Monthly Current Affairs
September - 2020

CONTENTS

POLITY

1. ## Representative governance system

   » Mains: Challenges in representative democracies

Challenges in representative democracies:

Money as a factor in elections:

- Around the world, electoral democracies are affected by the issue of funding political parties and elections.

- Money has become an important factor deciding the winnability of the candidates. Money is required to win elections legitimately, even when people are not bribed to vote. Uninterrupted visibility and communication with citizens require advertisements as well as teams of professionals for managing social media. This has increased the cost of elections.

- The race to raise more money for even legitimate electioneering purposes can corrupt the process of funding parties and elections. This happens to be the root causes of corruption in politics and government.

Quality of elected representatives:

- Despite having been elected based on the principle of universal adult franchise and enjoying popular mandate, the quality of the elected representatives is a cause of concern.

  * There are growing indications of increasing criminalization of politics.

  * Debates within India's Parliament, in which all members have been elected by the world's most impressive election machinery, hardly inspire citizens' confidence in their representatives' ability to govern the country.

Process flaws:

- There is an inherent flaw in the design of the process for electing representatives.

  * Representatives of the people are chosen by smaller electorates within geographical constituencies. However, when they meet together in the national assembly, they are expected to govern the whole country and consider what is best for the whole country.

  * Constituency favouring leads to challenges for reaching optimal solutions.

  * However, if the people who elected them find they are not protecting local interests, they will not be elected again.

- Political parties in electoral democracies provide a solution to the problem of creating an alignment of views among representatives from hundreds of constituencies around the country.

Multi party systems:

- It is easier to form effective governments in electoral democracies when there are fewer parties. When there are too many parties and too many contradictory points of view to be accommodated within a coalition, governance can break down.

  * The 1990's witnessed political uncertainty in India due to the lack of a clear mandate in the general elections. Recently, Israel had to undertake multiple rounds of elections to form a government.

Intra party democracy:

- There is lack of intra party democracy in most political parties of the day.

- Political parties when not internally democratic, they serve as means for self-aggrandising politicians to amass power and wealth as a result of which democracy as a whole suffers.

The temptation of direct democracy:

- Given the above discussed challenges to representative democracy, it is tempting to abandon political parties and parliaments and revert to direct forms of democracy where every decision can be put directly to all citizens to vote on.

- New Internet technologies could provide relevant tools to make this possible.

- However, there are challenges with respect to direct democracy as well. If all voters have not understood what is at stake, they cannot decide well and they could be guided by emotions rather than objective facts and figures. Complex issues, where many interests collide, must be resolved by reason, not settled by the numbers.

The Way forward:

Addressing the existing concerns:

- Electoral funding must be cleaned up. Criminalization of politics must be ended and democracy within political parties must be improved to make representative democracy work better.

- Electoral reforms are essential.

- This will require appropriate legislations and their strict enforcement by the constitutionally backed institutions like the election commission and the Judiciary.

Local governance and citizen participation:

- Local governance, wherein citizens manage their local affairs democratically is a must for a good, democratic governance system. There is the need for greater decentralization of powers and functions.

- Active citizen participation in the democracies would allow them to become the source of solutions to many problems in the society.

- Given the familiarity with the local conditions the locals will be able to take optimal decisions.

- Local systems solutions will be effective even in solving global systemic problems of environmental sustainability and inclusive growth.

Indian Constitution-Amendments

2. **Privy Purse and constitutional amendment**

   » Prelims: 26th constitutional amendment

   » Mains: Important constitutional amendments

   Details:

   - The Privy Purse was used as a conciliatory move to get the princely state rulers to surrender their sovereignty to the Indian union.

     * As defined from 1949 under Article 291 of the Indian Constitution, a privy purse would be a fixed, tax-free sum guaranteed to the former princely rulers and their successors. The sum was intended to cover all expenses of the former ruling families and would be charged on the Consolidated Fund of India.

   - The constitution Twenty-sixth Amendment Act, 1971 abolished this provision of privy purses and princely privileges.

     * It was seen as an important step in further democratisation of Indian society. It represented the momentum of social change in the country.

Election related issues

3. **Blockchain voting**

   » Prelims: Potential applications of block chain technology

   » Mains: Arguments in favour of and against remote voting

   Context:

   - Attempts by the Election Commission of India to further digitize the electoral infrastructure of the country.

   Background:

   Blockchain Technology:

   - A blockchain is essentially a digital ledger of information/transactions that is duplicated and distributed across the entire network of computer systems on the blockchainfor the purpose of ensuring integrity and verifiability of data stored on the ledger.

   - This makes it difficult or impossible to change, hack, or cheat the system.

- Blockchain technology has been traditionally used as supporting structures for cryptocurrencies. However, their use in non-cryptocurrency applications has witnessed a steady rise, in fields such as the monitoring of supply chain networks in industries and in remote voting and elections.

  * Recently, In Russia, the vote on the constitutional amendment was carried out through votes cast online.

Details:

- The Election Commission is exploring the possibility of using blockchain technology for the purpose of enabling remote elections.

- The proposals for the system include a system wherein the electors would have to physically reach a designated venue in order to cast their vote. The systems would use "white-listed IP devices on dedicated internet lines" and make use of the biometric attributes of electors to identify the users.

  * IP whitelisting is a security feature often used for limiting and controlling access only to trusted users. IP whitelisting allows you to create lists of trusted IP addresses or IP ranges from which your users can access your domains.

Arguments in favour of remote voting:

- Remote voting would benefit internal migrants and seasonal workers who face considerable difficulties in exercising their democratic right of voting. This would make them politically relevant. This could help further deepen democracy in India.

  * India is home to the largest internal migrants in the world at around 51 million of the populace based on the 2011 Census.

- Remote voting might also be useful for some remotely-stationed members of the Indian armed forces.

Arguments against remote voting:

Security concerns

- Previous experiences of remote voting in other countries have pointed out to many vulnerabilities in the system.

  * Any shortcomings in the implementation of cryptographic protocols in the remote voting system would make it possible to access and decrypt the votes stored on the blockchain. Physical implants or software backdoors placed on an individual system could allow attackers to collect and deduce voting choices of individuals. This goes against the secrecy of voting required to ensure free elections.

  * An attacker may be able to clone the biometric attributes required for authenticating as another individual and cast a vote on their behalf.

* The provision of a dedicated line for remote voting will make the infrastructure increasingly prone to targeted Denial-of-Service attacks, where an attacker would be in a position to block traffic from the system.

Infrastructural needs

- The adoption of digitisation and interconnectivity introduce additional points of challenges into the system. Round the clock electricity and broadband connectivity is a necessity to ensure the envisaged system works. This would be a challenge in remote areas.

Explore existing solutions

- Given that there are other existing solutions like the postal ballots and proxy voting proposed solution like the 'One Nation, One Voter ID' system to ensure ballot portability, it makes little sense to explore newer technological solutions which involve setting up entirely new, untested systems.

Way forward:

- There is the need to shed the obsession with techno-solutionism. It is important to note that further digitisation, in itself, does not make processes more robust. Any solution to electoral problems must be fault tolerable and not affect the integrity or transparency of the overall election process.

- Instead the existing systems like the postal ballots and proxy voting provisions should be improved upon to make the systems more inclusive and also robust.

- Even if the Election Commission is able to design a system which is proven to be satisfactorily secure, such a system should be limited only to lower level elections, and not for something as significant as the general election.

Parliament and state legislatures- Functioning and conduct of business

4. Division of Votes

- » Prelims: Division of votes
- » Mains: Functioning of parliament

Context:

- Deputy Chairperson Harivansh did not consider the Opposition's demand for a division of votes on a resolution to send the two farm bills to a select committee

What is division?

- Matters in parliamentary democracy are generally decided by voting. In Parliamentary Parlance this is called 'Division', i.e., dividing the House to decide a matter by majority vote.

- Every matter requiring the decision of the House is decided by means of a question put by the Chairman on a motion made by a Member. After the motion has been moved, the Chairman formally proposes or places the motion for consideration of the House.

Methods of Division

- Rules 252 to 254 of the Rules of Procedure and Conduct of Business in Rajya Sabha provide for the different methods of Division in the House.

- The rules provide for four methods of voting in Rajya Sabha.

  * Voice vote;

  * Counting;

  * Division by automatic vote recorder; and

  * Division by going into the Lobbies.

1. Voice Vote

- The Chairman puts the question before the House and invites those who are in favour of the motion to say "Aye" and those against the motion to say "No".

- Then the Chairman says: "I think the Ayes or the Noes, (as the case may be) have it".

  * MPs orally convey their agreement or disagreement to a motion.

  * Being an oral vote, it does not put on parliamentary record the stand of political parties and individual MPs on contentious political issues.

- When a question is decided by this method, the Chairman does not announce the numbers of "Ayes" and "Noes".

2. Division by count

- If the opinion of the Chairman as to the decision of a question is challenged, he may, if he thinks fit ask the members who are for "Aye" and those for "No" respectively to rise in their places and, on a count being taken, he may declare the determination of the House.

- In this case also, the names of the voters are not recorded.

3. Division with the aid of Automatic Vote Recorder – under rule 253)

- Each member is assigned a fixed seat. Each seat is provided with an integrated microphone and voting console containing four buttons – 'P' for PRESENT, 'A' for AYES, 'O' for ABSTAIN and 'N' for NOES.

- A member who is not able to cast his vote by pressing the button provided for the purpose due to any reason considered sufficient by the Chairman, may, with the permission of the Chairman, have his vote recorded verbally by stating whether he is in favour of or against the motion.

4. Division by going into Lobbies – (Under rule 254)

- If the Chairman decides that the votes shall be recorded by the members going into the Lobbies, he may direct the 'AYES' to go into the Right Lobby and the 'NOES' into the Left Lobby.

Issue Area

- The rules of procedure regarding voting are unambiguous that if a voice vote is challenged, "votes shall be taken by operating the automatic vote recorder or by the members going into the Lobbies".

- Even if a single member demands a division, it is required to be carried out. Quite often, a division of vote is demanded even when the outcome is predictable, in order to bring on record the positions of parties and members on a particular bill.

- Deputy Chairperson's explanation that members were not demanding a division from their seats and the House was not in order is misleading.

- In any case, regardless of which side has the majority, procedure is sacrosanct and voting is the foremost tool of establishing parliamentary authority. It cannot be reduced to an act of benevolence by the Chair or the executive.

Significance of division

- Data on divisions keeps Political parties accountable on their shifting stands.

- Divisions also provide insights into the participation of MPs in the legislative process

    * In many democracies, voting records of MPs are raised in public discussion to analyse their work as a legislator.

Conclusion

- Making division/recorded voting as the default method of voting will not only catalyze more debates within political parties but will also encourage MPs to actively engage in lawmaking in Parliament.

Parliament and state legislatures-Functioning and conduct of business

5. **Parliamentary scrutiny on the back burner**

    » Prelims: Parliamentary committees terms and membership

    » Mains: Concerns with respect to Parliamentary committees

What are Parliamentary Committees?

- Parliamentary Committees are essentially miniature Parliaments in themselves. These Committees are smaller units of MPs from both Houses, across political parties and they function throughout the year. These smaller groups of MPs study and deliberate on a range of subject matters, Bills, and budgets of all the ministries.

Where do they draw their powers from?

- Parliamentary committees draw their authority from Article 105 (on privileges of Parliament members) and Article 118 (on Parliament's authority to make rules for regulating its procedure and conduct of business).

What are the types of committees?

- Most committees are 'standing' as their existence is uninterrupted and usually reconstituted on an annual basis;

    * Some standing committees are departmentally related, an example being the Standing Committee on Human Resource Development.

    * The three financial committees the Public Accounts Committee, the Estimates Committee and the Committee on Public Undertakings.

- Some are 'select' committees formed for a specific purpose, for instance, to deliberate on a particular bill.

    * They are Adhoc in nature.

    * They are dissolved once the purpose is met which means Once the Bill is disposed of, that select committee ceases to exist.

Why have parliamentary committees?

In a parliamentary democracy, Parliament has broadly two functions, which are lawmaking and oversight of the executive branch of the government. Parliament is the embodiment of the people's will. Committees are an instrument of Parliament for its own effective functioning.

- First, they help Parliament manage its business better. It is easier to examine a topic in depth by a committee of 30 than by an assembly of 700.

    * Given the volume of legislative business, discussing all Bills under the consideration of Parliament in detail on the floor of the House is impossible. Committees are platforms for discussion on a proposed law.

- Second, they enable input from experts and those who may be directly affected by a policy or legislation. For example, the Departmentally Related Standing Committees (DRSCs) often invite comments from the public and call several people to testify before them.

    * At least in principle, the assumption is that the smaller cohort of lawmakers, assembled on the basis of the proportional strength of individual parties and interests and expertise of individual lawmakers, could have more open, intensive and better informed discussions.

- Third, being outside direct public glare allows members to discuss issues and reach consensus without worrying about constituency pressures.

- A related fourth advantage in the Indian context is that the anti-defection law does not apply to committees—therefore, decisions are not usually made on party lines.

    * Committee meetings are 'closed door' and members are not bound by party whips, which allows them the latitude for a more meaningful exchange of views as against discussions in full and open Houses where grandstanding and party positions invariably take precedence.

- Fifth these committees allow members to focus on some specific areas and build their expertise, which helps them scrutinize issues more thoroughly.

- Finally, Executive accountability to the legislature is enforced through questions in Parliament also, which are answered by ministers.

    * However, department standing committees go one step further and hear from senior officials of the government in a closed setting, allowing for more detailed discussions.

    * This mechanism also enables parliamentarians to understand the executive processes closely.

Concerns – A gradual marginalisation:

- Committees of scrutiny and advice, both standing and ad hoc, have been confined to the margins in the last few years.

- Data by PRS India states that while 60% of the Bills in the 14th Lok Sabha and 71% in the 15th Lok Sabha were wetted by the DRSCs concerned, this proportion came down to 27% in the 16th Lok Sabha.

- Apart from the Departmentally-related Standing Committees (DRSCs), the government has shown extreme reluctance to refer Bills to Select Committees of the Houses or Joint Parliamentary Committees.

    * The last Bill referred to a Joint Parliamentary Committee was the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Second Amendment) Bill, in 2015.

    * Some of the most momentous acts of Parliament in recent years such as the radical overhaul of Article 370 that revoked the special status of Jammu and Kashmir and divided the State into two Union Territories were not processed by any House committee.

- Given their large-scale implications and the popular protests against them, the three Bills related to agricultural produce and the three labour Bills were cases that deserved to be scrutinised by Select Committees of the Houses.

Way forward:

- Plenty of evidence suggests that the committee system has greatly enhanced the capacity of Parliament to carry out its mandate.

- Strengthening the committee system can go a long way in improving the quality of laws drafted and minimise potential implementation challenges.

- The need of the hour is a greater and effective utilisation of Parliamentary Committees to strengthen Parliament as a deliberative body which can ensure effective oversight.

Parliament and state legislatures-Functioning and conduct of business

6. Question hour dropped in monsoon session

- » Prelims: Question hour, starred and unstarred questions.

- » Mains: Accountability of the executive to the legislature

Context:

- The deletion of 'Question Hour' provision in the monsoon session of the Parliament.

    * The Unstarred Questions will continue to be received and answered and it is only the Starred Questions and the Supplementary questions emanating from them that would not be accepted.

- The Parliament would also have a curtailed Zero Hour.

Background:

Question Hour:

- Question Hour is the first hour of a sitting session and it is devoted to questions that Members of Parliament can raise.

- The Rules of Procedure in both Houses prescribe the operational details for the question hour.

- Questions are addressed to a specific Minister of the government. The concerned Minister is obliged to answer to the Parliament, either orally or in writing, depending on the type of question raised.

- The two major types of questions include the Starred and non-starred questions.

    * Starred Questions require oral answers and the member is allowed to ask a supplementary question, with the permission of the Speaker.

    * Non-starred questions are those for which a written reply is expected. After the reply has been provided, no supplementary question can be asked.

- Copies of answers given are available to Members at the Notice Office before the start of the day's proceedings as also on the websites.

