) signed a Statement of Intent (Sol). This will be a bi-annual dialogue.

Statement of Intent:

 A statement that highlights the important areas of a research project and also mentions the purpose of the project offering a better understanding of the project undertaken is referred to as a Statement of Intent.

Major Objectives:

- The NITI BMZ dialogue aims at creating a common platform for bilateral discussions.
- Exchanging the experiences of the developmental policies.
- To establish means to overview bilateral programmes.
- Carry out joint research for the progress of government policies and to tackle the multisectoral challenges.
- Involvement of think tanks, Government, Industry and Academia to analyse policy issues.

Areas of collaboration:

- This dialogue intends to increase the India Germany bilateral cooperation in the areas of Climate, SDGs, energy, emerging technologies and agroecology.
 - * There is a possibility that NITI Aayog will associate with its German stakeholders to resolve the issue of climate change using Artificial Intelligence and to regulate issues of transparency, accountability, privacy related to artificial intelligence.

Important Launch:

- The SDG Urban Index & Dashboard (2021-22) was launched by the Government of India and BMZ to establish a robust SDG monitoring in the cities by improving the ULB- level data monitoring and reporting systems.
- The Index and Dashboard will ensure the implementation of data-driven decision making.

11. UNESCO-ABU Peace Media Awards 2021

Context:

 Doordarshan and All India Radio win awards at the UNESCO-ABU Peace Media Awards 2021.

About the awards:

- The awards were given by UNESCO in collaboration with Asia Pacific Broadcasting Union (ABU) under 'Together for Peace' (T4P) initiative.
- The ABU-UNESCO T4P Media Awards highlight and promote the crucial role of independent, ethical journalism and citizens' media literacy for building positive peace in human minds.
- The Awards honour innovative and creative content, which informs and educates audiences on best practices of building positive peace that have increasing urgency in achieving the Sustainable Development Goals and building back better from the COVID-19 pandemic.

12. Indore keeps cleanest city tag for fifth year

Context:

• Recently, the Swachh Survekshan Awards, 2021 was handed out by the President of India.

Details:

Swachh Survekshan Awards, 2021

- For the sixth year in a row, Indore was declared the cleanest city.
- Chhattisgarh has been named the cleanest state in the category of states having more than 100 urban local bodies for the third time.
- Maharashtra and Madhya Pradesh were placed second and third, respectively, among states having more than 100 urban local bodies (ULBs).
- · Varanasi was named the cleanest "Ganga city."
- Surat and Vijayawada were in second and third place, respectively, among cities.
- With less than 100 ULBs, Jharkhand was deemed the cleanest state, followed by Haryana and Goa.

Additional Information:

Swachh Survekshan Report

- The Union Ministry of Housing and Urban Affairs (MoHUA) released the Swachh Survekshan Urban report, while the Jal Shakti Ministry published the Grameen (Rural) report.
- It is one of the world's largest sanitation surveys.
- The survey helps to broaden the scope of the ranking process while also motivating cities and communities to actively pursue mission projects in a timely and innovative manner.

13. Indira Gandhi Peace Prize

- The civil society organisation, Pratham has been selected for the Indira Gandhi Prize for Peace, Disarmament and Development for 2021.
 - * The Indira Gandhi Prize for Peace, Disarmament and Development, is accorded annually by Indira Gandhi Memorial Trust.
- Pratham has been dedicated to improving the quality of education among underprivileged children in India and across the world.
 - * It has been involved in the innovative use of digital technology to deliver education thus enabling children to learn during the COVID-19 related school closures.
 - * Its Annual Status of Education Report (ASER) involves regular evaluation of the quality of education. The ASER model has been used to assess education outcomes and learning deficiencies in 14 countries over three continents.

14. A Rs.1 bounty on giant African snails

African Giant Snails:

- African Giant snail species have been a significant cause of pest issues around the world.
- It feeds voraciously and is a vector for plant pathogens, causing severe damage to agricultural crops and native plants.
- It competes with native snail taxa and spreads human disease.

Context:

 A novel initiative to eliminate the threat posed by the highly invasive African giant snails is being undertaken in Kerala under which a group of volunteers purchase the African giant snails at nominal rates from people and eliminate en masseusing a saline lotion.

15. Bid to get heritage status for jackfruit tree

Context:

- A jackfruit tree, aged around 250 years, in Karnataka is striving to get "heritage tree" status.
- · Additional Information

Jackfruit:

- · Scientific Name: Artocarpusheterophyllus.
- Jackfruit is a multi-flowered fruit with fleshy petals made up of hundreds to thousands of individual blooms.
- India, Thailand, Indonesia, and Nepal are the world's top producers of Jackfruit.
- Kerala, Tamil Nadu, West Bengal, Bihar, Uttar Pradesh, Odisha, and Assam are India's major Jackfruit production states.
- Kerala is the world's largest jackfruit producer.
- Kerala and Tamil Nadu have it as their state fruit.

PRACTICE QUESTIONS

- Consider the following statements with regards to Ganges River Dolphins and choose the correct ones:
 - 1. They are listed as 'endangered' on the IUCN red list.
 - 2. It is the national aquatic animal of India.
 - 3. It features in Schedule II of the Wildlife Protection Act, 1972.

Which of these statements are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above
- 2. "Hindus and Muslims are the two eyes of the beautiful bride that is Hindustan. Weakness of any one of them will spoil the beauty of the bride." This statement is associated with whom amongst the following?
 - A. Aurobindo Ghosh
 - B. Raja Ram Mohan Roy
 - C. Sir Syed Ahmed Khan
 - D. Mahatma Gandhi
- 3. Consider the following statements with regards to Dengue:
 - 1. The same mosquito species is responsible for causing dengue, chikungunya, yellow fever and zika infection.
 - 2. Diagnosis of dengue infection is done with a blood test.
 - 3. National Vector-Borne Disease Control Programme, under the Ministry of Urban Development, is the central nodal agency for the prevention and control of Dengue in India.

Which of these statements are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above
- 4. Which of these nations is not a part of the BASIC group of nations?
 - A. South Africa
 - B. China

- C. Bangladesh
- D. India
- 5. Who among of the following Mughal Emperors shifted emphasis from illustrated manuscripts to album and individual portrait?
 - A. Humayun
 - B. Akbar
 - C. Jahangir
 - D. Shah Jahan
- 6. Consider the following statements with regards to the Defense Acquisition Council and choose the correct ones:
 - 1. It is the highest decision-making body in the Defense Ministry for deciding on new policies and capital acquisitions for the three services (Army, Navy and Air Force) and the Indian Coast Guard.
 - 2. The Chief of Defense Staff is the Chairman of the Council.
 - 3. It was formed after the Group of Ministers' recommendations on 'Reforming the National Security System', in 2001, post the Kargil War (1999).