Zero Hour:

- Zero Hour is the time when Members of Parliament (MPs) can raise Issues of Urgent Public Importance.

    * The Zero Hour starts at 12 noon immediately following the Question Hour.

- 'Zero Hour' is not mentioned in the Rules of Procedure. It is an Indian parliamentary innovation.

- Zero Hour is an informal device available to MPs to raise matters without any notice 10 days in advance. This is because, generally, the matters are of public importance and such matters cannot wait for 10 days.

Significance of question hour:

- The Question hour serves as an important instrument of holding the executive accountable for its actions and inactions.

    * The Indian Constitution prescribes a parliamentary form of government in which the executive is accountable to the electorate through a legislature. Executive accountability is an inalienable aspect of a democracy.

* The legislature holds the executive accountable through discussions on matters of public interest and concern by using the available provisions like asking questions in question hour, adjournment motion, calling attention, half-an-hour discussion, motion of no confidence, questions of privilege, etc.

• Given the specificity of the questions, the subsequent answers tend to lead to wider debates, inquiries, and in some instances have even brought to light administrative scandals. The questions that MPs ask are designed to elicit information and trigger suitable action by ministries.

• The information made available through the answers by the ministers adds to public information essential to informed debates on matters of interest or concern.

• With the broadcasting of Question Hour since 1991, Question Hour has become one of the most visible aspects of parliamentary functioning.

Details:

• The opposition and several people have expressed concerns over the current development based on the following arguments.

Lowering executive accountability:

• Among the available instruments of executive accountability, the 'Question Hour' is of special significance given its regularity and its availability on a basis of equality to every Member of the House, Rajya Sabha or Lok Sabha. Given that it covers every aspect of government activity, domestic and foreign, it acts as a powerful tool of accountability.

• The deletion of question hour will lower the ability of the legislature to hold the executive accountable.

Significance of question hour:

• The deletion of 'Question Hour' amounts to curtailment of the right to question the government and goes against the philosophy of democracy.

The significance of starred questions:

• Unlike the unstarred questions wherein written replies are allowed and a government can afford to camouflage inconvenient details, In case of Starred Questions and the provision of the Oral Supplementary questions provide an opportunity for the legislature to unravel hidden facts.

Lack of consultation:

• The decision to do away with the question hour has been taken without due deliberation and discussion with the stakeholders.

Failing to explore alternatives:

• Therefore citing the pandemic as a reason for the dropping of question hour from parliamentary activity is unsatisfactory.

• There seems to have been little effort in trying to explore alternatives and procedural options that would help retain the essence of the question hour.

* One possible solution could have been to admit the Starred Question, reply to it in a set of prepositions and allow the Member concerned to table in writing the permitted number of follow up questions also to be answered in writing the following day.

* Given that the Chairman and the Speaker exercise great powers relating to the proceedings of their respective Houses, they could have used a Motion to develop a consensus on this issue.

Conclusion:

• Despite the unprecedented challenges brought forth by the pandemic, there is a need to find solutions premised on the spirit of democracy.

• The politics of avoidance should be avoided and executive accountability needs to be prioritized.

Parliament and state legislatures-Functioning and conduct of business

7. **Deputy Speaker of Lok Sabha**

   » Prelims: Deputy speaker of Lok sabha; election and powers

   » Mains: Functioning of parliament

Context:

• LokSabha Speaker has said that if there is a provision for the post of Deputy Speaker in the LokSabha, then it was only obvious that there should be one, but it was not the Speaker's job to appoint one, and that the Deputy Speaker must be chosen by the House.

Background:

• This is the first time that the LokSabha has functioned for over a year without having a Deputy Speaker.

• A panel of MPs has been assisting the Speaker.

• Speaker has been requested to fill the post of Deputy Speaker of the LokSabha.

Deputy Speaker of the LokSabha:

• Article 93 of the Constitution provides for election of both the Speaker and the Deputy Speaker of the LokSabha.

   * There is no need to resign from their original party though as a Deputy Speaker, they have to remain impartial.

• Usually, the Deputy Speaker is elected in the first meeting of the LokSabha after the General elections from amongst the members of the LokSabha.

   * By convention the position of Deputy Speaker is offered to opposition party in India.

- They hold office until either they cease to be a member of the LokSabha or they resign.
- They can be removed from office by a resolution passed in the LokSabha by an effective majority of its members.

Way forward:

- According to the Rules of Procedure and Conduct of Business in Lok Sabha, "The election of a Deputy Speaker shall be held on such date as the Speaker may fix."
- But as per tradition Speaker needs the nod of the government for announcing such an election.
- Once the date notified, one or more motions can be moved by members for election of a nominee as the Deputy Speaker of the Lok Sabha.
    * No member can move a motion for his or her own election.
- If a motion is accepted by the simple majority of the house, the MP becomes the Deputy Speaker of the Lok Sabha.

Parliament and state legislatures-Functioning and conduct of business

8. 8 Opposition MPs suspended from RS for 'unruly behaviour'

- » Prelims: Powers of speaker of LS and chairman of RS.
- » Mains: Functioning of parliament

Context:

- Eight Rajya Sabha MPs were suspended for unruly behaviour in the House

What is the reason for suspending an MP?

- The general principle is that it is the role and duty of the Presiding Officer — Speaker of Lok Sabha and Chairman of Rajya Sabha — to maintain order so that the House can function smoothly.
- The suspension of the eight members comes a day after the Upper House witnessed massive unruly scenes by protesting Opposition members during the passage of two farm Bills.
- In order to ensure that proceedings are conducted in the proper manner, the Speaker/Chairman is empowered to force a Member to withdraw from the House.

What are the rules under which the Speaker acts?

- Rule Number 373 of the Rules of Procedure and Conduct of Business says: "The Speaker, if is of the opinion that the conduct of any Member is grossly disorderly, may direct such Member to withdraw immediately from the House, and any Member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting."

- To deal with more recalcitrant Members, the Speaker may take recourse to Rules 374 and 374A.

What is the procedure for revocation of a Member's suspension?

- While the Speaker is empowered to place a Member under suspension, the authority for revocation of this order is not vested in her.
- It is for the House, if it so desires, to resolve on a motion to revoke the suspension.

What happens in Rajya Sabha?

- Like the Speaker in Lok Sabha, the Chairman of the Rajya Sabha is empowered under Rule Number 255 of its Rule Book
- The Chairman may "name a Member who disregards the authority of the Chair or abuses the rules of the Council by persistently and wilfully obstructing" business.
- In such a situation, the House may adopt a motion suspending the Member from the service of the House for a period not exceeding the remainder of the session.
- The House may, however, by another motion, terminate the suspension.
- Unlike the Speaker, however, the Rajya Sabha Chairman does not have the power to suspend a Member.

Functioning of the Indian Judiciary

9. Stop press

- » Prelims: Provisions of article 19 of the Indian constitution
- » Mains: Concerns with prior restraint on media publications

Context:

- The interim order of the Andhra Pradesh High Court imposing a ban on the mainstream media and social media, from mentioning anything in relation to an FIR filed by the police against a former Advocate General of the State and others.

Background:

- In recent years, there have been quite a few instances of interim injunctions against all media houses obtained by the petitioner solely to prevent any news reporting about them. Such orders by the courts restrain the media from reporting on particular cases or people.
- While claiming to be defamed by one publication, they have been able to obtain open-ended stay on publications.

Concerns:

- A blanket gag order against the media has serious consequences for both free speech and media freedom on one side and the common citizen's right to know or right to receive information on the other.

- This also raises important questions of prior restraint on media publication

  * The blanket ban on media publications even without examining their content goes against spirit of previous judgments of the SC which have held that pre-broadcast or pre-publication censorship is not tenable and that all grievances against objectionable content should be dealt with in accordance with the law of the land after its publication.

  * This observation helps uphold the right of the media as enshrined under Article 19 (1) (a) of the Constitution that guarantees freedom of speech and expression.

- Such blanket bans limit media coverage and the consequent public scrutiny.

Counter-arguments:

- Injunctions against publication could help prevent possible defamation or invasion of privacy and could also help protect the fairness of a trial or investigation in genuine cases.

- This could avoid the concerns associated with a media trial.

Way forward:

- As a matter of principle, courts must avoid blanket orders against publication.

- The Supreme Court Judgment in the Sahara vs. SEBI (2012) case can act as important guiding point for the judiciary in this direction.

  * As per the judgment, the Court can grant preventive relief on a balancing of the right to free trial and a free press. However such temporary restraint on publication must only be favoured in cases of real and substantial risk of prejudice to the administration of justice or a fair trial.

Functioning of the Indian Judiciary

10. Virtual courts

  » Mains: Benefits and concerns associated with Virtual courts

Context:

- Parliamentary Panel on Law and Justice has presented its report, "Functioning of the Virtual Courts/ Courts Proceedings through Video-Conferencing".

Recommendations:

- It has recommended continuation of virtual courts even in a post-COVID scenario.

- However, it has suggested that infrastructure needs to be upgraded especially in district courts to implement this.

- The panel has argued that transfer of certain categories of cases, like cases pertaining to traffic challans or other petty offences, from regular court establishments to virtual courts will reduce the pendency of cases.

  * Currently there are 30 million pending cases.

  * During the pre-COVID period, the video-conference (VC) set up was primarily used for conducting remand matters to prevent movement of prisoners between courts and jails.

- The Committee recommended the Ministry of Law and Justice and Ministry of Electronics and Information Technology to address data privacy and data security concerns while developing a new platform for India's judicial system.

Concerns:

- Virtual court hearings, especially during peak hours when many people log into the video-conferencing system, is subject to frequent crashes of the system. This can lead to the entire proceedings being vitiated by one glitch.

- There are also concerns that virtual courts will compromise privacy of data as well as confidentiality of discussions and court proceedings.

  * Software programs and applications are prone to hacking and manipulation.

  * Currently, third-party software applications such as Vidyo, Cisco and Jitsi are being used in India for conducting hearings through video-conferencing.

- Another concern is that almost 50% lawyers, particularly in district courts, do not have any laptop or computer facility.

Functioning of the Indian Judiciary

11. Where is the sentinel guarding our rights?

  » Mains: Concerns associated with the functioning of the Supreme Court

Context

- The article talks about the need for the Supreme Court to re-address its role assigned under the Constitution as "sentinel on the qui vive" (watchful guardian) of fundamental rights.

Issues

With regard to the exercise of power:

- Since the assumption of office by Chief Justice J.S. Khehar in 2017, the Court has increasingly drawn the attention of the public for its repeated failures. Successive Chief Justices have failed to stop the decline of the Court.

- Allegations have been made against the Chief Justice of India, stating that the decisions in some of the most important matters affecting the nation, the Constitution, democracy, and the people and their fundamental rights have been taken in favour of the executive.

- With the Court upholding the Chief Justice as 'Master of the Roster', in a debatable judgment in 2018, Chief Justices have used their powers to constitute Benches and allocate cases to such Benches in a highly selective manner, defeating the fundamental principle of the rule of law.

    * While the Chief Justice must be the administrative head, he must exercise his powers in a fair and just manner.

    * He must not constitute Benches and allocate cases to those Benches in a manner which tilts the balance in favour of the executive.

Disturbing events:

- Former Arunachal Pradesh Chief Minister KalikhoPul's suicide note carried serious allegations against "two senior-most judges" of the Supreme Court. The inquiry on the issue was stopped by Chief Justice J.S. Khehar and his colleagues.

- The same Court declined to order any inquiry into the demise of Judge B.S. Loya, thereby failing to reassure the subordinate judiciary that it stands with it.

- The fact that Chief Justice Dipak Misra presided over the Constitution Bench hearing matters related to the medical college scam, despite the FIR naming unknown persons including constitutional functionaries of misconduct, perhaps weakened his authority. Subsequently, many including retired judges have been charge-sheeted in that case.

- The case of sexual harassment charge against Chief Justice Ranjan Gogoi was another case where the entire judiciary and executive demonstrated their high-handedness.

The functioning of the Court:

- Since the lockdown, the Supreme Court has cut short its functioning. Despite repeated requests from the Bar, virtual hearings have not improved.

- While the High Courts have been using better systems, the Supreme Court persists on using a system that does not allow all the judges to sit every day. As a result, generally, seven-eight Benches sit every day as against 13-15 which can be constituted by the master of the roster.

- It has been argued that the working of the Court is far from satisfactory although the Court claims that a sufficient number of matters are being heard.

- The constitution of benches and allocation of matters even under the present dispensation continue to be subjective.

- Senior judges are not assigned PIL matters and almost all matters raising important issues in respect of acts of commissions and omissions by the executive have been allocated to Benches constituted by the Chief Justice.

Way forward:

- The right to get redress from the Court is itself a fundamental right, and the Court cannot abandon its own duty in this regard.

- The Court needs to re-address its role assigned under the Constitution.

- The Supreme Court must reassert clearly that it is truly the sentinel on the qui vive as regards the fundamental rights of all citizens.

Government policies and interventions

12. **Gopalakrishnan committee on non-personal data governance**

    » Prelims: Gopalakrishnan committee

    » Mains: Salient recommendations of the Gopalakrishnan committee

Context:

- The draft report of the Gopalakrishnan Committee submitted to the Ministry of Electronics and IT has been put out for public consultation.

Background:

The Gopalakrishnan Committee:

- The committee was set up in 2019 and is referred to as the Expert Committee on Non-Personal Data Governance Framework

- It is a nine-member panel, headed by former Infosys vice-chairman Kris Gopalakrishnan.

Objective:

- The Gopalakrishnan Committee was set up by the government for developing a governance framework for non-personal data.

- The Gopalakrishnan report is the first policy document globally that tries to address the issue of economic governance of digital society's data.

Suggestions:

- The Gopalakrishnan Committee has recommended among other things, making non-personal data "open".

    * Non-personal data are data that do not identify an individual.

    * Non-personal data sets can be useful in either framing public policy or creating and providing new services. Non-personal data are viewed as critical for development of the AI ecosystem.

- The committee has suggested that the non-personal data of an individual generated in the country should be allowed to be used by various companies. It envisages wide sharing and availability of data in

society.

* Only the data collected from non-privately owned sources, from society or community sources, have to be shared when requested for. Data from privately owned sources remain private.

- To ensure that companies share the required data, the report suggests developing a governance and legal basis for data-sharing requirements and obligations.

  * Community trustees would act as the representative of the community and would articulate the community's data ownership claim.

  * Data collectors would be considered as data custodians who will use and secure data as per the best interests of the community concerned.

  * Data trusts would act as data infrastructures that will enable data sharing, sector-wise, or across sectors, and which can be run by various kinds of third-party bodies.

  * A Non-Personal Data Authority is envisaged to enable and regulate all the data-sharing activities.

  * The committee recommends a new legislation, to provide legal backing to the envisaged model.

Lacunae in the recommendations:

Government data sets:

- The Gopalakrishnan Committee report does not adequately address governance frameworks around government data sets.Instead, the report largely focuses on the dangers posed by data collection by private sector entities.

- The Gopalakrishnan Committee does not evaluate the challenges with existing policies and practice pertaining to government data, and does not offer solutions on this front.

  * Notably, some of the most important non-personal data sets are held by the government, or result from taxpayer funding.

Conditions for data transfer:

- Though the Committee has taken a good step forward in recommending the making of non-personal data "open", the committee does not lay down conditions for such data transfers. This has raised concerns about state interference in the private data ecosystem.

  * The Justice B.N. Srikrishna Committee report of 2018 highlighted the need to restrict the growing power of the state to carry out surveillance.

Unaddressed issues:

- India's cybersecurity framework continues to be woefully inadequate and this issue has not been addressed in the report.

Arguments in favour of data sharing:

- The article discusses the need for data sharing and its importance to build a strong and fair digital economy.

Data as a public good:

- Data collected from various communities are considered to be 'owned' by the relevant community. Such 'community ownership' means that the data should be shared back with all those who need it in society.

  * The Gopalakrishnan committee's concept of 'community data' is in line with the above argument.

Infrastructural nature of data:

- The article argues that like other public infrastructures like roads, electricity, etc. society's digital data too can be considered a public infrastructure or 'commons 'in the current digital economy.

- There is the need to ensure that such infrastructure is available to all interested entrepreneurs and start-ups.

Overcoming digital monopoly:

- Few corporations have vertically integrated all the digital components involved in delivery of any digital service and have become global monopolies. Digital corporations have begun to dominate all sectors, including important ones such as education and health. Seven out of the top 10 companies globally today have a data-centric model.

- Such unsustainable concentration of digital power poses significant challenges.

  * This could have detrimental geopolitical impacts for some countries given the global domination of U.S. and Chinese companies in the digital sphere.

  * At the national level monopolies can lead to exploitation of consumers and small economic actors, and of strangulating competition and innovation.

- One way of breaking the monopoly power would be by separating the infrastructural elements of digital service provision (data) from the business of digital service delivery. This could be enabled by ensuring access to society's digital data to all. This would help address the scenario where dominant digital corporations are building exclusive control over any sector's data as their key business advantage and hindering the progress of new companies.

Promoting domestic industries:

- The proposed model would incentivize the entry of start-ups into the digital business sector by helping ensure widespread availability of society's data to all. If everyone gets greater access to non-personal data, they can develop their digital businesses or other activities with it.

- This would result in increased economic activity resulting in higher economic growth and higher job opportunities.

- A robust domestic data/AI industry will also help reduce India's dependence on U.S. and Chinese companies.

Significance of government data openness:

- The government data sets should be open to the citizens of the country based on the following arguments:

    * This will result in greater transparency in governmental actions and hence bring in greater accountability.

    * Given that these data sets result from taxpayer funding the citizens should be able to enjoy the benefits accruing from such data sets.

    * Government data sets, curated according to publicly verified standards, can lead to increased confidence in data quality and increased usage.

    * Free flow of information can have beneficial effects on society in the socio-economic domain.

Measures taken to promote openness:

- The Right to Information (RTI) Act, 2005, mandates the disclosure of government data on a suo moto basis.

- "Information for all" is an important pillar of the Digital India Policy.

- The National Data Sharing and Accessibility Policy (NDSAP), 2012 requires all non-sensitive information held by public authorities to be made publicly accessible in machine readable formats, subject to certain conditions.

- The Open Government Data Platform provides open access to data sets held by ministries and other agencies of the government.

Concerns:

- India has failed to create an open data society due to the following reasons.

Poor implementation of existing guidelines:

- Despite the well intended provisions of the National Data Sharing and Accessibility Policy (NDSAP), 2012, its implementation has been far from satisfactory.

- The quality and quantity of data sets published by the government have not been satisfactory. The data sets released by governments are often inconsistent, incomplete, outdated, published in non-machine readable or inconsistent formats, include duplicates, and lack quality metadata, thereby reducing re-usability.

Reluctance to provide information:

- The administration has been reluctant to make valuable information sets available to the public on grounds of sensitivity of the information and has been using provisions like the exceptions provided under the RTI act and the official secrets act provisions.

Way forward:

- Data governance being a relatively new concept in India, the government must take an incremental approach to reforms.

- Before trying to reform private sector data governance structure, the reforms should begin with reforming how the government itself deals with citizens' data.

This would result in greater trust in data governance practices and also allow the development of state capacity to govern the data ecosystem.

- India has done well in being the first country to come up with a comprehensive framework in the domain of digital policy and governance. This could provide India a formidable first mover advantage to acquire its rightful place in the digital world.

Government policies and interventions

13. Aircraft (Amendment) Bill

» Prelims: Important features of the aircraft amendment bill

» Mains: Significance of the new amendments

Background:

- The amendments address several regulatory shortcomings that were highlighted by aviation watchdogs of the United Nations and the U.S. — the International Civil Aviation Organisation and the Federal Aviation Authority — during their audits on safety and security in the Indian aviation ecosystem.

Highlights of the Aircraft Amendment Bill, 2020:

- The Aircraft (Amendment) Bill, 2020 is an amendment to the Aircraft Act, 1934 which regulates manufacture, possession, use, operation, sale, import and export of civil aircrafts, and licensing of aerodromes.

- The Bill gives statutory powers to the Directorate General of Civil Aviation (DGCA), the Bureau of Civil Aviation Security (BCAS) and the Aircraft Accident Investigation Bureau (AAIB).

    * These bodies were set up through various government notifications but did not have a defined role under the parent Act, as well as air navigation services.

    * DGCA will have safety oversight and regulatory functions.

    * BCAS will carry out regulatory activities related to civil aviation security.

    * AAIB will look into investigative activities for aircraft accidents.

- These statutory bodies are to be headed by Director General appointed by the Centre.

- The central government can issue directions to these bodies with respect to their activities in public interest.

- The Bill also empowers the central government to cancel the licences, certificates or approvals granted to a person if the person contravenes any provisions of the Act.

- The legislation also provides for keeping defence aircraft out of the purview of Aircraft Act, 1934.

14. Making the language of the law comprehensible

  » Prelims: Schedule 7 of the Indian constitution

  » Mains: significance of an inclusive language policy

Context:

- A plea was filed by the citizens who protested against the publication of the draft EIA notification in only English and Hindi, on the grounds that such a policy excludes a large number of Indians who do not speak Hindi or English from participating in the public consultation process.

- They demanded that the draft be published in 22 Indian Languages.

- This issue has brought much-needed attention to the issue of official languages used by the central government in its functioning.

Central Government's Response:

- Two High Courts have asked the government to publish the notification in all 22 languages mentioned in Schedule VIII to the Constitution.

- However, the central government is pushing back against this order, arguing that it is not required by the law to publish these notifications in the 22 languages mentioned in Schedule VIII.

- One of the other reasons offered by the central government to resist the translation of the notification into 22 languages is that translations may result "in the meaning of the words being obfuscated and often even lost", thereby leading to greater legal uncertainty.

- The Official Languages Act, 1963 requires the publication of the law in only English and Hindi. As a result, the central government, de facto, ends up excluding non-English and non-Hindi speaking citizens from the law-making process only because of their linguistic identity.

Authoritative Texts (Central Laws) Act, 1973:

- There exists a central law called the Authoritative Texts (Central Laws) Act, 1973 that creates a legal mechanism to recognise authoritative translations of all central laws into languages mentioned in Schedule VIII to the Constitution of India.

- This law extends to rules and delegated legislation issued under central laws.

- The Legislative Department of the Law Ministry hosts these translations on its website.

Translations as legal right:

- In many of the cases especially with regard to legislative enactments, it is reasonable to argue that citizens are not bound by laws that are not made available to them in their local language.

- The Supreme Court in the past had also advised the government to amend the Official Languages Act, 1963 to allow publication of official notifications in languages other than Hindi and English.

- The Supreme Court of India in Harla v. State of Rajasthan, 1951 has ruled that citizens are not bound by laws that have not been published and publicised.

    * The Court stated in pertinent part: "Natural justice requires that before a law can become operative it must be promulgated or published. It must be broadcast in some recognisable way so that all men may know what it is; or, at the very least, there must be some special rule or regulation or customary channel by or through which such knowledge can be acquired with the exercise of due and reasonable diligence."

Language Politics:

- This issue is yet to garner the political attention it deserves despite the fact that since independence, language has been one of the main markers of political identity in India.

    * The reorganisation of Indian States on linguistic lines in 1956 took place because of the agitations demanding the creation of a State for the Telugu-speaking people of the Madras Presidency.

- Ever since then, language has played a key role in shaping Indian politics.

- The rise and success of several regional political parties have been associated with linguistic pride, which sometimes can boil into language chauvinism against other linguistic minorities.

Concerns:

- Despite the importance of language to Indian politics, the key political parties which owe their existence to their politics around language, appear to be weak and inadequate in convincing Parliament or the central government in ensuring that all 22 languages recognised in the Schedule VIII to the Constitution are used by all institutions of the central government while communicating or interfacing with the public.

The Example of the European Union:

- EU has a policy in place to respect the linguistic diversity of its member nations.

- In the European Union (EU) – multi-linguistic jurisdictions, all EU-level official documents are made available in all 24 official languages of member States.

- This policy allows all EU nationals to communicate with EU institutions in any of the 24 official languages and these institutions are required to respond in the same language.

Way forward:

- Central government offices, such as the passport office, should give citizens the option to engage with the government in a language of their choice.

* So far, only the Unique Identification Authority of India (UIDAI) which runs the Aadhaar digital identity programme has an inclusive language policy allowing citizens to get identity cards in languages other than English and Hindi.

- An inclusive language policy must be integral to the law-making and enforcement process.

- This should include mandatorily publishing all parliamentary debates and associated records such as reports of parliamentary committees, the entire record of the Gazette of India, all legislation and delegated legislation of the central government in all 22 languages in Schedule VIII.

Conclusion

- The Government of India should make necessary changes put in place a policy to recognise the linguistic diversity and translate laws into other languages

15. Same-sex Marriage

Context:

- The Centre has opposed before the Delhi High Court, a petition seeking recognition of same-sex marriages.

Petitioner's argument:

- A petition had been filed in the SC, arguing that in the absence of a declaration from a court or authority, same-sex couples were being denied registration of their marriage under the 1955 Act. This, the counsel said, was happening despite the Supreme Court's verdict on IPC Section 377.

- It was also argued that the definition within The Hindu Marriage Act does not say that the marriage has to take place between a 'man' and a 'woman'.

- The petitioners submitted that the denial of registration impacted both the right to equality and the right to life, because benefits available to heterosexual couples were denied to homosexual couples.

Government's argument:

- The Centre argued that Indian legal system, society and values do not recognise marriage between same sex couples.

- Solicitor General, representing the Centre, said the 2018 judgment of the Constitution Bench of the Supreme Court merely decriminalises homosexuality or lesbianism.

- The Solicitor General said the petition was not permissible as it was asking the court to legislate and also that any relief granted "would run contrary to various statutory provisions".

16. Singapore Convention on Mediation comes into force

- The Singapore Convention on Mediation, also known as the United Nations Convention on International Settlement Agreements Resulting from Mediation has come into force.

- This will provide a more effective way for enforcing mediated settlements of corporate disputes involving.

- The harmonised and simplified enforcement framework under the Convention will lead to savings in time and legal costs for the businesses. This would boost the countries 'ease of doing business' credentials.

- As on September 1 2020, the Convention has 53 signatories, including India, China and the U.S.

Important Supreme Court Judgments

17. Kesavananda Bharati Case

Case Summary – Kesavananda Bharati & Others (Petitioners) V State of Kerala (Respondents)

- Kesavananda Bharati & others Versus State of Kerala is certainly one of the leading cases in the constitutional history of India if not the most important judgement of post-independent India and is popularly known as the Fundamental Rights case. The majority judgement in the case was pronounced by S.M.Sikri C. J., Hegde J, Mukherjea J, Shehlat J, Grover J, Jaganmohan Reddy J, Khanna J,

- It was dissented by Ray J, Palekar J, Mathew J, Beg J, Dwivedi J and Chandrachud J.

- It is rightly said that the judgement in the instant case brought an end to the conflict between the executive and the judiciary and proved to be a saviour of the democratic system and set up in the country. The resultant judgement in the case was a hard-fought legal battle between the two constitutional stalwarts and legal luminaries namely N.A. Palkhivala (who represented Petitioners) and H.M. Seervai (who represented the State of Kerala). The hearing in the case took place for sixty-eight long days and finally, a voluminous 703-page judgement was pronounced on 24th April 1973.

Brief Facts

- Kesavananda Bharati was the chief pontiff of the Edneer Mutt, a monastic religious institution located in Kasaragod district, Kerala. Bharati had some land in the Mutt which he owned. The Kerala state government passed the Land Reforms Amendment Act in 1969. As per this Act, the government could acquire some of the lands that belonged to the Mutt. In March 1970, Bharati moved the Supreme Court (under Section 32 of the Constitution) to enforce the rights that were guaranteed to him under:

  * Article 25: Right to practice & propagate religion

  * Article 26: Right to manage religious affairs

  * Article 14: Right to equality

  * Article 19(1)(f): Freedom to acquire property

  * Article 31: Compulsory acquisition of property

- The Kerala state government enacted another law, the Kerala Land Reforms (Amendment) Act, 1971 even as

the petition was under the court's consideration.

- The contentions made by the petitioners brought to the fore the validity of various amendments that were brought in by the Parliament to nullify the effects of Golaknath v State of Punjab. The petitioners challenged, in particular, three constitutional amendments – 24th Amendment, 25th Amendment and 29th Amendment and their validity.

  * 24th Constitutional (Amendment) Act, 1971
  * 25th Constitutional (Amendment) Act, 1972

- The extent to which the Parliament can exercise its power to amend the Constitution.

Contentions of the petitioners:

- Petitioners contended that the Parliament can't amend the Constitution in a manner they want as their power to do this is limited. The Parliament cannot make an amendment to the Constitution to change its basic structure as was set forth by Justice Mudholkar in the Sajjan Singh v State of Rajasthan case.

- They argued that the 24th & 25th Constitutional Amendments were violative of the Fundamental Right provided in Article 19(1)(f).

Contentions of the respondents:

- The State said that the Parliament's supremacy is the Indian legal system's basic structure and hence, it has boundless power to amend the Constitution. The respondents stressed that in order to fulfil its socio-economic obligations the unlimited power of the Parliament to amend the Constitution must be upheld.

Kesavananda Bharati Case Judgement

- The landmark judgement was delivered on 24th April 1973 by a razor-thin majority of 7:6 wherein the majority held that any provision of the Indian Constitution can be amended by the Parliament in order to fulfil its socio-economic obligations that were guaranteed to the citizens as given in the Preamble, provided that such amendment did not change the Constitution's basic structure. The minority, however, in their dissenting opinion, were wary of giving the Parliament unlimited amending power.

- The court held that the 24th Constitutional Amendment was entirely valid. But it found the first part of the 25th Constitutional Amendment to be intra vires and the second part of the same ultra vires.

Doctrine of Basic Structure

- The basic structure doctrine states that the Parliament has limitless power to amend the Constitution subject to the condition that such amendments should not change the Constitution's basic structure. The bench did not mention the basic structure of the Constitution and it was left to the interpretation of the courts. This was subsequently laid down in several

other judgements by the SC.

- The court contended that the term 'amend' mentioned in Article 368 doesn't imply amendments that can alter the Constitution's basic structure. If the Parliament intends to make an amendment with respect to a constitutional provision, such an amendment would necessarily have to undergo the 'basic structure' test.

Conclusion

- The case of Kesavananda Bharati vs the State of Kerala as mentioned supra had been heard for 68 days, the arguments commencing on October 31, 1972, and ending on March 23, 1973. The hard work and scholarship that had gone into the preparation of this case were breathtaking. Literally hundreds of cases had been cited and the then Attorney-General had made a comparative chart analysing the provisions of the constitutions of 71 different countries.

- The majority of the bench wished to safeguard the Constitution by preserving its basic features. The judgment was based on sound reasoning and it was given after a careful analysis of multifarious aspects. The bench opined that if the Parliament were to get unfettered power to amend, there were chances of that power to be misused, and that governments would change it as per their own preferences and whims. Such limitless powers vested in the hands of the government would mean that the basic features and also the very essence and spirit of the Indian Constitution could be changed. There was a need for a doctrine which could protect the rights of both the Indian Parliament and Indian citizens; the bench met this need halfway and came up with the basic structure doctrine, that protects the rights of both camps. It is to be noted that while in the US, only 27 amendments have been made, India has seen over one hundred amendments since independence. Despite this big number, the spirit of the Constitution and also the ideas of the Constitution-makers have not been tampered with. It is because of the bench's decision that the identity and spirit of the Constitution have not been lost. This landmark case has given our Constitution stability. Even though the petitioner lost this case partially, the SC ruling in the Kesavananda Bharati case turned out to be a saviour for Indian democracy, and also prevented the Constitution from losing its spirit.

Context

- Kesavananda Bharati Swamiji of Edneer Mutt passes away

18. Juristic Person

- A juristic person is a non-human legal entity recognized by the law and entitled to rights and duties in the same way as a human being.