Which of these statements are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above
- 7. Countering America's Adversaries Through Sanctions Act (CAATSA), a United States federal law, does not impose sanctions on which of the following nations?
 - A. Afghanistan
 - B. Iran
 - C. North Korea
 - D. Russia
- 8. Consider the following statements with regards to Ayushman CAPF scheme:
 - 1. It will provide healthcare services to the serving and retired CAPF personnel from all seven forces, viz. Assam Rifles, BSF, CISF, CRPF, ITBP, NSG and SSB, and their dependents through the Ayushman Bharat PM-JAY IT platform.

- 2. A dedicated call centre for support and grievance redressal for CAPF personnel has also been set up.
- 3. Under this scheme, any medical expense done by the CAPF personnel will be reimbursed up to the limit of Rs. 5 lakh per family.

Which of these statements are incorrect?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

9. Consider the following statements with regards to the recently released guidelines on NPAs by the Union Finance Ministry:

- 1. Staff accountability need not be examined in the case of NPA accounts with outstanding of up to Rs. 20 lakh.
- 2. The accountability exercise, whenever needed, must be completed within 3 months from the date that the account is declared as NPA.
- 3. If NPA is caused by external factors such as changes in government policies or natural calamities, it should not attract a staff accountability examination.

Which of these statements are incorrect?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

10. Consider the following statements:

- 1. The motion to impeach a Judge of the Supreme Court of India cannot be rejected by the Speaker of the Lok Sabha as per the Judges (Inquiry) Act, 1968.
- 2. The Constitution of India defines and gives details of what constitutes 'incapacity and proved misbehaviour' of the Judges of the Supreme Court of India.
- 3. The details of the process of impeachment of the Judges of the Supreme Court of India are given in the Judges (Inquiry) Act, 1968.
- 4. If the motion for the impeachment of a Judge is taken up for voting, the law requires the motion to be backed by each House of the Parliament and supported by a majority of total membership of that House and by not less than two-thirds of total members of that House present and voting.

Which of the statements given above is/are correct?

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

11. Consider the following statements with regards to the tea garden community of Assam:

- 1. They are found mainly in those districts of Upper Assam and Northern Brahmaputra belt where there is high concentration of tea gardens.
- 2. The Government of Assam has a full-fledged "Tea-tribes welfare department" for looking after the socio-economic welfare of the community.
- 3. Tribals among the community have been fighting for decades to receive Scheduled Tribe (ST) status, which is being denied to them in Assam although in other states of India their counterparts fully enjoy that status.

Choose the correct ones from the given codes:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

12. As pe	r the 201 <i>5</i>	5 JCPOA	deal l	betweer	า Iran	and
P5+1	nations,	Iran was	not	meant	to er	ırich
Uraniı	ım above		while (enriched	d Urar	າium
above	cai	n be use	d for n	uclear w	/eapo	ns.

- A. 5.83%, 90%
- B. 3.67%, 80%
- C. 3.67%, 90%
- D. 5.83%, 80%

13. Consider the following statements with regards to the Air Quality Index:

- 1. It measures a total of 10 major air pollutants.
- 2. AQI reading from 401-500 is considered as 'severe'.
- 3. PM 2.5 refers to the concentration of microscopic particles less than 2.5 microns in radius.

Which of these statements are incorrect?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

14. Which of the following is the theme for Goa Maritime Conclave 2021?

- A. Maritime Security and Emerging non-traditional threats: A case for proactive role for IOR Navies
- B. Common Maritime Priorities in IOR and need for Regional Maritime Strategy
- C. Addressing Regional Maritime Challenges
- D. None of the above

15. Consider the following statements with regards to the practice of Stubble Burning:

- 1. It is notified as an offence under the Air (Prevention and Control of Pollution) Act, 1981.
- 2. In Punjab and Haryana, farmers burn the stubble (rice chaff) left after the rice harvest so that the field may be readied for the next Kharif (winter) crop like wheat.
- 3. Madhya Pradesh government has set up an innovative experiment, called gauthans, to solve this problem.

Choose the correct code:

- A. 1 only
- B. 1 & 3 only
- C. 2 only
- D. All of the above

16. Consider the following statements:

- 1. Asiatic lion is naturally found in India only.
- 2. Double-humped camel is naturally found in India only.
- 3. One-horned rhinoceros is naturally found in India only.

Which of the statements given above is/are correct?

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

17. Consider the following statements with respect to Vamsadhara River:

- 1. Mahendratanaya River is a major tributary of Vamsadhara.
- 2. Vamsadhara River Water Dispute is between Telangana, Andhra Pradesh and Odisha.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only

- C. Both
- D. None

18. With respect to the SOHO satellite, which of the following statements is/are correct?

- 1. It is a joint mission of the European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA).
- 2. It is a mission to explore the planet Mercury.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

19. Consider the following statements:

- 1. Tigray Region the Northernmost regional state in Ethiopia is bordered by Eritrea to the north and Djibouti to the East.
- 2. Ethiopia is the largest landlocked country in the world.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

20. With reference to the Advocate General of the State, which of the following statements is/are correct?

- 1. The Advocate General is appointed by the President.
- 2. Article 165 has provided for the office of Advocate general for the States.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

21. Under the Airports Economic Regulatory Authority of India Act, the Centre can designate an airport as a 'Major Airport' if it has an annual passenger traffic of at least

- A. 20 Lakhs
- B. 25 lakhs
- C. 30 lakhs
- D. 35 lakhs

22. 'Doctors without Borders (Medecins Sans Frontieres)', often in the news, is

- A. A division of World Health Organization
- B. A non-governmental international organization
- C. An inter-governmental agency sponsored by European Union
- D. A specialized agency of the United Nations

23. Consider the following statements with regards to the UAPA law:

- 1. The law was originally enacted in 1967.
- 2. As per the Act, an investigating officer is required to obtain the prior approval of the Director-General of Police to seize properties that may be connected with terrorism.
- 3. UAPA has life imprisonment as the highest punishment.

Choose the correct ones from the given codes:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

24. Consider the following statements with regards to Molnupiravir:

- 1. It is the world's first antiviral medicine which can be taken as a pill for the treatment of Covid-19.
- 2. It was originally developed to treat influenza.
- 3. The drug has been codenamed 'EIDD-2081'.

Which of these statements is/are incorrect?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. None of these

25. Which of the following was not amongst the climate change targets announced by India at the recently held climate conference at Glasgow?

- A. India will achieve net-zero target by 2070
- B. India will ensure 50% of its energy will be sourced from renewable energy sources latest by 2040
- C. India will also reduce its emissions intensity per unit of GDP by less than 45% latest by 2030
- D. India would also install 500 Gigawatt of renewable energy by 2030

26. Consider the following statements with regards to the Indian Government's plan to list India's G-secs in the international bond indices:

- 1. The RBI had earlier notified a fully accessible route for investment by non-residents for investment in government securities without any ceiling.
- 2. The move is expected to increase foreign inflow into India's debt market.
- 3. It will help the government in managing its market borrowing programme.