- The Supreme Court in Shiromani Gurdwara Parbandhak Committee vs Som Nath Dass and Others (2000) said: "The very words Juristic Person connote recognition of an entity to be in law a person which otherwise it is not. In other words, it is not an individual natural person but an artificially created person which is to be recognised to be in law as such."

There are two kinds of legal entities: human and non-human

- In law, a human person is called a natural person (sometimes also a physical person). They are capable of assuming obligations and holding rights.

- A non-human person is called a juridical person (sometimes also a juridic, juristic, artificial or legal Person).

Legal persons are the creations of the law

- Legal Person includes those things which are treated in the same way as human beings for legal purposes.

- Legal persons have rights and co-relative duties; they can sue and be sued, can possess and transfer property.

- Since they're voiceless, this is mostly done through guardians and representatives.

- Gods, corporations, rivers, and animals, have all been treated as juristic persons by courts.

Juristic Persons Examples

Deities

- The treatment of deities as juristic persons started under the British. Temples owned huge land and resources, and British administrators held that the legal owner of the wealth was the deity, with a shebait or manager acting as trustee.

  * In 1887, the Bombay High Court held in the Dakor Temple case: "Hindu idol is a juridical subject and the pious idea that it embodies is given the status of a legal person."

  * In Bishwanath and Anr vs Shri Thakur Radhaballabhji & Ors (1967), the Supreme Court held that if a shebait does not discharge their duties properly, a devotee can move court as "friend of the deity".

- However, not every deity is a legal person. This status is given to an idol only after its public consecration, or prana pratishtha.

  * In Yogendra Nath Naskar vs Commissioner of Income Tax (1969), the Supreme Court ruled: "It is not all idols that will qualify for being 'juristic person' but only when it is consecrated and installed at a public place for the public at large."

- Justice D Y Chandrachud in the Sabarimala judgment held: "Merely because a deity has been granted limited rights as juristic persons under statutory law does not mean that the deity necessarily has constitutional rights."

Animals

- The Punjab and Haryana High Court has accorded the status of 'legal person or entity' to animals in Haryana giving them the corresponding 'rights, duties and liabilities of a living person'.

- Stating that animals cannot be treated as 'objects' or 'property' and are entitled to justice, the verdict reads, 'The corporations, Hindu idols, holy scriptures, rivers have been declared legal entities and thus, in order to protect and promote greater welfare of animals including avian and aquatic, animals are required to be conferred with the status of legal entity/ legal person.

Corporations

- A corporation is distinguished from the individuals who constitute the corporation. A corporation has a personality of the individuals. A corporation can sue and be sued.

- Even if the members of a corporation die, the corporation continues. A corporation is recognized by law as a permanent and continuous legal entity.

- The legal status and position of a company have been aptly described by the Supreme Court of India in Tata Engineering & Locomotive Company Ltd., V State of Bihar.

- The court observed, 'the corporation in law is equal to a natural person and has a legal entity of its own".

- The entity of the corporation is entirely separate from that of its shareholders and its assets are separate from those of its shareholders.

Rivers

- The Uttarakhand High Court declared Ganga and Yamuna rivers "living entities".

  * The High Court judgement ordered that the two rivers be represented by the chief of the National Mission for Clean Ganga – a government body overseeing projects and conservation of the Ganga – as well as the state's Chief Secretary and Advocate General.

- The Supreme Court however ruled rivers cannot be viewed as living entities.

- In 2017, New Zealand granted legal personhood to the Whanganui River.

Conclusion

- Thus, it is clear that incorporation had great importance because it attributes legal personality to nonliving entities such as companies, institutions, etc. which help in determining their rights and duties.

- Clothed with legal personality, these non-living personalities can own, use and dispose of property in their own names.

- Unincorporated institutions are denied this advantage because their existence is not different from the members.

ECONOMY

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1. **World Bank's forecast for India**
    - » Prelims: Reports by the World Bank
    - » Mains: Risks in the Indian economy

Context:

- As per the provisional data released by the National Statistical Office, India's Gross Domestic Product (GDP) has suffered its steepest contraction on record in the April-June quarter, as output shrank 23.9% in the quarter in comparison to the same period in 2019.

Causative factors:

Decreased demand:

- The stringent COVID-19 lockdowns in force during the period of first quarter seems to have hollowed out demand. Private consumption spending, which accounts for almost 60% of GDP, has contracted 26.7% as consumers have limited themselves only to essential spending and stopped almost all discretionary spending.

Effect of lockdown on sectors:

- The services category including trade, hotels and transport have been severely hit by the pandemic-linked restrictions.
- Manufacturing sector has registered a contraction as demand for products deemed non-essential declined, and factories, even after reopening, struggled to run amid shortages of labour and added safety norms.

Decline in exports:

- Exports, which contribute to almost 20% of GDP has contracted due to lockdowns, restrictions in movement of goods, cancellation of orders from importing countries.

Uncertainty and investment decline:

- Investment activity has witnessed a steep contraction of about 47% as large businesses have decided to conserve cash and have refrained from any capital spending in the face of uncertainty, and smaller firms have prioritised survival.

Concerns:

- There are concerns that the economic contraction may not be just a transient phenomenon and there is the possibility of an extended slowdown.

Limited fiscal space:

- The Centre's pandemic mitigation expenditure helped expand its consumption spending by 16.4% year-on-year and thus helped soften the overall blow to GDP.

- There is very limited scope for such a expenditure growth over the next three quarters because of the following reasons:
    - * The fiscal deficit in just the first four months of the financial year has already exceeded the full-year's budgeted target and the central government has expressed its desire to respect the fiscal limits set by the FRBM act.
    - * Revenue receipts for the government have decreased due to the economic contraction.

Unaccounted informal sector:

- The NSO data are provisional figures and are expected to undergo revision as they do not capture the informal sector due to difficulties in collecting data.
- Informal sector accounts for a major share of Indian economy and there is wide acceptance of the fact that the lockdown has had a higher detrimental effect on the informal sector. This would imply that the current estimates are not indicative of the actual output decrease and the revised estimate might only provide a further drop in the growth numbers.

Employment issues:

- There have been reports of high level of job losses and income erosion. The latest survey-based data from IHS Markitthough expects manufacturing PMI for August to register growth also notes that job shedding would continue at a strong rate in the industry.
- This would have a detrimental impact on the disposable income in the hands of the people and also lead to decreased consumption expenditure.

Increasing case load:

- The still rising trajectory of new COVID-19 infections would retard any recovery in growth.

Challenges in agricultural sector:

- Despite a good performance in the agricultural sector, which grew 3.4% and outpaced the year earlier quarter's 3% expansion, it too faces headwinds in the form of higher-than-ideal rainfall in August in several key crop growing regions in western and central India and the uncertainty with respect to the impact of recent farm market ordinances.

Way forward:

- With COVID-19 hitting private consumption, demand recovery will hinge on government spending and the government must give up its fiscal conservatism and finds innovative ways to mobilise resources.

Indian Economy and issues relating to growth and development

2. Reviving the economy

- » Prelims: Gross fixed capital formation, Index of eight core industries
- » Mains: Relation between important economic parameters and economic health

Context:

- The poor quarterly GDP numbers for Q1 2020-21, and the weak macro-economic indicators of the Indian economy.

Gross Fixed Capital Formation:

Meaning:

- As per RBI, Gross capital formation refers to the 'aggregate of gross additions to fixed assets (that is fixed capital formation) plus change in stocks during the counting period.'

- Gross fixed capital formation measures the increase in fixed capital. Gross fixed capital formation includes spending on land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; the construction of roads, railways, private residential dwellings, and commercial and industrial buildings. Disposal of fixed assets is taken away from the total.

- It is a component of the Expenditure method of calculating GDP.

Significance:

- Developing countries generally invest heavily in fixed assets to increase aggregate demand and prepare capacities to meet future demands.

Trend:

- Gross Fixed Capital Formation (as % of GDP) had been on a constant decline (except in 2018) between 2014 and 2019, falling from 30.1% to 27.4%.

Consumer demand:

Meaning:

- Consumer demand is the willingness and ability of consumers to purchase a quantity of products or service in a given period of time, or at a given point in time.

Significance:

- Consumer demand is an important aspect of the market based economy.

- Higher consumer demand incentivizes greater industrial production which leads to higher employment opportunities and the consequent economic growth.

Trend:

- Consumer demand in urban India as indicated by the domestic car sales has been on a steady decline for nine consecutive months. The decreased demand would lead to a fall in industrial activity.

- Though the rural demand has been better than urban demand due to a surplus monsoon and a higher disposable income through MGNREGA wages, still the weak FMCG demand in the rural economy is indicative of the decreasing average real rural wage growth.

Index of Eight Core Industries:

Meaning:

- The Index of Eight Core Industries is a monthly production index.

- The eight core industries are coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity.

Significance:

- The Eight Core Industries comprise 40.27 per cent of the weight of items included in the Index of Industrial Production (IIP). Hence they have an impact on general economic activity as well as other industrial activity.

- Index of eight core industries is considered as a lead indicator of the economy's industrial performance.

- This index is an indicator of the supply side health of the economy.

Trend:

- The eight core sectors have witnessed a decline in the recent times and have registered a growth of -0.2% in August 2020.

Concerns:

- The Indian economy faces the dual risk of weakening demand and shrinking supply.

- Investment sentiments are low.

- The government's ability to spend has reduced due to reduced revenues.

The way forward:

- Government spending alone won't help and it needs to incentivize private and household investments as they account for a large proportion of the capital formation.

- There needs to be a massive push on infrastructural spending to boost the core sector demand and generate jobs.

- The eight core sectors need structural reforms to revive their growth.

Indian Economy and issues relating to growth and development

3. Measures needed to revive economy

- » Prelims: GDP definition
- » Mains: Measures required to revive the Indian economy

Context:

- Federation of Indian Chambers of Commerce & Industry (FICCI) has urged bold and decisive action from the government to stimulate demand for India to return to a positive growth trajectory, following a 23.9% contraction in GDP in the first quarter of FY21.

Concerns:

- It has been found that weak demand continues to remain the key bottleneck for economic revival.

- In the absence of a major fiscal push on the demand side, India risks ending up in a low demand and low-income cycle.

- Job losses, declines in income and disruptions to business will strain the finances of retail and SME borrowers significantly.

- The Indian travel and tourism industry, one of the worst-impacted sectors by the COVID-19 pandemic, may suffer a loss of Rs. 5 lakh crore.

  * Travel and tourism industry accounts for 9.2% of India's GDP and employs 8% of the population, with a total foreign exchange contribution of about $28 billion.

Suggestions:

- Experts opine that sustained efforts are the key to reviving the economy.

- Measures are needed on supporting demand, including additional cash transfers to migrant workers, the poor and farmers.

- Temporary cut in GST rates.

- Increase in government procurement.

- Front-ending infrastructure projects and part funding of wages (as has been done in other nations) to ensure employment is sustained.

- Immediate measures are needed for survival of travel and tourism industry.

Indian Economy and Issues relating to growth and development

4. Financing economic recovery

- » Prelims: United Nations Economic and Social Commission for Asia and the Pacific

- » Mains: Need for a fiscal stimulus and available options

Background:

- The COVID-19 pandemic has had a deep socioeconomic impact across Asia and the Pacific.

- The dwindling revenue and increasing expenditure pose a unique challenge to the administrations.

  * Due to the continued lockdown measures and restricted borders, countries in Asia and the Pacific have been experiencing sharp drops in foreign exchange inflows due to declines in export earnings, remittances, tourism and FDI.

  * Countries are having to inject trillions of dollars for emergency health responses and fiscal packages.

- Policymakers are trying to expand their limited fiscal space.

Initiatives taken:

- The United Nations is steering an initiative called the Financing for Development in the Era of COVID-19 and Beyond, to articulate a comprehensive financing strategy to safeguard the Sustainable Development Goals.

- The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has recently launched its first-ever Regional Conversation Series on Building Back Better. This would involve ministers, decision-makers, private sectors and heads of international agencies to share collective insights on sharing pathways to resilient recovery from health pandemic and economic collapse.

- The Global Debt Service Suspension initiative calls for extending the debt moratorium to help the countries manage the debt distress.

Way forward:

Adopting a comprehensive financing plan:

- The finance plans should apart from aiming to address the challenge of diminished fiscal space and debt vulnerability must also envisage a sustainable recovery, consistent with the ambitions of the Paris Agreement and the 2030 Agenda.

- Apart from the economic considerations, the policy must promote social equality and environmental sustainability principles.

Regional co-operation:

- Given the limited abilities of the individual nations to deal with such a huge disruption, there is the need to harness the potential of regional cooperation in support of financing for development. Governments must pool financial resources to create regional investment funds.

- Regionally coordinated financing policies can restart trade, reorganise supply chains and revitalise sustainable tourism in a safe manner.

Role of domestic institutions:

- Central banks should continue to balance the contradictory needs of supporting the economy and maintaining financial stability.

Domestic reforms:

- The administration should consider enhancing tax reforms and improving debt management capacities.

- Tax reforms would ensure higher tax compliance.

Prioritizing investments:

- The government must use the limited fiscal space to invest in priority sectors.

* This could involve enhanced financial support to micro, small and medium-sized enterprises and other employment such employment intensive sectors.

* The government will also need to prioritize the needs of the most vulnerable sections in the society.

Explore alternative financing routes:

- Exploring sustainability-oriented bonds and innovative financing instruments options such as debt swaps for SDG investment should be explored further.

Role of global organizations:

- The United Nations and its specialized agencies will have to co-ordinate an inclusive, sustainable and resilient post-COVID-19 recovery given their global reach.

- The global financial institutes like the World Bank and the IMF will have to mobilize resources to ensure sufficient financial resources for the recovery process.

Indian Economy and issues relating to growth and development

5. **Attracting foreign investment into India**

   » Prelims: U.S.-India Strategic Partnership Forum, FDI provisions in India

   » Mains: Measures needed to attract foreign investment in India and impeding factors

Background:

- In his recent address to the U.S.-India Strategic Partnership Forum, the Indian Prime Minister pitching India as an investment destination called for higher foreign investments into India.

   * The US-India Strategic Partnership Forum (USISPF) is a non-profit organization that works for the partnership between India and the U.S. Subjects covered under the Summit are India's potential in becoming a Global Manufacturing Hub, Opportunities in India's Gas Market, Ease of Doing Business to attract FDI in India, Common Opportunities & Challenges in Tech Space, Indo-Pacific Economic issues, Innovation in Public Health and others.

- The PM laid out a vision of making India a manufacturing hub at the heart of global supply chains.

- The pitch comes in the backdrop of the government's keenness to lure potential investors, especially those looking to relocate from China, to India.

Significance of the move:

- The worsening relationship between the U.S. and China and the ongoing trade stand-off between the world's two largest economies presents a unique opportunity for India to woo U.S. investors and multinationals looking to shift from China to set up their bases in India.

- Even if a few multinational enterprises can be drawn to set up manufacturing bases, either by shifting facilities or as new additional plants, this would benefit Indian economy through increased FDI, new jobs and higher tax revenue for the government.

- There is also strategic significance involved in the pitch given the escalating border feud between India and China and India's economic and trade ties with China.

Concerns:

- Despite the right intentions of attracting foreign investment into India, the recent government measures seem to be sending the wrong messages to the potential foreign investors.

'Aatmanirbhar Bharat' initiative:

- The government's recent 'Aatmanirbhar Bharat' initiative, of making India more self-reliant would send a wrong signal to the foreign investors.

- Several Ministries have urged companies and industry sectors to adopt the policy of 'import substitution'-to replace imports with 'Made in India' substitutes. This could be perceived by the foreign investors as undesired regulation, as they too could be asked to source capital goods locally.

- Global FDI investors prioritise policy stability even at the cost of lower profits and favour largely barrier-free access to local and international markets.

Decision to not be part of the RCEP:

- India's decision to not join the RCEP multilateral trade pact is being viewed negatively by the foreign investors as this would put investor companies seeking to tap consumers in RCEP member countries at a tariff disadvantage. This would restrict their market access in these countries.

The nature of FDI inflow into India:

- Between April-July 2020, the Foreign Direct investment (FDI) into India stood at $20 billion.

- Despite the good inflow of FDI even during the time of COVID-19 into India, there continues to be concerns over the nature of the FDI inflows into India.

- Most of the recent FDI announcements have been by way of stake acquisitions in existing businesses, and predominantly in the services sector. These do not produce other desirable outcomes that are expected with FDI like the inflow of better technology and creation of additional employment opportunities.

- The FDI into manufacturing has been comparatively low.

Conclusion:

- India's efforts to attract capital will not result in substantial FDI flow till investors see policy stability.

- The government will have to convince investors that it is committed to an open, barrier-free global trade and investment order.

- Also the attempts to lure higher foreign investments into India should be supplemented with parallel efforts to explore supply-chain synergies with other economies.

Indian Economy and issues relating to growth and development

6. **Auto parts makers urged to cut imports**

   » Prelims: Production linked incentive scheme

   » Mains: Significance of import substitution and governmental efforts in this direction

   Context:

   - The Road Transport and Highways Minister speaking at the annual session of the Automotive Component Manufacturers Association of India (ACMA), has asked domestic automobile component makers to develop products locally and reduce dependence on imports.

   Details:

   - There are potential benefits that can accrue to India by reducing its dependence on imports in the automobile sector.

   Covering geopolitical risks:

   - The trade war between the U.S. and China and the increasing tensions along the LAC between India and China threatens to disrupt the automobile supply chains.

   - Many companies in China were either relocating or adding plants in other countries to cover the geopolitical risks.

   - India's attempt to cut its dependence on China for automotive parts could help India cover the possible geopolitical risks.

   Boost to 'Make in India':

   - The efforts to reduce imports would be supplemented by domestic manufacturing efforts. This could provide a boost to the Make in India programme and lead to the benefits of increased economic activity and employment opportunities.

   Key sector for economic revival:

   - The auto industry has been reviving faster than expected, mostly due to pent-up demand and people now preferring personal mobility over public transportation.

   - This provides an avenue for economic revival in the midst of the current economic slowdown. Self reliance in the sector would ensure its unimpeded growth.

Global automobile manufacturing hub:

- The presence of an integrated auto sector supply chain within India could help make India a top global automobile manufacturing hub. This would attract higher FDI into the sector and could also aid the export of automobiles from India.

Governmental efforts:

- A production-linked incentive (PLI) scheme for auto and component makers is under consideration and this would promote and incentivize domestic production and help reduce imports.

- The scrappage policy is at an advanced stage of inter-ministerial discussions. This would help create a demand base for the automobile sector and incentivize investments into the sector

Way forward:

- Given that India relied on even imports of low-tech components like gear boxes, tubes and steering wheels, and given that there are no technological impediments for localisation of these components, such components should be identified and efforts should be made to localize production of such entities in the beginning. Subsequently other categories of components where imports could be converted to local should be identified and promoted.

- While trying to increase domestic production all safety precautions need to be taken to ensure that there is no compromise on quality and safety.

- Apart from domestic efforts there is also the need to explore partnership with manufacturers from Japan, Europe, Korea and the U.S. to set up their manufacturing units within India.

Indian Economy and issues relating to growth and development

7. **Exploiting the Chinese exit**

   » Prelims: ICT sector in India

   » Mains: Opportunities available for India after the ban of Chinese apps and the required steps to exploit this opportunity

   Background:

   The Chinese app ban in India:

   - The government in September 2020 banned 118 applications — a majority being Chinese, on grounds of national security and sovereignty threat posed by these apps

   - In June 2020, the government had banned 59 Applications on similar grounds.

   - India has additionally blocked Chinese companies from contracting to work on its 5G mobile phone infrastructure.

   - Notably, the announcement comes amid tension between India and China along the LAC.

The Chinese growth story:

- In order to appreciate the significance of the Indian move, there is the need to examine the growth of Chinese in the technology sector over the years.

Consolidating domestic market

- During the initial years of the global Internet boom, The Chinese government began erecting censorship barriers and banned several popular Western websites and applications. The Chinese intent behind such a move was to filter and screen Western content available to its citizens.

- This had forced IT giants like Google and others to either fully pull out of the Chinese market or drastically reduce their presence in China.

- The censorship and other restrictions of international companies in the field of internet have paid rich dividends for the domestic Chinese economy.

- During this time the Chinese Internet market experienced high growth rate. The active internet users in China grew from just over 300 million in early 2010 to over 900 million users currently.

- The Great Internet Wall of china had helped insulate Chinese entrepreneurs from Big Tech of the Silicon Valley. This allowed home-grown firms such as WeChat and Alibaba a market to expand on their businesses.

- Though initially the home grown firms built copy cat versions of popular apps from the silicon valley, they soon morphed into distinctly Chinese applications tailored solely to the home market.

- Baidu has replaced Google in China. YoukuTudou is YouTube, and Xiaohongshu is a version of Instagram. WeChat which began as a simple messaging app, has diversified into other fields like social media, news, messaging, payments, and digital commerce.

Venturing into international market:

- Recognizing their mistake in failing to make themselves an IT outsourcing services superpower like India, China has also been focussing on external markets.

  * The popular apps like TikTok and PUBG have captured international markets.

  * The Chinese multinational technology company, Huawei Technologies is a leading global provider of information and communications technology (ICT) infrastructure and smart devices.

- China has been investing heavily in new technologies like Artificial Intelligence and is leading global efforts in fields like "neural networks" and "deep learning". This would place China as the technological super power in coming times.

  * Artificial neural networks also referred to as neural networks, are computing systems vaguely inspired by the biological neural networks of a human brain. A neural network is a series of algorithms that endeavours to recognize underlying relationships in a set of data. Neural networks are used for solving many business problems such as sales forecasting, customer research, data validation, and risk management. And even for natural language understanding.

  * Deep learning is part of a broader family of machine learning methods based on artificial neural networks. Deep learning AI is able to learn without human supervision, drawing from data that is both unstructured and unlabeled.Deep learning helps process data for use in detecting objects, recognizing speech, translating languages, and making decisions.

Details:

- The decision to ban Chinese apps in India is not only a geopolitical move but also a strategic trade manoeuvre that can have a significant positive economic impact for India.

- Immense economic opportunities would open up for India post the Chinese app ban in India. Banning these Chinese websites and applications to the Indian public effectively allows our home-grown IT talent to focus on the newly arrived Internet user.

Potential of Indian Market:

- With over 600 million internet users, India is the second largest online market in the world, ranked only behind China.

- India has been witnessing the widening reach of Internet connection across the country with hundreds of millions of non-urban Indians emerging as new consumers. India is among the fastest-growing markets for digital consumers with India recording double digit growth over the past several years, driven by rapid internet growth in rural areas.

- The data generated by this large consumer base is a valuable commodity for the internet based companies.

  * The Chinese Internet industry could use this data to test and implement the AI technologies they have been developing.

  * The big tech firms from Silicon Valley have been looking to consolidate their base in Indian markets.

- India is also unique in the sense that India hosts diverse markets given the regional barriers created by the numerous languages spoken in India. This provides an accretion of excellent smaller markets, with opportunities for specialised Internet services created for a local community.

Concerns with Indian approach:

- While big tech firms from Silicon Valley and China in both hardware and software have been in a tussle over the Indian consumer, India's focus remains on exporting IT services while paying little attention to servicing our own nation's tech market.

- While India focus has been on exporting IT services, the vacuum created between the increasing demand and limited domestic supply has been filled by American Big Tech and by the Chinese.

Way forward for India:

Shifting focus to domestic market:

- The primary Indian IT objective must shift focus from export of IT services to servicing the domestic market.

- Suitable policy corrections are required in this direction by the administration to suitably attract investment in this sector.

Products modelled according to local needs:

- After the ban on several Chinese apps, India has had some copycat replacement websites and applications. But such copycat versions won't be enough for India to make full use of China's exit.

- The fundamental focus of the new digital products should be to provide for regional necessities and preferences.

- There is the need to create hyper-local and hyper-regional services of high quality that are also portable across our linguistic diversity. This could help establish a strong Internet market in India.

Focussing on accessibility:

- Technology companies all over the world have focused their efforts on the 15% of the world's population with deep pockets while largely ignoring the other six billion denizens of the world's population.

- Indian entrepreneurs should focus on providing services and products of high quality that will be used by everyday Indians across the country with focussed attention towards increasing accessibility.

Technology export:

- India could consider sharing its technological knowhow with other countries in the "south", such as those in Africa and Latin America. This would help expand the market for Indian companies.

Indian Economy and Issues relating to mobilization of resources and Government budgeting

8. ## Cess Pool

  » Prelims: Consolidated Fund of India, Cess

  » Mains: Concerns with respect to devolution of cess funds and fiscal federalism

Context:

- The latest audit of the Union Government's accounts tabled in Parliament reveals that the Finance Ministry retained over 40% of all cess collections in 2018-19 in the Consolidated Fund of India (CFI).

  * As many as 35 different cesses, levies and charges yielded Rs. 2.75-lakh crore in the year, but only about Rs.1.64-lakh crore was remitted to the specific reserve funds for which these cesses were levied.

  * The purposes for which Parliament approved such cesses were not met.

What is Cess?

- Cess is a form of tax charged/levied over and above the base tax liability of a taxpayer.

- A cess is usually imposed additionally when the central government looks to raise funds for specific purposes.

  * Example: the government levies an education cess to generate additional revenue for funding primary, secondary, and higher education.

- Cess is not a permanent source of revenue for the government, and it is discontinued when the purpose levying it is fulfilled.

- While the tax proceeds are shared with the States and Union Territories according to the guidelines by the Finance Commission, the cess proceeds need not be shared with them.

Dedicated fund:

- In order to utilise the cess proceeds lying in the CFI, the government has to create a dedicated fund.

- As long as a dedicated fund is not created, the cess proceeds remain unutilised.

Concerns:

- Funds collected by the Centre as cesses for specific purposes, such as the mineral trust, oil industry development and infrastructure, have not been fully transferred to dedicated funds.

  * Cess collected on crude oil has not been transferred to an oil industry development body it was meant to finance, for over 10 years.

  * Part of the hefty cess collected as additional excise duties on petrol and diesel, to finance roads and infrastructure, was retained in the CFI.

  * About Rs. 47,272 crore GST Compensation Cess was not remitted to its rightful account over the first two years of GST.

- Also, a major concern is that the compensation cess transfers to States were accounted as Grants-in-aid to States, distorting the Centre-States fiscal math.

- A new 4% Health and Education Cess on income tax was partly deployed towards education, but no fund was created for health, similarly, Social Welfare surcharge levied on customs.

- The Centre's reliance on cesses and surcharges to raise revenue has increased significantly since the States' share of the divisible pool of taxes was raised to 42% in line with the 14th Finance Commission's suggestions.

* Cess receipts are not part of this pool.

* But, their intended use to fund specific public spending needs serves as an acceptable rationale, provided it is adhered to.

Way forward:

- The Comptroller and Auditor General of India (CAG) of India has on multiple occasions, urged the Finance Ministry to take immediate corrective actions.

- With a climate of distrust hovering over India's federal polity (Eg. GST compensation dispute) it is critical for the Centre to rebuild confidence.

- Cesses need to be rationalised. A good start would be with the excise duties on petrol and diesel.

- Absolute transparency is the need of the hour in the management of cess receipts and transfer.

Indian Economy and Infrastructure

9. Closing old power plants

» Prelims: Emission control systems in Coal based power plants

» Mains: Factors responsible for stress in the power sector and the remedial measures required

Context:

- Stress in the power sector.

Background:

- Several of the power distribution companies (discoms) in Indian states remain financially stressed.

Causative factors:

Low revenue generation

- The free power for agriculture is a major challenge for the power sector. The proportion of the farm sector's energy consumption has doubled since the 1970s while revenue realisation has remained stagnant. Energy-use in the agriculture sector has registered high growth rate as compared to other sectors.

- The discoms are also required to provide subsidised power to significant segments of their customer base. This has led to low revenue generation.

    * The delayed payments from government entities have only deteriorated the discoms financial health further.

- Power theft has dented the revenue stream of the discoms.

Surplus capacity

- Several States have installed capacity that are far in excess of actual requirements.

    * Despite having surplus generation capacity, an additional 60,000 MW thermal power is officially under construction across the country, with another 29,000 MW in the proposal/permitting stage.

- This has resulted in huge over capacity in the electricity system, and disproportionate fixed cost obligations for suchdiscoms.

Details:

- Analysis by Climate Research Horizon has revealed that the shutting down of thermal power plants older than 20 years in selected States can help save the exchequer Rs. 53,000 crore over five years.

- The savings will accrue from not having to spend on retrofitting these plants to reduce the toxicity of their emissions.

    * India's coal-fired power plants must meet stringent new emission norms by 2022, which were set in December 2015 by the ministry of environment, forest and climate change (MoEF&CC).This would require the implementation of the emission control systems (ECSs) in such power plants.

- Additionally the move will also help meet India's climate action goals and help in India's transition towards renewable energy.

Inclusive growth and issues arising from it

10. Labour codes

» Prelims: 4 labour codes and the laws that have been subsumed

» Mains: Significance of the new codes and criticisms of the same

Context:

- The government has introduced three Bills in the Lok Sabha to amalgamate laws on social security, occupational safety and health and industrial relations.

Background:

- In India, labour falls under the Concurrent List of the Constitution. Therefore, both Parliament and state legislatures can make laws regulating labour.

- Given the large number of state and central laws regulating various aspects of labour such as resolution of industrial disputes, working conditions, social security and wages and their often complex and archaic provisions had made compliance difficult for the businesses.

- As part of the government's labour reform agenda, the existing labour laws are to be amalgamated into four labour codes- on wages, industrial relations, social security and safety, health and working conditions. This would help to improve ease of compliance and ensure uniformity in labour laws.

- The code on wages was passed in 2019.

* The Code on Wages seeks to amend and consolidate laws relating to wages, bonus and matters connected therewith. The Code will subsume four labour laws -- Minimum Wages Act, Payment of Wages Act, Payment of Bonus Act and Equal Remuneration Act.

Details:

- The Labour and Employment Minister introduced the Industrial Relations Code, 2020; the Occupational Safety, Health & Working Conditions Code, 2020; and the Code on Social Security, 2020.

The Industrial Relations Code, 2020:

- It seeks to amalgamate and combine three major laws governing employee-employer relationship

    * the Trade Unions Act, 1926,

    * the Industrial Employment (Standing Orders) Act, 1946, and

    * The Industrial Disputes Act, 1947.

Important features

- The Industrial relations code allows companies with up to 300 workers to fire workers without having to gain government approval.

    * Currently, only industrial establishments with under 100 workers are allowed to do so.

        » Firms with more than 300 workers need to still apply for approval.

- The code also seeks to restrict the rights of workers to strike. As per its reading, a worker cannot go on strike without providing, at least, a 60-day notice, and not while proceedings before a Tribunal or a National Industrial Tribunal are taking place.

    * Earlier, workers could go on strike by giving between two weeks and six weeks of notice. Flash strikes are now outlawed.

    * The code has been expanded to cover all industrial establishments.

    * A lay-off would be deemed illegal if it is effected without permission or is done despite refusal of permission

What does it say on trade unions?

Trade Unions Act, 1926 2(h) "Trade Union" means any combination, whether temporary or permanent, formed primarily for the purpose of regulating the relations between

- workmen and employers or
- between workmen and workmen, or
- between employers and employers

- Where there is more than one trade union in an establishment, the sole negotiating union status will be given to the one that has 51% of the employees as its members.

- Where no union qualifies under this criterion, the employer must constitute a 'negotiating council' consisting of representatives drawn from the various unions, with only those with at least 20% of employees as its members.

The Social Security Code Bill:

- The Social Security Code proposes the creation of a National Social Security Board which will take on the responsibility of formulating suitable schemes for unorganised workers, gig workers and platform workers.

- It brings these sections of workers under the ambit of social security schemes that include

    * Life and disability insurance,

    * Provident funds,

    * Health and maternity benefits and

    * Skill upgradation.

- The code also proposes the formation of a social security fund to provide social security sums to the three classes of workers.

The Occupational Safety Code:

- The Occupational Safety Code subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979, which has been highlighted during the recent migrant workers crisis due to COVID-19.