Choose the correct code from the following:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

27. In which of the following relief sculpture inscriptions is 'Ranyo Ashoka' (King Ashoka) mentioned along with the stone portrait of Ashoka? (UPSC-2019)

- A. Kanaganahalli
- B. Sanchi
- C. Shahbazgarhi
- D. Sohgaura

28. Consider the following statements with regards to the UNESCO Creative Cities Network:

- 1. The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development.
- 2. The network covers six creative fields: crafts and folk arts, media arts, film, design, gastronomy and music.
- 3. Chennai recently became the sixth Indian city to be made a part of this network.

Choose the correct ones from the given codes:

- A. 1 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

29. Consider the following statements with regards to the Padma awards conferred by the Government of India:

- 1. Padma Shri is the fourth highest civilian award of the Government of India.
- 2. These awards were instituted in 1950 when the Constitution came into force.
- 3. The Government of India decides the winners of these awards with the common citizens having no role to play in the process.

Which of these statements is/are incorrect?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. None of these

30. Sportsperson Emma Raducanu became famous throughout the world for which of the following achievements?

- A. She became the youngest tennis player to get to the world number 1 rank
- B. She became the first female tennis player to win both singles and doubles titles at Wimbledon
- C. She became the first singles qualifier to win a Grand Slam title
- D. She became the first female tennis player to win all the four grand slams in one single year

31. As per NASA's definition, a meteor storm must have at least

- A. 100 meteors per hour
- B. 1,000 meteors per hour
- C. 10,000 meteors per hour
- D. 1,00,000 meteors per hour

32. The Ninth Schedule was introduced in the Constitution of India during the prime ministership of (UPSC- 2019)

- A. Jawaharlal Nehru
- B. Lal Bahadur Shastri
- C. Indira Gandhi
- D. Morarji Desai

33. Which of the following statements is/are correct?

- 1. LeadIT (Leadership Group for Industry transition) is an initiative to achieve the adoption of the best cyber security standards in the IT industry.
- 2. It was launched by India and Sweden along with the World Economic Forum in 2019.

Options:

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

34. India organised the 'Ganga Connect' exhibition in which city?

- A. New Delhi
- B. Varanasi
- C. Glasgow
- D. Osaka

35. National Legal Services Authority of India (NALSA) was established to fulfil which provision of the Indian Constitution?

- A. Article 20
- B. Article 39A
- C. Article 123
- D. Article 224

36. India and Israel have recently entered into a Bilateral Innovation Agreement (BIA) to promote

- A. Development of dual use technologies
- B. Development of next-generation COVID-19 vaccines
- C. Innovation in agriculture and irrigation
- D. Deployment of cyber defence tools

37. With reference to the British colonial rule in India, consider the following statements: (UPSC-2019)

- 1. Mahatma Gandhi was instrumental in the abolition of the system of indentured labour.
- 2. In Lord Chelmsford's 'War Conference', Mahatma Gandhi did not support the resolution on recruiting Indians for World War.
- 3. Consequent upon the breaking of Salt Law by Indian people, the Indian National Congress was declared illegal by the colonial rulers.

Which of the statements given above are correct?

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

38. Consider the following statements with respect to MPLADS funds:

- 1. Funds released to district authorities under MPLADS are not lapsable.
- 2. The MPLADS is a Central Sector Scheme fully funded by the Government of India.
- 3. The Ministry of Rural Development is the administrative ministry for the scheme at the Centre.

Which of the above statements is/are correct?

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

39. Consider the following Pairs:

Martial Arts	State
1. Kalaripayattu	Kerala
2. Mardani Khel	Rajasthan
3. Pari-Khanda	Uttar Pradesh
4. Thoda	Madhya Pradesh

Which of the above pairs is/are correctly matched?

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

40. With respect to Coringa Wildlife Sanctuary, which of the following statements is/are correct?

- 1. It is the second-largest stretch of mangrove forests in India.
- 2. The Sanctuary is declared as a Ramsar site. Options:
- A. 1 only
- B. 2 only
- C. Both
- D. None

41. Which is the best description of Janjatiya Gaurav Divas?

- A. It is the day to remember the contributions of tribal freedom fighters
- B. It is observed every year to convey the importance of Nurses in the healthcare system
- C. It is a day to acknowledge the contributions of women who have fought against trafficking
- D. It is celebrated every year to honour animal welfare and animal rights activists

42. With reference to the cultural history of India, the memorizing of chronicles, dynastic histories and Epic tales was the profession of who of the following?

- A. Shramana
- B. Parivraaj
- C. Agrahaarika
- D. Maagadha

43. Consider the following statements about the Governor of a state:

- 1. The office of Governor of a State is an employment under the Government of India
- 2. He is given immunity from any criminal proceedings, even in respect of his personal acts during his term as the Governor.

Which of the above statements is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both
- D. None

44. With respect to Major Dhyan Chand Khel Ratna Award, which of the following statements is/are correct?

- 1. It is the highest sporting honour of India.
- 2. The Khel Ratna award was instituted in 1991-1992
- 3. The first recipient was Chess legend Viswanathan Anand.

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

45. Arrange the following in a chronological order as per their annexation by the Doctrine of Lapse?

- 1. Satara
- 2. Sambalpur
- 3. Udaipur
- 4. Jhansi
- 5. Jaitpur
- 6. Nagpur
- 7. Baghat

Options:

- A. 1, 2, 3, 4, 5, 6, 7
- B. 1, 5, 2, 7, 3, 4, 6
- C. 2, 7, 6, 4, 1, 5, 3
- D. 7, 6, 5, 1, 2, 4, 3

46. Which of the following statements about Onake Obavva is/are correct?

- 1. She led an armed rebellion against the British East India Company in defiance of the doctrine of lapse
- 2. She belonged to the Chowta dynasty who ruled over parts of coastal Karnataka

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

47. Which of the following are envisaged by the Right against Exploitation in the Constitution of India? (UPSC-2017)

- 1. Prohibition of traffic in human beings and forced labour
- 2. Abolition of untouchability
- 3. Protection of the interests of minorities
- 4. Prohibition of employment of children in factories and mines

Select the correct answer using the code given below:

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

48. With respect to Norovirus, which of the following statements is/are correct?

- 1. It is a form of a virus that causes encephalitis.
- 2. Wild animals typically thought to be carriers include raccoons, bats and foxes.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

49. Consider the following statements:

- 1. The council of ministers shall be collectively responsible to the Governor.
- 2. The salaries and allowances of the ministers shall be determined by a committee appointed by the Chief Minister, Leader of Opposition and a cabinet minister selected by the Chief Minister.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

50. Which amongst the following statements is the best description of Tallinn Manual?

- A. It is a report which gives insights about climate change, its causes, potential impacts and response options
- B. It provides guidelines regarding the use of drugs to treat COVID-19
- C. It is an academic, non-binding study on how international law applies to cyber conflicts and cyber-warfare
- D. None of the above

51. Which of the following Rivers are west flowing?

- 1. Narmada
- 2. Mahi
- 3. Sabarmati
- 4. Luni
- 5. Tapi
- 6. Tawa
- 7. Sharavati

- A. 1, 2, 3, 4 and 5 only
- B. 3, 4, 5, 6 and 7 only
- C. 1, 2, 3, 5 and 7 only
- D. 1, 2, 3, 4, 5, 6 and 7

52. Out of the following statements, choose the one that brings out the principle underlying the Cabinet form of Government: [UPSC 2017]

- A. An arrangement for minimizing the criticism against the Government whose responsibilities are complex and hard to carry out to the satisfaction of all.
- B. A mechanism for speeding up the activities of the Government whose responsibilities are increasing day by day.
- C. A mechanism of parliamentary democracy for ensuring collective responsibility of the Government to the people.
- D. A device for strengthening the hands of the head of the Government whose hold over the people is in a state of decline.

53. Consider the following Pairs:

Tribe	State
1. Chenchus	Telangana
2. Kattupaniya	Tamil Nadu
3. Sherdukpen	Himachal Pradesh

Which of the above pairs is/are correctly matched?

- A. 1 only
- B. 2 and 3 only
- C. 3 only
- D. None

54. With reference to TESS, which of the following statements is/are correct?

- 1. It is a NASA Astrophysics Explorer mission
- 2. It is designed to search for exoplanets using the transit method

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

55. Which of the following are Mosquito-borne diseases?

- 1. Chikungunya
- 2. Cholera
- 3. Dengue Fever
- 4. Yellow Fever
- 5. Zika

Options:

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

56. Consider the following statements:

- 1. It is a semi-xerophyte crop, grown in tropical & subtropical conditions
- 2. It requires uniformly high temperatures varying between 21°C and 30°C.
- 3. It is a plant that needs a long frost-free period, a lot of heat and plenty of sunshine
- 4. It is semi-tolerant to salinity and sensitive to water logging and thus prefers well drained soils.

The above statements describes about:

- A. Sugarcane
- B. Coffee
- C. Tobacco
- D. Cotton

57. Consider the following statements in respect of Trade Related Analysis of Fauna and Flora in Commerce (TRAFFIC):

- 1. TRAFFIC is a bureau under the United Nations Environment Programme (UNEP).
- 2. The mission of TRAFFIC is to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

Which of the above statements is/are correct?

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

58. Consider the following statements with respect to Earthquakes:

- 1. The magnitude of earthquakes is measured on the Mercalli Scale.
- 2. The magnitude is expressed in absolute numbers, 0-10.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

59. With respect to Pradhan Mantri Awaas Yojana (Gramin), which of the following statements is/ are correct?

- 1. The cost of houses would be shared between Centre and States.
- 2. Selection of beneficiaries is only based on housing deprivation parameters of Socio-Economic and Caste Census (SECC), 2011

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

60. Consider the following statements:

- 1. Kaiser-i-Hind was recently declared as State butterfly of Arunachal Pradesh.
- 2. Its IUCN status is Near Threatened
- 3. Kaiser-i-Hind is protected under Schedule II of Wildlife (Protection) Act, 1972

Which of the above statements is/are correct?

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

61. Kamo'oalewa recently seen in news is

- A. A new variant of coronavirus found in samples taken from the Xinjiang region of China
- B. A fossil of a new megaraptor in Patagonia
- C. A Near-Earth asteroid which could be a fragment of our moon
- D. A Most Advanced Humanoid Robot

62. In India, it is legally mandatory for which of the following to report on cyber security incidents?

- 1. Service providers
- 2. Data centres
- 3. Body corporate

Select the correct answer using the code given below:

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

63. 'SITMEX', recently seen in the news, refers to -

- A. Anti-satellite weapon tested by Russia
- B. Maritime exercise between India, Singapore and Thailand
- C. New inflation index developed by the RBI
- D. A report on hunger brought out by the UN

64. Which of the following statements is/are correct?

- 1. Birsa Munda is a 16th-century tribal freedom fighter.
- 2. During British rule, he spearheaded an Indian tribal religious movement across the tribal belt of modern-day Bihar and Jharkhand.
- 3. His birth anniversary is marked as Janjatiya Gaurav Divas, to remember the contribution of tribal freedom fighters.

Options:

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

65. Rani Kamlapati belonged to which tribal community?

- A. Santhal
- B. Gond
- C. Muria
- D. Baiga

66. Which of the following statements is/are correct?

- 1. Forex reserves are maintained by the RBI.
- 2. RBI often intervenes in the forex market and buys up US dollars to prevent the rupee from losing its export competitiveness.
- 3. This has led the US Treasury Department to put India on its 'currency manipulator' watch list.

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

67. The economic cost of food grains to the Food Corporation of India is Minimum Support Price and bonus (if any) paid to the farmers plus

- A. Transportation cost only
- B. Interest cost only
- C. Procurement incidentals and distribution cost
- D. Procurement incidentals and charges for god owns

68. Which of the following statements is/are correct about the Kartarpur Corridor?

- 1. The Kartarpur Corridor is a visa-free border crossing and corridor between India and Pakistan.
- 2. It enables both border trade and pilgrimage.
- 3. It is built across the Chenab river.

Options:-

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

69. Which of the following statements is/are correct about the UNWTO?

- 1. The UN World Tourism Organization (UNWTO) is a specialized agency of the United Nations.
- 2. It promotes tourism as a driver of economic growth and is committed to promoting tourism as an instrument in achieving the United Nations Sustainable Development Goals.
- 3. It runs a global initiative known as 'The Tourism Villages' to highlight villages where tourism preserves cultures and traditions, celebrates diversity, provides opportunities and safeguards biodiversity.

Options:-

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

70. What led to the latest crisis at Belarus-Poland border?

- A. Dispute over trade negotiations between EU and Belarus.
- B. Territorial conflict between Poland and Belarus.
- C. Belarus enabling migrants from the Middle East and Africa to enter the European Union through Poland.
- D. Dispute over water sharing of a trans-boundary river.

71. If your fundamental rights have been violated, how can you seek remedy from the courts?

- A. By filing a Public Interest Litigation (PIL) at the nearest court
- B. By filing a police complaint and then approaching the District Court with a contempt petition
- C. By filing a writ petition directly at the High Court or Supreme Court
- D. By filing a curative petition at the Supreme Court

72. It is possible to produce algae based biofuels, but what is/are the likely limitation(s) of developing countries in promoting this industry? (UPSC-2017)

- 1. Production of algae based biofuels is possible in seas only and not on continents.
- 2. Setting up and engineering the algae based biofuel production requires high level of expertise/technology until the construction is completed.
- 3. Economically viable production necessitates the setting up of large scale facilities which may raise ecological and social concerns.

Select the correct answer using the code given below:

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

73. The Election Commission of India performs which of the following functions?

- 1. Determining the territorial areas of electoral constituencies.
- 2. Advise President/Governor in the matter of post-election disqualification.

- 3. Acting as a court to settle disputes concerning the granting of recognition to political parties and allocating election symbols to the parties.
- 4. Play a leading role in promoting participatory democracy and election administration worldwide.