- These laws cover factories, mines, dock workers, building and construction workers, plantation labour, contract labour, inter-state migrant workers, working journalists, motor transport workers, sales promotion employees, and cine workers.

- The Code seeks to regulate health and safety conditions of workers in establishments with 10 or more workers, and in all mines and docks.

    * The Code creates special provisions for certain classes of establishments such as factories, mines, dock workers, and constructions workers. These include separate provisions on licenses, safety regulations, and duties of employers.

- Under the Occupational Safety Code, women employees will be permitted to work at night, subject to certain conditions that relate to safety, holidays, working hours, and their consent.

- The code defines a migrant worker as someone who has come from his/her own state to seek employment in another state

    * The 2020 Bill also specifies that only those persons will be considered as inter-state migrants who are earning a maximum of Rs 18,000 per month

    * Benefits for inter-state migrant workers- option to avail the benefits of the public distribution system either in the native state or the state of employment

- It fixes the maximum daily work limit at eight hours a day.

- The code empowers a state government to exempt any new factory from the provisions of the Code to create more economic activity and jobs.

Merits

- Stringent hiring-firing rules applied to firms with over 100 employees, making it virtually impossible to lay off workers. This adversely acted as an incentive for smaller firms to stay small so they could escape the rules.

- According to the World Bank, with less restrictive laws, India could approximately add on an annual basis "2.8 million more good quality formal sector jobs".

- The Economic Survey, 2019 analyzed the pain of dwarfism prevalent in Indian firms.

  * Dwarfism refers to the phenomenon in which firms survive for more than 10 years but their growth in terms of employment is stunted.

  * It was observed that the threshold under labour legislation creates a perverse incentive to remain small.

Criticisms

- It is argued that the laws of paramount importance, having far too much impact on the people were passed in haste or without sufficient deliberation.

- No one disagrees with the basic objective of amalgamating, simplifying and rationalising labour laws.

  * However, the very fact that it involves a voluminous body of legislation should have meant that the final version was widely discussed with the stakeholders, and given sufficient time and opportunity to give their views.

- The most contentious feature is the increase in the threshold for an establishment to seek government permission before closure, lay-off or retrenchment from units that employ 100 workers to 300.

  * This gives establishment's greater freedom in their termination and exit decisions.

- To be fair, firms need to be provided flexibility in order to deal with the vicissitudes of business cycles.

  * However, doing away with standing orders for firms with less than 300 workers, which will essentially cover most firms, is tantamount to watering down the basic rights of workers in most organisations, affecting their bargaining power.

- There is also a genuine fear that expansive powers of exemption have been conferred on the respective governments and there has been excessive delegation of rule-making powers.

Inclusive growth and issues arising from it

11. Urban employment

» Prelims: Garib Kalyan Rojgar Abhiyaan, government measures for employment generation.

» Mains: The issue of jobless growth and measures required for employment intensive growth.

Context:

- Economic contraction and the associated unemployment problem in India.

Background:

Economic Contraction:

- India's Gross Domestic Product (GDP) suffered a steep contraction of 23.9% in the April-June quarter of the current fiscal year.

Employment concern and associated issues:

- Notably the employment intensive sectors like construction (–50%), trade, hotels and other services (–47%), manufacturing (–39%), and mining (–23%) have suffered the worst contractions. Given the contraction and lack of demand in the economy there would be a significant dip in urban employment opportunities.

- This raises concern on the employment situation in India as it would lead to either a growing number of people losing jobs or the newly joining labour force failing to find new opportunities. This could lead to a rise in unemployment levels.

- There has been a wave of massive 'reverse migration' with millions of workers returning to their home States due to a loss of livelihoods in urban areas.

  * In the rural areas this reverse migration has resulted in surplus labour force availability which could result in depression of rural wages and will also further add to the problem of disguised unemployment in the rural areas. The viability of agriculture to provide these workers with a decent living is also questionable.

  * The lack of workers in the urban areas has limited the industries capacity to ramp up production to pre-COVID levels.

Governmental efforts:

- The central government launched the 'Garib Kalyan Rojgar Abhiyaan' in June 2020 with an outlay of Rs. 50,000 crore. This employment scheme aims to provide livelihood opportunities in rural India.

- The Government has enhanced the budgetary announcement for the Mahatma Gandhi Employment Guarantee scheme. Rs 40,000 crore was allocated to the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) over and above the budgetary allocation of Rs 61,500 crore making it the highest-ever allocation towards MGNREGA. This will help boost employment opportunities in rural areas and will be a big relief to returning migrant labourers.

Concerns:

Structure of the economy:

- The informal sector accounts for a large share of Indian employment.
    * According to the International Labour Organization, of the 535 million labour force in India in 2019, some 398.6 million have poor quality jobs.
- These jobs are characterized by inadequate earnings, low productivity and difficult conditions of work that undermine the basic rights of workers. They lack effective representation by trade unions. Thus despite higher economic growth in recent years, working poverty in India remains high.
    * The working poor are working people whose incomes fall below a given poverty line due to low-income jobs and low familial household income.
- The high level of informal employment can be mainly attributed to the economic structural transformation process in India, wherein capital and labour transfer instead of taking place from low to higher value-added sectors has been flowing from one low value-added activity to another but not to higher value-added activities. This leads to a situation where a large proportion of the jobs being created are of poor quality. This undermines the prospects of reducing working poverty.

Demographic profile:

- India enjoys a demographic dividend and a large number of people are joining the labour market annually. The estimates are that more than 10 million people join the labour force annually. The lack of adequate job opportunities will turn this demographic dividend to a demographic disaster.

Inadequacy of the government schemes:

- While the move to expand MGNREGA is a welcome move, it is very idealistic to assume that the entire workforce, which has returned to their respective home States, will be accommodated by an expanded MGNREGA or any other similar schemes.
- Also there seems to be very little attention towards urban employment.

Way forward:

Generating more jobs:

- The emphasis should be to design and implement employment-intensive investment policies.

Incentivizing private enterprises:

- The policies should incentivize private entrepreneurs and private investments need to be facilitated. Enterprise formation needs to be an integral part of the strategy.

- Small and micro enterprises which are considered employment intensive sector need to be supported by the administration.

Investing in infrastructure:

- The government will need to prioritise urban infrastructure as it accounts for a large share of total investments in the local economy.
- A labour-intensive approach to building municipal infrastructure can be a cost-effective alternative to capital intensive-approach as currently the wage rates are low.
- Infrastructure investments would spur employment, generate earnings and contribute to small enterprise formation.

Urban employment scheme:

- The government needs to immediately launch an urban employment scheme on the lines of MGNREGA scheme. This has to focus on building large-scale medical, health and sanitation infrastructure in cities and towns across India.
- Another avenue for immediate employment generation can be to expand networks of essential services as a part of welfare interventions of State and local governments.

Reducing vulnerabilities in informal sector:

- Given the vulnerabilities of urban informal jobs, apart from ensuring adequate job generation there is also the need to generate jobs which provide decent wages and some form of job security.

Inclusive growth and issues arising from it

12. **Priority sector lending norms**
    » Prelims: Priority sector lending norms
    » Mains: Financial Inclusion and Measures for inclusive growth

Context:

- The Reserve Bank of India (RBI) has released revised priority sector lending guidelines.

Priority Sector Lending:

- It includes those sectors which the Government of India and Reserve Bank of India consider as important for the development of the basic needs of the country and are to be given priority over other sectors.
- The banks are mandated to encourage the growth of such sectors with adequate and timely credit.
- This is essentially meant for an all-round development of the economy.

Details:

- The altered guidelines include funding to segments including start-ups and agriculture.

- Bank finance of up to Rs. 50 crore to start-ups, loans to farmers both for installation of solar power plants for solarisation of grid-connected agriculture pumps, and for setting up compressed biogas (CBG) plants have been included as fresh categories eligible for finance under the priority sector.

- Higher weightage has been assigned to incremental priority sector credit in 'identified districts' where priority sector credit flow is comparatively low.

- Loan limits for renewable energy have been doubled.

- A higher credit limit has been specified for Farmers Producers Organisations (FPOs) and Farmers Producers Companies (FPCs) undertaking farming with assured marketing of their produce at a pre-determined price.

Significance:

- The RBI's revision in priority sector lending guidelines will incentivise credit flow to specific segments like clean energy, weaker sections, health infrastructure and credit deficient geographies.

Agricultural sector in India

13. Farm Bills, 2020

- » Prelims: The recently passed farm reform bills provisions, contract farming.

- » Mains: Expected benefits and associated concerns

Context:

- Lok Sabha passed the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020 and the Farmers' (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020.

The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020:

Background:

- Farmers have faced many restrictions in marketing their produce. This includes:

  * Restrictions in selling Agri-produce outside the notified APMC market yards.

  * They were restricted to sell the produce only to registered licensees of the State Governments.

  * Further, barriers existed in the free flow of agriculture produce between various States owing to the prevalence of various APMC legislations enacted by the State Governments.

Objectives:

- This bill seeks to create an ecosystem where the farmers and traders enjoy the freedom of choice relating to the sale and purchase of farmers' produce.

- The Bill basically aims at creating additional trading opportunities outside the APMC market yards for the farmers.

- It will also ensure the availability of a facilitative framework for electronic trading and related matters.

Expected benefits:

- This could ensure remunerative prices for the farmers through competitive alternative trading channels to promote efficient, transparent and barrier-free inter-State and intra-State trade and commerce of farmers' produce.

- It will ensure freedom of choice of sale and purchase of agri-produce.

- This will supplement the existing MSP procurement system which is providing stable income to farmers.

- It is expected to pave the way for the creation of a 'One India, One Agriculture Market' by promoting barrier-free inter-state and intra-state trade.

- It will promote commerce outside the physical premises of markets notified under State Agricultural Produce Marketing legislations.

- It will help control the volatility of the agricultural produce prices both from the perspective of the farmers as well as the consumers by helping ensure farmers of regions with surplus produce with better prices and consumers of regions with shortages with lower prices.

- There will also be a separate dispute resolution mechanism for the farmers.

The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020

Background:

- Indian agriculture is characterized by fragmentation due to smallholding sizes and has certain weaknesses such as weather dependence, production uncertainties and market unpredictability.

- This makes agriculture risky and inefficient in respect of both input & output management.

Objectives:

- This bill seeks to provide for a national framework on farming agreements that protects and empowers farmers to engage with agri-business firms, processors, wholesalers, exporters or large retailers for farm services and sale of future farming produce at a mutually agreed remunerative price framework in a fair and transparent manner.

- Farmers have been provided with adequate protection.

  * Sale, lease or mortgage of farmers' land is totally prohibited and farmers' land is also protected against any recovery.

  * An effective dispute resolution mechanism has been provided with clear timelines for redressal.

Expected benefits of the bill:

- The bill will empower farmers for engaging with processors, wholesalers, aggregators, wholesalers, large retailers, exporters, etc., on a level playing field without any fear of exploitation.

- This will also help transfer the risk of market unpredictability from the farmer to the sponsor.

- Enable the farmer to access modern technology and better inputs.

- Reduce the cost of marketing and improve the income of farmers.

- Help attract private sector investment for building supply chains for the supply of Indian farm produce to national and global markets, and in agricultural infrastructure.

- Farmers will engage in direct marketing thereby eliminating intermediaries resulting in better realization of price.

Amendments to essential commodities act:

- Amendments have also been proposed to the Essential Commodities Act to deregulate items such as cereals, pulses, oilseeds, potato and onion from trade restrictions and price control.

- It proposes to deregulate the production, storage, movement and sale of several foodstuffs, including cereals, pulses, edible oils and onions, except in the case of extraordinary circumstances.

- It says stock limits can only be imposed if retail prices surge 50% above the average in the case of non-perishables and 100% in the case of perishables.

Concerns:

Impact on MSP regime:

- There are fears that the free market philosophy being espoused by the recent initiatives could spell the end of Minimum Support Price (MSP) for agricultural produce and place the farmers at the mercy of the private traders.

- Without strong institutional arrangements, laissez-faire (no economic interventionism) policy may harm lakhs of unorganised small farmers.

Impact on APMCs:

- Provisions in the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020, providing for unrestricted commerce in designated trade areas outside APMC jurisdictions without levy of any fee spells a death knell for the APMCs.

  * MSPs and APMCs form the backbone of existing trading arrangements.

Against the spirit of federalism:

- There are concerns that the centre's move to issue orders to States goes against the spirit of federalism because agriculture and markets are listed as State subjects under the 7th schedule of the Indian constitution.

Revenue loss

- The Central law attempts to create new market areas where farmers could sell their produce without being subject to state regulations and fees.

- States now fears a dip in revenues collected from farmers

Lack of consultation

- The government has failed to have or hold any discussion with the various stakeholders including farmers and middlemen.

- The attempt to pass the Bills without proper consultation adds to the mistrust among various stakeholders including State governments.

- The Opposition was keen on sending the bills to a select committee.

  * Ideally, this should be done — for the committee process provides an opportunity to examine legislation, refine it, and allows parliamentarians to speak up without being confined to party positions.

Corporatisation

- It is alleged that the Bills are part of the larger agenda of corporatisation of agriculture and a withdrawal of government support

  * Although corporates will bring much-needed investment, they could also distort the playing field, as small farmers might not be able to match them in bargaining power.

Can States change this law?

- When a state law contradicts a Central law on the same subject, the law passed by Parliament prevails.

- Usually, when a state wants to amend a Central law made under one of the items in the concurrent list, it needs the clearance of the Centre.

- This is an arrangement envisaged as most Parliament laws apply to the whole of India and states amending the Central laws indiscriminately could lead to inconsistencies in different regions on the application of the same law. In matters of trade and commerce, this could especially pose serious problems.

Judicial challenge

- The option available with the states is to take the Centre to the Supreme Court over the validity of these laws.

  * Article 131 of the Constitution provides exclusive jurisdiction to the Supreme Court to adjudicate matters between the states and the Centre.

Way forward:

- Several States have already liberalised agricultural marketing, amending their APMC Acts, and some have allowed regulated private commerce including direct marketing. Evidence point out that mere liberalisation does not lead to private investment in new markets.

* When Bihar removed the APMC system, markets suffered loss of fee revenue, with no significant private investments in the sector.

- To strengthen competition, the Centre should massively fund the expansion of the APMC market system.

- Efforts must be made towards removing trade cartels, and providing farmers good roads, logistics of scale and real time information. The emphasis should be on empowering farmers.

Agricultural sector in India

14. Challenges in agricultural sector

» Prelims: C2 and A2+FL model of calculating MSP, PM-KISAN scheme

» Mains: Challenges in the agricultural sector and measures necessary to overcome these challenges

Background:

- The COVID-19 pandemic has induced severe economic slowdown in the Indian economy.

- Agriculture was the only sector which recorded a modest growth of 3.4%, outpacing 2019's first quarter's 3% expansion. Most other sectors saw a contraction, with sectors like construction, trade, hotels, transport and communication services registering almost 50% fall.

- There have been statements put forward that Agricultural sector will help lead India's economic revival based on the following arguments.

  * India's food grain production in 2019-20 was 3.7% higher than in 2018-19 and also the procurement of rabi wheat in 2020-21 was 12.6% higher than in 2019-20. This is being argued as indicative of resilience in the agricultural sector.

  * The food inflation in the Q1 of 2020-21, has been higher than in the previous year. This is being argued as indicative of a sustained and increased demand for food and a favourable trade sentiment in the sector. This is expected to benefit farmers due to better price realization for their produce.

  * The area under kharif sowing in 2020-21 is 14% higher than in 2019-20. This has been accompanied by higher tractor and fertilizer sales, which bodes well for economic recovery.

  * The government's ₹20-lakh crore Atmanirbhar Bharat package is expected to increase financial resources to the sector and provide an impetus to agricultural growth

Details:

- A closer examination is necessary to validate the claims being made for the agricultural sector.

Rabi procurement

- The higher procurement of rabi wheat in the current year is mostly due to the focussed efforts by the state governments ensure that procurement did not suffer during the lockdown and cannot be attributed to enhanced production or increased supply to the markets.