Options:

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

74. The Sydney Dialogue is focussed on -

- A. Nuclear disarmament
- B. Emerging, critical and cyber technologies
- C. Clean and renewable energy
- D. Demilitarisation of outer space

75. Which of the following statements is/are correct?

- 1. The Cyber Security Grand Challenge was launched in 2020 to promote innovation and provide impetus to the growth of Indian cyber security products.
- 2. It was launched by the Data Security Council of India (DSCI) and the Ministry of Electronics & IT (MeitY).

Options:

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

76. Which committee referred to the 5th Schedule as "Constitution within Constitution"?

- A. Mungekar Committee
- B. Dhebar Commission
- C. Tendulkar Committee
- D. C. Rangarajan Committee

77. In 1920, which of the following changed its name to "Swarajya Sabha"? (UPSC 2018)

- A. All India Home Rule League
- B. Hindu Mahasabha
- C. South Indian Liberal Federation
- D. The Servants of Indian Society

78. Which of the following statements is/are correct about Rani Lakshmibai?

- 1. Rani Lakshmibai was one of the leading figures in the Quit India Movement.
- 2. During her period, Jhansi was a Maratha princely state.
- 3. The British policy of 'Doctrine of Lapse' led her to revolt against the colonial empire.

Options:

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

79. Which of the following statements is/are incorrect?

- 1. India has become the third-largest domestic aviation market in the world and handles the largest domestic air traffic after USA and China.
- 2. The Ministry of Civil Aviation launched the UDAN scheme in 2016 to improve India's international air connectivity with a focus on US and European markets.

Options:

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

80. Which of the following statements is/are correct?

- 1. India's MSME sector plays a very significant role in terms of job creation, expanding manufacturing base and boosting Indian exports.
- 2. The sector contributes over 11 crore jobs with over 30% contribution to the GDP and over 49% to overall exports from India.

Options:

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

81. The term 'Zircon', recently seen in the news, refers

to-

- A. DRDO's robotic bomb disposal prototype
- B. Russian hypersonic cruise missile

- C. Israel's single-dose COVID-19 vaccine
- D. Google's satellite-based internet project

82. Which of the following best describes/ describe the aim of 'Green India Mission' of the Government of India? (UPSC-2016)

- 1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'.
- 2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future.
- 3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

Select the correct answer using the code given below.

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

83. A law enacted by the Parliament can be repealed in which of the following ways?

- 1. By passing an ordinance
- 2. By enacting another legislation to repeal the law
- 3. Through a resolution adopted by the Lok Sabha

Options:

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

84. India has funded which of the following projects in Sri Lanka?

- 1. Northern housing project
- 2. Jaffna cultural centre
- 3. Kankesanthurai port revival
- 4. Mattala airport
- 5. Palaly civilian airport

Options:

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

85. Hamas is an extremist group operating in -

- A. Syria
- B. Yemen
- C. Gaza Strip
- D. Iraq

86. Which of the following statements is/are correct?

- 1. The Real Estate (Regulation and Development) Act, 2016 is an act of the Parliament which seeks to protect home-buyers as well as help boost investments in the real estate industry.
- 2. It establishes a Real Estate Regulatory Authority (RERA) in each state for regulation of the real estate sector and also acts as an adjudicating body for speedy dispute resolution.
- 3. It was introduced because the Consumer Protection Act, 1986 was inadequate to address the needs of home-buyers.

Options:

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

87. Consider the following pairs:

Famous place River

1. Pandharpur Chandrabhaga

2. Tiruchirappalli Cauvery

3. Hampi Malaprabha

Which of the pairs given above are correctly matched?

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

88. Which of the following are the four holy places related to the life of Lord Buddha?

- 1. Vaishali
- 2. Lumbini
- 3. Bodh Gaya
- 4. Sarnath
- 5. Kushinagar
- 6. Shravasti

- A. 1, 2, 3 and 4 only
- B. 2, 3, 4 and 5 only
- C. 3, 4, 5 and 6 only
- D. 1, 3, 5 and 6 only

89. Which of the following statements is/are correct?

- 1. Compulsory licensing is when a government allows someone else to produce patented product or process without the consent of the patent owner or plans to use the patent-protected invention itself.
- 2. Countries can only make use of compulsory licenses for the domestic market, not for export.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

90. With respect to the Sickle Cell Disease, which of the following statements is/are incorrect?

- 1. It is a genetic disease, i.e., it is inherited from parents.
- 2. It affects haemoglobin, the molecule in white blood cells that delivers oxygen to cells throughout the body.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

91. Consider the following Pairs:

Tribal Freedom fighters Region 1. Komaram Bheem Telangana 2. Poto Ho Jharkhand 3. Thalakkal Chanthu Kerala Which of the above pairs is/are correctly matched?

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

92. With reference to river Teesta, consider the following statements:

- 1. The source of river Teesta is the same as that of Brahmaputra but it flows through Sikkim.
- 2. River Rangeet originates in Sikkim and it is a tributary of river Teesta.
- 3. River Teesta flows into Bay of Bengal on the border of India and Bangladesh.

Which of the statements given above is/are correct?

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

93. With respect to Indira Gandhi Peace Prize, which of the following statements is/are correct?

- 1. It is a prestigious award given by the Indira Gandhi Memorial Trust.
- 2. It is awarded to individuals or organizations to honour their efforts in promoting international peace, development and a new international economic order.
- 3. The recipients can be national and international nominees.

Options:

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

94. Which of the following are the surface-to-surface missiles?

- 1. Prahaar
- 2. Prithvi
- 3. Shaurya
- 4. Spyder
- 5. Trishul

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

95. Which of the following exercises is/are correctly matched?

1. Shakti: India- France

2. Dharma Guardian: India-Indonesia

3. Surya Kiran: India- Nepal

4. Sampriti: India –Bangladesh

Options:

A. 1 and 3 only

B. 2 and 4 only

C. 1, 3 and 4 only

D. 1, 2, 3 and 4

96. With reference to the use of nano-technology in health sector, which of the following statements is/are correct?

- 1. Nanoparticles can be used for drug delivery to the brain for therapeutic treatment of neurological disorders
- 2. NanoFlares can used for detection of cancer cells in the bloodstream
- 3. Nanochips can be used to check plaque in arteries

Options:

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

97. Due to some reasons, if there is a huge fall in the population of species of butterflies, what could be its likely consequence/consequences?

- 1. Pollination of some plants could be adversely affected.
- 2. There could be a drastic increase in the fungal infections of some cultivated plants.
- 3. It could lead to a fall in the population of some species of wasps, spiders and birds.

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

98. Consider the following statements:

- 1. Minimum support price (MSP) is the price that government agencies pay whenever they procure the particular crop.
- 2. The Centre currently fixes MSPs for 23 farm commodities.
- 3. The Govt. is legally bound to pay MSP when the open market price of the crop falls below the announced price.

Which of the above statements is/are incorrect?

- A. 1&2
- B. 1&3
- C. Only 3
- D. None of the Above

99. Consider the following statements:

- 1. Article 22 of the Constitution deals with protection against arrest and detention in certain cases.
- 2. All laws in India assume an accused to be innocent until proven otherwise.

Which of the above statements is/are correct?

- A. Only 1
- B. Only 2
- C. Both
- D. None

100. Committee of Experts under the Chairmanship of Justice B.N. Srikrishna deals with:

- A. Agricultural reforms and the MSP
- B. Privatization of Public Sector Banks
- C. Adoption of a Uniform Civil Code
- D. Personal data protection

101. Which of the following statements is/are correct?

- 1. Param Vir Chakra, Maha Vir Chakra and Vir Chakra were instituted by the Government of India on 26th January, 1950.
- 2. These gallantry awards are announced twice in a year first on the occasion of the Republic Day and then on the occasion of the Independence Day.
- 3. The recommendation for gallantry awards is invited by the Ministry of Defence twice in a year from the Armed Forces and Union Ministry of Home Affairs.

Select the correct option from below:

- A. 1&2
- B. 2 & 3

- C. 1&3
- D. All of the Above

102. Under the Indian Constitution, concentration of wealth violates

- A. The Right to Equality
- B. The Directive Principles of State Policy
- C. The Right to Freedom
- D. The Concept of Welfare

103. Consider the following statements:

- 1. India has set a target of 20 per cent ethanol blending in petrol by 2030.
- 2. Ethanol is high in oxygen content and ensures more complete combustion when blended with petrol or diesel.
- 3. India does not allow the production of ethanol from food grains as it affects food security in the country.

Which of the given statements is/are INCORRECT?

- A. 1 only
- B. 1 and 3 only
- C. 3 only
- D. None of the above

104. Which of the given statements is/are INCORRECT with respect to Udham Singh?

- 1. He assassinated the India office bureaucrat Curzon-Wyllie in 1909.
- 2. He assassinated Reginald Dyer, the Lieutenant-Governor who presided over the British suppression of the 1919 protests in Punjab.
- 3. He was associated with the Ghadar party while in the U.S.

Options:

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

105. Which of the given statements is/are correct with respect to the Pradhan Mantri MUDRA Yojana?

- 1. The scheme allows the borrowers to avail of collateral-free business loans at low rates of interest.
- 2. Under the scheme, eligible borrowers can directly borrow up to ₹10 lakh from the Micro Units Development & Refinance Agency Ltd (MUDRA).

3. Under the scheme, MUDRA has created three products – 'Shishu', 'Kishore' and 'Tarun' to signify the stage of growth and funding needs of the beneficiary.

Options:

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

106. He started a movement called 'Ulgulan', or 'The Great Tumult'. Popularly known as Dharti Abba, he also started a new faith. His birth anniversary is recognised as Janjatiya Gaurav Diwas.

Who is the Tribal Leader being talked about?

- A. Bhagwan Birsa Munda
- B. Tirut Singh
- C. Kanhu Murmu
- D. Sidhu Murmu

107. With reference to an initiative called 'The Economics of Ecosystems and Biodiversity (TEEB)', which of the following statements is/ are correct? (2016)

- 1. It is an initiative hosted by UNEP, IMF and World Economic Forum.
- 2. It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity.
- 3. It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity.

Select the correct answer using the code given below.

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

108. Consider the following pairs:

Editor/Founder Paper/Journal 1. Sasipada Banerji Deenbandhu 2. Narayan Meghaji Lokhande Bharat Sramajivi

Which of the above pairs is/are correctly matched?

Mahratta

A. 1 and 2 only

3. Bal Gangadhar Tilak

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

109. With reference to Lithium, which of the following statements is/are correct?

- 1. It is considered to be the lightest or the least dense metal on earth.
- 2. It is one of the rare metals.
- 3. It is highly reactive and flammable, and must be stored in mineral oil.

Options:

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

110. Consider the following statements:

- 1. It is the smallest of the shallow seas covering the continental shelf of Europe.
- 2. It is the busiest shipping lane in the world.

The above statements best describe:

- A. English Channel
- B. Gulf of Lion
- C. Strait of Otranto
- D. St George's Channel

111. India's Strategic crude oil storages are located in which of the following places?

- 1. Mumbai
- 2. Mangalore
- 3. Chennai
- 4. Visakhapatnam
- 5. Padur

Options:

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

112. With reference to the Parliament of India, consider the following statements: (UPSC -2017)

- 1. A private member's bill is a bill presented by a Member of Parliament who is not elected but only nominated by the President of India.
- 2. Recently, a private member's bill has been passed in the Parliament of India for the first time in its history.

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

113. Which of the given statements is/are INCORRECT with respect to the ASEM Process?

- 1. ASEM is a platform for the countries in Asia and Europe to exchange views on regional and global issues and strengthen cooperation.
- 2. The grouping comprises members of the European Union and ASEAN only.
- 3. The latest summit marked the 25th anniversary of the ASEM process and was chaired by India.

Options:

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

114. Consider the following statements with respect to INS Vela:

- 1. It is the first of the Indian Navy's six submarines under Project 75.
- 2. It is a Stealth Scorpene-Class Submarine.
- 3. It is a diesel-electric attack submarine of Kalvari-class.

Which of the given statements is/are INCORRECT?

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

115. The herb "Withania somnifera" is often seen in News as:

- A. It is a widely used herb in traditional Indian Medicine.
- B. It is an invasive species present in the Kole Wetlands in Kerala.
- C. Its extract is widely used in making pesticides.
- D. It is a herb that contains a dangerous amount of lodine which can cause goitre, high thyroid-stimulating hormone levels, and hypothyroidism.

116. Which of the given statements with repsect to Rashtriya Gokul Mission is/are correct?

1. It is a component of the National Programme for Bovine Breeding and Dairy Development.

- 2. It was initiated in 2018 with a focus on the conservation and development of indigenous breeds and improve their genetic makeup.
- 3. Its components include the establishment of integrated indigenous cattle centres (Gokul Gram) and breeder's societies (Gopalan Sangh).

Options:

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

117. In the Constitution of India, promotion of international peace and security is included in the: (UPSC-2014)

- A. Preamble to the Constitution
- B. Directive Principles of State Policy (DPSP)
- C. Fundamental Duties
- D. Ninth Schedule

118. Which of the following are the works of Rabindranath Tagore?

- 1. Satya Ke Prayog
- 2. Gitanjali
- 3. Ghare Baire
- 4. Sonar Tori

Options:

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

119. Consider the following statements:

- 1. Constitution Day is celebrated in our country on 26th January every year to commemorate the enactment of the Constitution of India.
- 2. The Ministry of Social Justice and Empowerment in 2015 notified the decision of Government of India to celebrate the Constitution Day every year to promote Constitution values among citizens.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

120. With reference to the appellate jurisdiction of the Supreme Court to grant Special Leave, which of the following statements is/are incorrect?

- 1. It can be granted against any court or tribunal in the country.
- 2. It is a discretionary power of the Supreme Court and cannot be claimed as a matter of right.
- 3. It is applicable to constitutional, civil and criminal matters.