- Market arrival of agricultural produce is a more comprehensive indicator of enhanced production or increased supply to the markets. Market arrival of the major crops have shown a decline from last year.

  * The market arrivals of 15 major crops were lower in 2020 than in 2019. Most of these crops have witnessed steep drop in market arrivals. In wheat, the most important rabi crop, only 61.6% of the arrivals in 2019 was recorded in 2020.

- The procurement by the government agencies account for only a small share of the total grain production.

  * As per official data, only 13.5% of paddy farmers and 16.2% of wheat farmers in India sell their harvest to a procurement agency at an assured Minimum Support Price (MSP). The rest sell their output to private traders at prices lower than MSP.

  * There have been reports of market access problem faced by farmers during the lockdown attributed to disruption in supply chains, closure of mandis and a fall in consumer food demand. This has led to a substantial loss of market for the farmers leading to major loss of incomes. Similar major losses have been reported in the milk, meat and poultry sectors as well.

Inflation and prices

- The higher inflation rates (based on CPI) do not imply higher price realization for the farmers. CPI indicates the price paid by the end consumer.

  * The higher CPI is mainly due to disruptions in supply chains and rise in trader margins.

- The wholesale market prices, which can be considered more indicative of the price received by the farmers has decreased for most crops.

- Given the fact that small and marginal farmers are net buyers of food, the higher rural inflation has had an adverse impact on them. They were forced to pay more for food purchases and some rural households had to reduce food purchases during the lockdown. This would have also had an adverse impact on their disposable income and expenditure and investment capabilities.

Higher kharif sowing

- The article argues that the higher kharif sowings in 2020 is indicative of the underlying distress and not prosperity in the agricultural sector based on the following arguments.

* As the rabi incomes fell during the lockdown, many rural households may have returned to farming or intensified farming for food- and income-security during the current kharif season.

* Lakhs of migrant workers have returned to their villages from urban areas. They may have taken up agriculture in previously fallow or uncultivated lands. This might further aggravate the disguised unemployment problem in the agricultural sector due to the surplus labour supply.

Atmanirbhar Bharat package

• The total fresh spending for agriculture in the package amounts to less than Rs. 5,000 crore. The rest are schemes already included in the past Budgets, announcements with no additional financial outgo.

• The under-investment in the agricultural sector may prove to be counterproductive as this will lead to a condition where the rural incomes will remain depressed, and push the economy further into a vicious cycle of poor demand, low prices and low growth.

Uncertainties

• The agricultural sector faces headwinds in the form of higher-than-ideal rainfall in August in several key crop-growing regions in western and central India and the uncertainty with respect to the impact of recent farm market ordinances.

Share of Agricultural sector in GVA

• Agriculture contributes only around 15% to India's Gross Value Added (GVA).

• An impressive 4% growth in the agricultural sector will only contribute to 0.6 percentage points to GVA growth. To contribute a full one percentage point to GVA growth, agriculture will have to grow by 6%, which is unlikely.

* Though the higher rabi procurement, higher kharif sowing and flow of cheap credit will help provide an impetus to the sector, but the lower crop prices, lower market arrivals and higher unemployment would also have a bearing on the actual growth rates in the sector.

Way forward:

Financial support:

• The crisis in agriculture demands that the government announce a strong fiscal stimulus for the rural economy. This will help address the existing distress in the short term. Government should consider providing financial support to farmers in the following ways.

* The amounts being paid through the Pradhan Mantri KisanSamman Nidhi (PM-KISAN) should be doubled from Rs. 6,000 a year to Rs. 12,000 a

year. Efforts should be made to not only enhance the coverage monetarily but also include tenant farmers and wage labourers as well.

* Instead of incremental increase in the minimum support price (MSP) for farmers the government should set all MSPs at 150% of the C2 cost (comprehensive cost) of production.

» Currently the MSP is fixed based on A2+FL. A2 costs cover all paid-out expenses, both in cash and kind, incurred by farmers on seeds, fertilisers, chemicals, hired labour, fuel and irrigation, among others. FL is the imputed value of unpaid family labour.

» C2 costs are more comprehensive, accounting for the rentals and interest forgone on owned land and fixed capital assets respectively, on top of A2+FL.National commission on farmers head by M.S Swaminathan had recommended a 50 per cent margin over C2 as the MSP.

* Instead of a moratorium on loan repayments, the government should waive the interest on loans taken by farmers in 2019 and 2020.

* The government should announce a comprehensive financial package of direct assistance for the crisis-ridden poultry, meat sectors and small milk producers.

Reforming the sector:

• While the financial support will only help address the existing distress in the sector, there is the need to reform the sector to address the long term sustainability and profitability in the sector.

• The major areas of focus should be the following:

* Reduce input costs.

* Ensure higher price realization for the farmers through increased market access, increased food processing avenues.

* Ensure adequate infrastructure for the agricultural sector

* Promotion of environmentally sustainable agricultural practices like zero based natural farming and organic farming.

Major crops/cropping pattern in India

15. **Bt cotton cultivation in India**

» Prelims: Cotton cultivation regions in India, Bt Cotton features

» Mains: Benefits and concerns associated with cultivation of Bt cotton in India.

Background:

Cotton cultivation in India:

• Cotton is one of the most important fiber and cash crop of India and plays a dominant role in the industrial and agricultural economy of the country.

* Cotton in India provides direct livelihood to 6 million farmers and about 40 -50 million people are employed in cotton trade and its processing.

• Much of the cotton cultivated in India until the 20th century was of the indigenous 'desi' variety, Gossypium arboreum. From the 1990s, hybrid varieties of G. hirsutum were promoted. The Bt cotton was introduced in India in 2002.

* Though both hybrids and GMOs involve genetic changes, the two are different given the difference in approach to bring this genetic change.

    » Hybrids can occur naturally or they might be facilitated by humans. Hybridization is a traditional breeding technique where, commonly in plants, the pollen from one plant is used to fertilize another related or unrelated plant species. "Hybrids" are the offspring of such a cross.

    » GMOs are always created in laboratories. GMOs involve gene splicingresulting in a seed that has a specific gene of known function from another plant or organism.

Bt cotton:

• Cotton crop is highly prone to pests and diseases. Cotton is prone to infestation from moth pests (Lepidopteran) such as the Pink Bollworm (PBW) and sap-sucking (Hemipteran) pests such as aphids and mealy bugs. To over this vulnerability, the GM cotton was developed.

• Genetically modified (GM) cotton contains the pesticide gene from the bacteria Bacillus thuringiensis (Bt). This protects the plant from bollworm.

• As per the data available with the agriculture ministry, the adoption of Bt cotton stands at around 93% in 2011.

Benefits of Bt Cotton:

• The resistance to pests reduces the plants vulnerability to pest attacks and thus helps increase the yield from the plant.

    * One study has noted that the adoption of Bt cotton is said to have increased cotton production from India by three times between 2002-2014.

• The inherent resistance to pest attacks would also help reduce insecticide spraying on the cotton plant.

    * This would help reduce the cost of cotton cultivation for the farmers and also would ensure better safety for the farmers due to reduced exposure of farmers to toxic insecticides and pesticides.

• The use of Bt cotton would also lead to some environmental benefits.

    * The reduced pesticide usage would lead to lesser environmental pollution by these harmful chemicals.

    * Also the targeted strategy against only the relevant pests through Bt cotton would eliminate the threat posed by pesticides which eliminate all the insects in the field even if they are not harmful to the crop. This would have a detrimental impact on the biodiversity and may lead to undesired effects like imbalances in food chain and may also degrade the soil fertility.

Concerns with respect to Bt cotton:

Questions over yield:

• The recent studies have questioned the yield improvements being attributed to the adoption of Bt. Cotton.

• They note that the contribution of Bt cotton to yield increase was only about 4% each year and the current yields were lower than in the initial years of Bt adoption.

• The rise in cotton yields can be explained by improvements in irrigation and a dramatic growth across the country in the use of fertilizers.

    * Gross fertilizer use for cotton more than doubled from 2007-2013; the average rose from 98 kg/ha in 2003 to 224 kg/ha in 2013.

• Some countries that don't have Bt, hybrids or good access to inputs have been able to match India's cotton productivity.

Increasing resistance of pests:

• There are indications that the PBW has developed a resistance to Bt cotton in India. Bollworm spraying has begun to increase. With rising acreage under Bt cotton cultivation, expenditures for spraying for pests also went up.

    * By 2018, farmers were spending an average of $23.58 per hectare on insecticide — 37% more than the pre-Bt levels.

Neglect of desi varities:

• The growing share of Bt Cotton has led to the neglect of the desi varities.

• The cost of ignoring 'desi' varieties would lead to loss of the biological potential and diversity offered by these.

• The desi varieties resist many pests and don't present the problems faced by hybrids.

    * The hybrid varieties cannot resist a variety of local pests and require more fertilizers and pesticides. The increasing use of man-made pesticides to control pests has led to the emergence of resistant pests. Resistant Pink and even American Bollworm (ABW), a minor pest in the past, began increasing, leading to a growing use of a variety of pesticides.

Way forward:

Comprehensive view of GM crops:

- Despite finding huge favour in India, the GM crop has only brought modest and short-lived benefits. This should guide India's choices when it comes to other Bt crops such as brinjal.

Focussing on desi varieties:

- Research suggests that with pure-line cotton varieties, high density planting, and short season plants, cotton yields in India can be substantially increased and also such varieties stand a better chance at withstanding the vagaries of climate change.

- There is the need for a comprehensive government policy for supporting 'desi' varieties.

Additional information:

- Cotton fabric from around 3,000 BCE has been excavated from the ruins of Mohenjo-daro, and archaeological findings in Mehrgarh, Pakistan, show that cotton was used in the subcontinent as far back as 5,000 BCE.

- In India, there are ten major cotton growing states which are divided into three zones, viz. north zone, central zone and south zone. North zone consists of Punjab, Haryana, and Rajasthan. Central zone includes Madhya Pradesh, Maharashtra and Gujarat. South zone comprises Andhra Pradesh, Telangana, Karnataka and Tamil Nadu. Besides these ten States, cotton cultivation has gained momentum in the Eastern State of Orissa. Cotton is also cultivated in small areas of non-traditional States such as Uttar Pradesh, West Bengal & Tripura.

Food security

16. Food inflation

- » Prelims: Food inflation trend in India
- » Mains: Reasons for high food inflation

Context:

- High food inflation in India

Details:

- Food inflation in India slowed to 9.05 percent in August of 2020 from 9.27 percent in July.

- Prices of vegetables went up 11.41 percent, pulses 14.44 percent, cereals 5.92 percent, meat and fish 16.5 percent and sugar 3.93 percent.

What is food inflation?

- It is basically the rise in the cost of an essential food item relative to the previous price.

- Food inflation is quite volatile. The volatility actually depends on agricultural prices as the change in the weather, supply, and demand in the agricultural sector tends to vary.

Causes of food inflation:

- There are several causes of food inflation. Some of the major ones are:

  * Climate change – Climate change leads to extreme and unpredictable weather conditions which in turn, affects agriculture adversely. Hence, food prices rise.

  * Transportation – An increase in the oil prices will lead to increased transportation costs, and will eventually lead to hiked food prices.

  * A rise in global food prices can also cause food inflation in a country. This is particularly true for tradables like sugar, oil and meat and not so much for staples such as dairy products and cereals.

  * Diversification of diet towards high-value food products can cause a rise in the prices because of increased demand of such food products like meat, eggs, pulses, fruits, etc.

  * Rising input costs in agriculture also lead to increased food prices

Governmental schemes/Programmes/initiatives

17. Vehicle scrappage policy

- » Prelims: Vehicle Scrappage Policy
- » Mains: Significance of vehicle scrappage policy

Context:

- The Ministry of Road Transport and Highways (MoRTH) has formulated a note for Cabinet on creation of an ecosystem for voluntary phasing out of unfit and old polluting vehicles.

Details:

- Under the vehicle scrappage policy, the government proposes amendments to motor vehicle rules to allow scrapping of vehicles older than 15 years.

- The proposed policy, once approved, will be applicable on all vehicles.

Significance:

Environmental:

- The move will aid environment-friendly phasing out of polluting old vehicles and spur adoption of electric vehicles. This would play a critical role in reducing air pollution in the cities.

Economic:

- With this new policy India could emerge as a hub for automobile manufacturing as key raw material available from scrapping steel, aluminium and plastic were bound to be recycled, bringing down automobile prices by "20-30%."

- This would also help reduce Indian oil dependence and help improve the Current account deficit of which oil imports form a major proportion.

- This would help reduce import of critical raw material from other countries helping improve India's trade balances with such countries.

- This policy would spur investments in the automobile sector, which would help economic revival in India and will also help generate additional employment opportunities.

Governmental schemes/Programmes/initiatives

18. A.P. tops in ease of doing business

» Prelims: EODB parameters

» Mains: Significance of EODB index for policy formulation

Context:

- The release of the States' ease of doing business rankings.

Background:

- Ease of Doing Business (EODB) is a joint initiative by the Department for Promotion of Industries and Internal Trade and the World Bank to improve the overall business environment in the States.

- These rankings represent the ease of doing business in terms of increased transparency, efficiency and effectiveness of the government regulatory functions vis-a-vis the business enterprises.

- This ranking includes 180 reform points covering 12 business regulatory areas such as Access to Information, Single Window System, Labour, Environment, etc.

Need for the Business Reform Action Plan

- The larger objective of attracting investments and increasing the Ease of Doing Business in each State was sought to be achieved by introducing an element of healthy competition through a system of ranking states based on their performance in the implementation of the Business Reform Action Plan.

- The ranking this time gives full weightage to the feedback from over thirty thousand respondents at the ground level, who gave their opinion about the effectiveness of the reforms.

- State rankings will help attract investments, foster healthy competition and increase the Ease of Doing Business in each State.

Details:

- Andhra Pradesh has topped in the latest ease of doing business rankings.

  * The State rankings are based on the implementation of State Business Reform Action Plan 2019.

- Andhra Pradesh is followed by U.P. and Telangana at the second and third spots, respectively.

- The state which showed the most improvement since the 2018 ranking is Uttar Pradesh which moved from rank 12 in 2018 to rank 2 in 2019.

19. Green Term Ahead Market (GTAM)

» Prelims: Green Term Ahead Market (GTAM)

» Mains: Deepening renewable energy in Indian energy mix

Context:

- Union Power Minister launches the Green Term Ahead Market (GTAM) in electricity as a first step towards greening the Indian short term power market.

Background:

- In August 2020, the Central Electricity Regulatory Commission (CERC) had approved Green term ahead market (GTAM) contracts on the Indian Energy Exchange (IEX) platform.

- Though the renewable penetration in the country is increasing, the participation of renewable energy in the existing DAM and TAM segment has remained negligible (less than 1%), as there has been no segregation between conventional power and green power by the system and the realization going to the generator was at par with conventional power.

  * DAM: Day ahead market where transactions in electricity are allowed for a day in advance.

  * TAM: Term ahead market where electricity is traded the same day to up to 11 days in advance.

- Also, renewable developers would prefer to tie their generation in advance for longer periods with the consumers to ensure cash flows and project viability.

About GTAM:

- Green Term Ahead Market (GTAM) is an alternative new model introduced for selling off the power by the renewable developers in the open market without getting into long term PPAs.

- GTAM will allow the buyers and sellers to trade green power along with the fulfilment of RPO obligations.

- GTAM contracts will be segregated into Solar RPO & Non-Solar RPO as RPO targets are also segregated.

Significance:

- In the absence of a suitable trading platform before, it was observed that the Renewable Energy (RE)-rich States are either backing down RE or selling their surplus RE as conventional power which is leading to losses for both DISCOMS and RE generators. After the introduction of GTAM, the RE generators and DISCOMS would now be able to access the new niche platform – GTAM – to sell their excess power.

- It is a much needed market-based support for renewable energy to achieve the ambitious target of 175 GW of renewable energy by 2022 as it will provide a new opportunity to RE merchant capacity to sell power and additionally, it would also help spawn new RE merchant plants.

- GTAM is the first exclusive product for the renewable energy sector in the world.