Options:

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

121. Consider the following pairs:

Islands	Dispute
1. Kuril	Japan- Russia
2. Senkaku	China- Japan
3. Dokdo	Japan- South Kor

Which of the above pairs is/are correctly matched?

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

122. Who among the following is associated with 'Songs from Prison', a translation of ancient Indian religious lyrics in English?

- A. Bal Gangadhar Tilak
- B. Jawaharlal Nehru
- C. Mohandas Karamchand Gandhi
- D. Sarojini Naidu

123. Which nuclear power plant in India is being built in partnership with France?

- A. Kaiga
- B. Kudankulam
- C. Kalpakkam
- D. Jaitapur

124. 'Operation HAECHI-II', recently seen in news, refers to -

- A. A global anti-drug operation launched by United Nations Office on Drugs and Crime
- B. EU mission to rescue migrants stranded in the Mediterranean Sea

- C. Deployment of UN Peacekeeping Forces in Afghanistan
- D. Interpol's global operation to crackdown on cyber-enabled financial crime.

125. Which of the following statements are incorrect?

- 1. The Communist Party of India (Maoist) is a violent, extremist organization.
- 2. It was formed in 1967, following the armed-Maoist uprising at Naxalbari.
- 3. Ithas been designated as a terrorist organisation under the Unlawful Activities (Prevention) Act.

Options:-

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

126. Which of the following are seen as features of the Indian Judiciary?

- 1. Independent from the executive and legislature
- 2. President appoints judges to the higher judiciary
- 3. Transparent and accountable appointment process

Options:-

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

127. Consider the following statements:

- 1. Agricultural soils release nitrogen oxides into the environment.
- 2. Cattle release ammonia into the environment.
- 3. Poultry industry releases reactive nitrogen compounds into the environment.

Which of the statements given above is/are correct?

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

128. Consider the following statements with regards to the Minimum Support Price:

- 1. It was first introduced in 1965 to encourage farmers to grow foodgrains.
- 2. At present, it covers 23 crops.
- 3. No MSP is offered for pulses in India.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

129. Consider the following statements with regards to Norovirus:

- 1. It is a group of viruses that leads to gastrointestinal illness.
- 2. Norovirus is resistant to many disinfectants and can heat up to 60°C.
- 3. The virus can also survive many common hand sanitisers.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

130. The famous Yelagiri Hills lie in which of the following states?

- A. Tamil Nadu
- B. Kerala
- C. Karnataka
- D. Telangana

131. Consider the following statements with regards to Drugs Controller General of India:

- 1. The DCGI establishes standards for the manufacturing, sales, import, and distribution of drugs in India.
- 2. The DCGI also regulates medical and pharmaceutical devices.
- 3. DCGI is also responsible for the training of Drug Analysts deputed by State Drug Control Laboratories and other Institutions.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

132. Which one of the following National Parks lies completely in the temperate alpine zone?

- A. Manas National Park
- B. Namdapha National Park
- C. Neora Valley National Park
- D. Valley of Flowers National Park

133. Consider the following statements with regards to suspension of the Members of Parliament:

- 1. The MPs can be suspended by the President on the recommendation of the presiding officer of the house.
- 2. The MPs can only be suspended for their conduct in the ongoing session of the Parliament.

Choose the correct statements:

- A. 1 only
- B. 2 only
- C. Both 1 & 2
- D. None of the above

134. Consider the following statements with regards to 'Office of Profit' in India:

- 1. There is a clear statement in the Indian Constitution under Articles 102(1)(a) and 191(1)(a), that an MP or MLA is not allowed to hold any office of profit as this would fetch them financial gains and benefits.
- 2. It doesn't apply when an individual holds two executive positions simultaneously.
- 3. The office of profit concept has been adopted from the British Parliamentary model.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

135. The drainage path of Krishna River doesn't include which of the following states:

- A. Tamil Nadu
- B. Maharashtra
- C. Karnataka
- D. Telangana

136. Which of the following is correct with regards to the Central Bank Digital Currency (CBDC), as per the RBI:

- A. CBDC is the legal tender issued by a global authority in a digital form
- B. CBDC is the legal tender issued by a central bank in a digital form
- C. CBDC is RBI's attempt to launch its own cryptocurrency to rival the existing ones
- D. None of the above

137. In the context of which one of the following are the terms 'pyrolysis and plasma gasification' mentioned:

- A. Extraction of rare earth elements
- B. Natural gas extraction technologies
- C. Hydrogen fuel-based automobiles
- D. Waste-to-energy technologies

ANSWER KEYS

1	A
2	С
3	A
4	С
5	С
6	С
7	A
8	С
9	A
10	С
11	D
12	С
13	С
14	A
15	A
16	A
17	A
18	D
19	D
20	В

21	D
22	В
23	A
24	D
25	В
26	D
27	A
28	A
29	В
30	С
31	В
32	A
33	В
34	С
35	В
36	A
37	В
38	В
39	A
40	A

41	A
42	D
43	A
44	D
45	В
46	D
47	С
48	D
49	D
50	С
51	D
52	С
53	A
54	С
55	В
56	D
57	В
58	В
59	A
60	D

61	С
62	D
63	В
64	С
65	В
66	D
67	С
68	A
69	D
70	С
71	С
72	В
73	D
74	В
75	С
76	A
77	A
78	С
79	В
80	С

81	В
82	С
83	С
84	D
85	С
86	D
87	A
88	В
89	A
90	В
91	D
92	В
93	D
94	A
95	С
96	D
97	С
98	С
99	A
100	D

101	D
102	В
103	В
104	A
105	D
106	A
107	С
108	С
109	D
110	A
111	В
112	D
113	С
114	В
115	A
116	С
117	В
118	В
119	В
120	A
-	

121	D
122	С
123	D
124	D
125	С
126	В
127	D
128	A
129	D
130	A
131	D
132	D
133	D
134	D
135	A
136	В
137	D

MAINS PRACTICE QUESTIONS

GS Paper 1

Social Issues

- 1. Explain with relevant examples the technological solutions to eradicate manual scavenging. (10 Marks, 150 Words)
- 2. Multiple provisions in the Indian Constitution and several laws prohibiting the practice of manual scavenging haven't been able to eliminate this practice in the country. Examine the causes and suggest ways to overcome this problem. (250 words; 15 marks)
- 3. Throw light on the biggest roadblocks in the delivery of nutrition interventions to pregnant women in India. Suggest ways to tackle this problem. (250 words; 15 marks)
- 4. Enlist the various initiatives taken by the government to bring India's tribal population into the mainstream and evaluate the success of such initiatives. (250 words; 15 marks)
- 5. Project Sampoorna's success in reducing child malnutrition is a model that can be easily implemented anywhere. Discuss. (10 Marks, 150 Words)

GS Paper 2

Polity and Governance

- 1. States should base reservation policies on data, not political expediency. Comment. (10 Marks, 150 Words)
- 2. The government needs to strike a balance between the welfare functions of NGOs and their ability to hinder the nation's progress. Do you agree? Elucidate with examples. (15 marks, 250 words)
- 3. Discuss the concerns associated with the Members of Parliament Local Area Development Scheme (MPLADS) and suggest corrective measures for its better implementation. (15 Marks, 250 Words)
- 4. Will the idea of designating three capitals for the State promote 'distributed development'? Critically examine. (15 Marks, 250 Words)
- 5. The rising tide of criminalization in Indian politics threatens the survival of true democracy. Discuss. (15 Marks, 250 Words)
- 6. What do you understand by Uniform Civil Code? Examine its relevance for India and the roadblocks in its implementation. (250 words; 15 marks)
- 7. Despite suggestions from various commissions, the Supreme Court hasn't allowed any reforms in the collegium system. In this context, enlist the merits and demerits of the existing collegium system. (250 words; 15 marks)
- 8. There is an urgent need to strike a balance between the right to privacy and national security. Do you agree with this statement? Suggest appropriate methods to achieve the same. (250 words; 15 marks)
- 9. We can't afford any more delays in introducing reforms in our parliamentary system. Do you agree? Give suggestions regarding such reforms. (250 words; 15 marks)
- 10. In light of the recent clashes between the Centre and the State governments, suggest ways to invigorate Centre-State relations in the country. (250 words; 15 marks)
- 11. An important parliamentary reform, often overlooked, is empowering the parliamentary committees, enabling them to keep a check on executives' powers. Suggest measures to revive the fortunes of these committees. (250 words; 15 marks)
- 12. The transfer of High court judges by the collegium is riddled by controversies. In the light of the statement, discuss the solutions to improve and streamline the judicial appointments procedure in India. (15 Marks, 250 Words)

- 13. Do you agree with the government's argument that gender equality shouldn't apply to permanent commissions for women in the army? Give arguments to support your answer. (250 words; 15 marks)
- 14. Eradicating the problem of cyberbullying requires concrete measures from the policymakers in India. Suggest such measures keeping in mind the present scenario. (250 words; 15 marks)
- 15. 'The real answer to India's defense problems lies in indigenous manufacturing.' Do you agree? Suggest ways to expedite the development of India's defense manufacturing sector. (250 words; 15 marks)
- 16. To revive the fortunes of India's telecom sector, there needs to be a similar regulatory policy for telcos and internet companies. Do you agree? Give reasons to justify your stand. (250 words; 15 marks)

Health

- 1. Throw light on the roadblocks in India's journey towards achieving universal health coverage. Also suggest possible ways to get rid of these roadblocks. (250 words; 15 marks)
- 2. Identify the various bottlenecks in India's health delivery mechanism. Also suggest appropriate solutions to the problem. (250 words; 15 marks)
- 3. In the Indian context, bring out the correlation between health and poverty with suitable arguments. (250 words; 15 marks)

International Relations

- 1. The recent G20 meeting came at a critical moment for the global political economy. Examine its key outcomes. (250 words; 15 marks)
- 2. Examine the plight of Indian migrant workers in West Asia with special emphasis on the challenges faced by women workers. (250 words; 15 marks)
- 3. AUKUS could rock China's boat in the Indo-Pacific. Examine. (15 marks, 250 words)
- 4. India has failed to fully appreciate the usage of international law as a means to advance its national security interests. Do you agree? Justify. (15 Marks, 250 Words)
- 5. Is it time for India to leave its sideline position and actively participate in resolving the issues in Afghanistan? Substantiate your answer. (250 words; 15 marks)
- 6. In order to have a meaningful dialogue, India must be an active player in the Afghanistan reconciliation process. Throw light on the evolving paradigm of India's foreign policy with respect to Afghanistan. (250 words; 15 marks)
- 7. India has lost a big opportunity to take the centre stage in world affairs by not utilizing the NAM platform that it built. Suggest measures to change this. (250 words; 15 marks)

GS Paper 3

Economy

- 1. Scarcity alone is not sufficient to facilitate the adoption of cryptocurrencies as money. Analyse. (250 words; 15 marks)
- 2. Examine the opportunities available at the WTO's 12th Ministerial Conference (MC12) for charting the future course of global trade. (250 words; 15 marks)
- 3. Discuss the various issues facing the fertilizer sector in India and suggest remedies to resolve these issues. (250 words; 15 marks)
- 4. India currently stands on the cusp of building a space ecosystem and with ISRO being the guiding body, India can now evolve as a space startup hub for the world. Evaluate. (250 words; 15 marks)
- 5. Do you agree with the perception that WTO has failed to live up to its expectations and must re-invent itself to fulfil its mandate? Elaborate on the reasons behind your argument. (250 words; 15 marks)

Environment and Ecology

- 1. Illustrate the key initiatives announced by India during COP26 summit at Glasgow. (250 words; 15 marks)
- 2. India's existing laws are inadequate in dealing with climate change. Critically evaluate. (250 words; 15 marks)
- 3. Explain why India has stayed away from committing to both the methane pledge and the forest conservation declaration adopted at the 26th UNFCCC COP at Glasgow? (15 Marks, 250 Words)
- 4. Do you support the Indian government's argument of 'Common but differentiated responsibility' when it comes to mitigating the effects of climate change? Support your answer with appropriate examples. (250 words; 15 marks)
- 5. There is still a gulf between India's climate change commitments and their realization. Suggest measures to fill in this gap. (250 words; 15 marks)
- 6. The problem of pollution in India won't be solved till we consider it as a 'seasonal problem'. In the light of this statement, suggest measures to curb the pollution problem in India. (250 words; 15 marks)
- 7. In the context of climate action, developing economies such as India are burdened with several challenges and require the help of the developed North. Hence, it is argued that to fulfill COP26 pledges, the world needs a new climate of cooperation. Discuss. (250 words; 15 marks)
- 8. Hydrogen is the most promising solution to decarbonise sectors like cement, steel, and refineries. The National Hydrogen Mission and the green hydrogen sector will give India a quantum jump in meeting our climate targets. Examine. (250 words; 15 marks)

Internal Security

- 1. Urgent Police reforms will go a long way in solving the lacunae of the Indian judicial system as well. Discuss. (15 marks, 250 words)
- 2. Conflicts in Northeast India have not only focused on the Indian state, but also manifest intergroup and intragroup dimensions. Explain the statement with the help of relevant examples. (10 Marks, 150 Words)
- 3. Experts have argued that there is a high sense of alienation amongst Kashmiri youth, owing to the nature of security response of the Indian state against cross-border terrorism. In the light of this, suggest a softer approach that could be adopted to win the hearts and minds of young Kashmiris at the grassroots. (250 words; 15 marks)
- 4. The judgment of the Supreme Court of India in the Thwaha Faisal vs Union of India case has immense potential to reclaim the idea of personal liberty and human dignity. The Court has acted in its introspective jurisdiction and deconstructed the provisions of the Unlawful Activities (Prevention) Act (UAPA) with a great sense of legal realism. This paves the way for a formidable judicial authority against blatant misuse of this law. Critically evaluate. (15 marks, 250 words)