20. One District One Product Concept

» Prelims: One District One product Concept

» Mains: Promotions of exports from India

Context:

- One District One Product Concept for encouraging Domestic Manufacturing.

Details:

- The objective of the concept is to convert each district of the country into an export hub by:

    * Identifying products with export potential in the district

    * Addressing bottlenecks for exporting these products

    * Supporting local exporters, manufacturers to scale up manufacturing, and find potential buyers outside India.

- The aim is to promote exports, promote the manufacturing & services industry in the district and generate employment in the district.

- Towards this end, District Export Promotion Committees (DEPCs) are being set up in each district.

    * These committees are likely to be headed by the DM/Collector/DC/District Development Officer of the District and co-chaired by the designated Regional Authority of the Directorate General of Foreign Trade (DGFT).

    * The primary function of the DEPC will be to prepare and act on district-specific Export Action Plans in collaboration with all the relevant stakeholders from the Centre, State and the District levels.

21. CAROTAR, 2020

» Prelims: CAROTAR 2020 provisions, FTAs

» Mains: Measures taken to avoid treaty abuse in international trade

Context:

- The Customs Administration of Rules of Origin under Trade Agreements Rules, 2020 (CAROTAR, 2020), will come into force from September 2020.

Background:

- Preferential rules of origin ensure that only goods originating in participating countries enjoy tariff or other preferences. India has inked FTAs with several countries, including Japan, South Korea, Singapore, and ASEAN members.

- Under such agreements, two trading partners significantly reduce or eliminate import/customs duties on the maximum number of goods traded between them.

Details:

- The Department of Revenue has notified the 'Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020.

- It applies to the import of goods into India where the importer makes a claim of a preferential rate of duty in terms of a trade agreement.

- Under the terms of the CAROTAR, in order to claim a preferential rate of duty under a trade agreement, the importer is required to make a declaration in the bill of entry that the imported products qualify as originating goods for a preferential rate of duty under that agreement, in addition to producing the Certificate of Origin (CoO).

- Under the rules, the importer has to possess all relevant information related to country of origin criteria, including the regional value content and submit the same to the proper officer on request.

Significance:

- Under this provision, a country that has inked an FTA with India cannot dump goods from some third country in the Indian market by just putting a label on it.

- The new norms have been framed with a view to checking inbound shipments of low quality products and dumping of goods by a third country routed through an FTA partner country.

22. Rupee IR derivatives

» Prelims: Interest rate derivatives

» Mains: Need for Interest rate derivatives

Context:

- The Reserve Bank of India (RBI) has proposed allowing foreign portfolio investors (FPIs) to undertake exchange-traded rupee interest rate derivatives transactions.

Interest Rate Derivatives:

- Interest Rate Derivatives (IRDs) are contracts whose value is derived from one or more interest rates, prices of interest rate instruments, or interest rate indices.

- For an Interest Rate Derivative, the underlying asset is the right to pay or receive a (usually notional) amount of money at a given interest rate.

Details:

- The transactions would be subject to an overall ceiling of Rs. 5,000 crore.

- The proposed directions are aimed at:

    * Encouraging higher non-resident participation.

    * Enhancing the role of domestic market makers in the offshore market.

    * Improve transparency and achieving better regulatory oversight.

23. Capping MEIS benefits

» Prelims: MEIS scheme, RoDTEP scheme

» Mains: Measures taken to promote exports from India

Context:

- Fund crunch has forced the commerce ministry to cap export benefits under Merchandise Export from India Scheme (MEIS) at Rs.2 crore for every exporter.

Details:

- According to the Directorate General of Foreign Trade (DGFT) notification, the aforesaid ceiling may be subject to further downward revision to ensure that the total claim under the scheme for the (four month) period does not exceed the allocation prescribed by the government, which is Rs.5,000 crore.

Merchandise Export from India Scheme (MEIS):

- MEIS was designed to provide exporters with sops to offset infrastructure inefficiencies and associate costs.

- The scheme will come to an end by December, 2020 following India losing a case at the World Trade Organisation (WTO) after a challenge by the US.

- The Indian government has announced a new WTO-compliant scheme called Remission of Duties or Taxes On Export Product (RoDTEP).

Remission of Duties or Taxes On Export Product (RoDTEP):

- RoDTEP will replace MEIS starting 1 January, 2021.

- The finance ministry has set up a committee under the chairmanship of GK Pillai to finalise the rates under RoDTEP that will allow reimbursement of all embedded taxes including local levies paid on inputs by exporters.

Concerns:

- The government had stopped paying pending MEIS incentives beginning July, 2020.

- According to Federation of Indian Export Organisations (FIEO) , the government's decision to cap export incentives under MEIS scheme at Rs. 2 crore per exporter on outbound shipments made during September-December, 2020 is going to seriously affect traders.

- It is opined that the move would create huge uncertainty as those eligible for a cap of ₹2 crore will not be able to factor in even such benefits in their exports.

- These benefits under MEIS are a part of the export competitiveness and therefore the sudden change will affect exporters' financially as buyers are not going to revise their prices upwards.

- The Centre has been urged to extend the MEIS till March 31, 2021, coterminous with the existing Foreign Trade Policy.

24. RBI releases document on UCBs' Cyber security

- » Prelims: UCBs in India
- » Mains: Cyber security in the banking sector

Context:

- The Reserve Bank of India (RBI) has brought out a document titled the 'Technology Vision for Cyber Security for Urban Co-operative Banks (UCBs) 2020-2023'.

Objective:

- It has been drafted to enhance the cybersecurity of urban co-operative banks (UCBs).

- It aspires to:

  * Involve more board oversight over cybersecurity.

  * Enable UCBs to better manage and secure IT assets.

  * Implement an offsite supervisory mechanism framework for UCBs on cybersecurity-related controls.

  * Develop a forum for UCBs so that they can share best practices and discuss practical issues and challenges.

  * Implement a framework for providing awareness/training for all UCBs.

Details:

- It has 12 specific action points and plans to achieve its objective through a five-pillared strategic approach GUARD:

  * Governance Oversight

  * Utile Technology Investment

  * Appropriate Regulation and Supervision

  * Robust Collaboration

  * Developing necessary IT, cybersecurity skill sets.

- With wider adoption of digital banking channels, the cybersecurity landscape will continue to evolve.

  * It would necessitate the UCBs to manage the associated risks effectively.

  * Active collaboration within UCBs and stakeholders would be necessary for sharing and coordinating various measures taken on cybersecurity aspects.

Terms in News

25. Nano-fertilizers

- » Prelims: Nano fertilizers
- » Mains: Advantages and concerns associated with Nano fertilizers

Context:

- Fertilizer major IFFCO has recently introduced its 'nano-technology' based fertilizer for on field trials.

What are Nano-Fertilizers?

- Nano fertilizers are synthesized or modified form of traditional fertilizers, fertilizers bulk materials or extracted from different vegetative or reproductive

parts of the plant by different chemical, physical, mechanical or biological methods with the help of nanotechnology.

- The term 'nano fertilizer' is used for both materials of a physical diameter between 1 and 100 nm in at least one dimension (e.g., ZnO nanoparticles) and those existing at the bulk scale with more than 100 nm in size but that have been modified with nanoscale materials (e.g., bulk fertilizer coated with nanoparticles).

- They are used to improve soil fertility, productivity and quality of agricultural produce.

Background:

- Conventional bulk fertilizer or traditional fertilizers are not only expensive for the producer, but may be harmful to humans and the environment.

- Farmers or growers mainly apply conventional fertilizers through the soil by either surface broadcasting, subsurface placement, or as fertigation or with irrigation water. However, a large portion of applied fertilizers is lost to the atmosphere or enters water bodies, finally polluting our ecosystems.

- This has led to the search for environmentally friendly fertilizers or smart fertilizer, mainly those with high nutrient-use efficiency, and nanotechnology is rising as a promising alternative.

- The exceptional properties of nanoparticles, such as high surface area/volume size ratio and enhanced optoelectronic and physicochemical properties, compared to their bulk counterparts, are now emerging as a promising strategy to promote plant growth and productivity.

Advantages of Nano-fertilizers:

- Nano fertilizers are required in a small amount which reduces the cost of transportation and field application.

- Their nutrient delivery system is slow or through a control release mechanism, this is associated with the covering or cementing of nutrients. By taking advantage of this slow nutrient delivery, growers can increase their crop growth because of consistently long-term delivery of nutrients to plants.

- The accumulation of salt in soil can be minimized as it is required in a small amount.

- They can be synthesized according to the nutrient requirements of planned crops.

- The miniature size, high specific surface area and high reactivity of nano fertilizers increase the bioavailability of nutrients.

- Providing balanced nutrition, nano fertilizers facilitate the crop plants to fight various biotic and abiotic stresses.

Concerns

- The properties of many nanoparticles are considered to be of potential risk to human health, viz., size, shape, solubility, crystal phase, type of material, and exposure and dosage concentrations.

- Despite some opinions indicating that food products containing nanoparticles available in the market are safe to eat, there is the need for further studies into this issue.

26. Import substitution

- » Prelims: Import substitution

- » Mains: Need for import substitution and measures required

Context:

- A study titled 'Self-Reliant India: Approach and Strategic Sectors to Focus.' by Export and Import Bank of India (Exim Bank).

Details:

- The study notes that several sector-specific strategies can lead to import substitution of over $186 billion for India.

- According to the study, promoting self-reliance in sectors such as electronics and defence equipment, among others will help in import substitution, thus facilitating progress towards India's vision of self-reliance.

- Other sectors identified for import substitution and enhancing domestic production include machinery, chemicals and allied sectors, and select agricultural products.

- The study has also included sectors such as auto components, and iron and steel where, there is overall trade surplus for the country. But in some sub-categories, there is trade deficit, particularly with China.

27. Domestic Systemically Important Insurers (D-SIIs)

- » Prelims: DSI status

- It refers to insurers of such size, market importance and domestic and global inter connectedness whose distress or failure would cause a significant dislocation in the domestic financial system.

- Therefore, the continued functioning of D-SIIs is critical for the uninterrupted availability of insurance services to the national economy.

- D-SIIs are perceived as insurers that are 'too big or too important to fail' (TBTF).

- These considerations require that D-SIIs should be subjected to additional regulatory measures to deal with the systemic risks and moral hazard issues.

- The Life Insurance Corporation of India (LIC), General Insurance Corporation of India and The New India Assurance Co have been identified as Domestic Systemically Important Insurers (D-SIIs) for 2020-21 by insurance regulator IRDAI.

28. Organic farming in India

- As per International resource data from Research Institute of Organic Agriculture and the International Federation of Organic Agriculture Movements Statistics 2020, India stands at 9th position in terms of certified agricultural land with 1.94 million ha (2018-19).

29. External debt

- India's total external debt increased by 2.8% to $558.5 billion at the end of March 2020.

  * Sovereign debt shrank by 3% while Non-sovereign debt rose 4.2% mainly due to an increase in commercial borrowings.

- The 'India's External Debt: A Status Report: 2019-2020' shows that the external debt as a ratio to GDP rising marginally from 19.8% to 20.6%.

- Notably, the ratio of foreign currency reserves to external debt has witnessed an improvement from 76% in 2019 to 85.5% as at end-March 2020.

30. Unorganized sector in India

- The unorganised sector forms a significant part of the Indian economy.

- According to estimates by the National Commission for Enterprises in the Unorganised Sector, the unorganized sector accounts for 45% of output and 93% of employment of the working population.

- Amongst the characteristic features of this sector are smaller scales of operation, uncertain legal status, using lower technology based methods, inadequate access to government schemes, finance and government aid. The employees have lower rate of compensation, lower job security and no leave or paid holidays, they have lower protection against employers indulging in unfair or illegal practices.

31. Vodafone wins $2 bn tax case

- » Prelims: Permanent Court of Arbitration, Bilateral investment Treaties
- » Mains: Major observations of the Judgment

Background

- In February 2007, Vodafone International Holding (VIH), a Dutch Company had procured 100 percent shares in CGP Investments (Holding) Ltd (CGP), a Cayman Islands Company for USD 11.1 billion from Hutchison Telecommunications International Limited (HTIL).

- CGP, through different transitional organizations/ authoritative courses of action controlled 67 percent of Hutchison Essar Limited (HEL), an Indian Company.

- The acquisition came about in Vodafone getting command over CGP and its downstream the subsidiaries including eventually Hutchison Essar Limited.

- In 2007, the Indian Tax Department gave a show-cause notice to the Vodafone Company to clarify tax was not retained on instalments made to HTIL in connection to the above concerned transaction.

View of Tax department and Judgments

- The Tax department argued that the said transaction of transfer of shares in CGP had the impact of aberrant or indirect transfer of assets located in India.

- Vodafone filed a petition in Bombay High Court, among other things, challenged the jurisdiction of the tax authorities in this issue where the Court held that the Indian Income Tax authorities had the jurisdiction over this issue.

- Subsequently, Vodafone challenged the High Court judgment in the Supreme Court, which in 2012 ruled that Vodafone Group's interpretation of the Income Tax Act of 1961 was correct and that it did not have to pay any taxes for the stake purchase.

  * The Supreme Court decided that the Indian tax legislation did not tax indirect transfers of property.

Finance act Amendment

- The Act was amended by Parliament and the onus to pay the taxes fell back on Vodafone. The case had by then become infamous as the 'retrospective taxation case'.

What is retrospective taxation?

- As the name suggests, retrospective taxation allows a country to pass a rule on taxing certain products, items or services and deals and charge companies from a time behind the date on which the law is passed.

- Countries use this route to correct any anomalies in their taxation policies that have, in the past, allowed companies to take advantage of such loopholes.

- While governments often use a retrospective amendment to taxation laws to "clarify" existing laws, it ends up hurting companies that had knowingly or unknowingly interpreted the tax rules differently.

- Apart from India, many countries including the US, the UK, the Netherlands, Canada, Belgium, Australia and Italy have retrospectively taxed companies, which had taken the benefit of loopholes in the previous law.

What happened after India passed the retrospective taxation law?

- Once Parliament passed the amendment to the Finance Act in 2012, the onus to pay the taxes fell back on Vodafone. The amendment was criticised by investors globally, who said the change in law was "perverse" in nature.

- Following international criticism, India tried to settle the matter amicably with Vodafone, but was unable to do so.

- Vodafone Group then invoked Clause 9 of the Bilateral Investment Treaty (BIT) signed between India and the Netherlands in 1995.

What is the Bilateral Investment Treaty?

- In 1995, India and the Netherlands had signed a BIT for promotion and protection of investment by companies of each country in the other's jurisdiction.

- Among the various agreements, the treaty had then stated that both countries would strive to "encourage and promote favourable conditions for investors" of the other country.

- The two countries would, under the BIT, ensure that companies present in each other's jurisdictions would be "at all times be accorded fair and equitable treatment and shall enjoy full protection and security in the territory of the other".

Context

- The Permanent Court of Arbitration at The Hague ruled that India's retrospective demand of Rs 22,100 crore as capital gains and withholding tax imposed on the British telecommunication company for a 2007 deal was "in breach of the guarantee of fair and equitable treatment".

- The court has also asked India not to pursue the tax demand any more against Vodafone Group.

What did the Permanent Court of Arbitration at The Hague say?

- One of the major factors for the Court of Arbitration to rule in favour of Vodafone was the violation of the BIT

- In its ruling, the arbitration tribunal also said that now since it had been established that India had breached the terms of the agreement, government's demand is in breach of "fair and equitable treatment" and it must now stop efforts to recover the said taxes from Vodafone.

- It also directed India to pay 4.3 million pounds ($5.47 million) to the company as compensation for its legal costs, one of the sources added.

Concerns

1. First, the tribunal has ordered India to reimburse legal costs to the tune of more than ₹40 crore incurred by Vodafone in fighting this case.

- In other words, the taxpayer's money will be used to pay Vodafone. So, the important lesson is that all the three organs of the Indian state — Parliament, executive, and the judiciary — need to internalise India's BIT and other international law obligations.

- These organs need to ensure that they exercise their public powers in a manner consistent with international law, or else their actions could prove costly to the nation.

2. Second, India should learn that being a country that values the rule of law is an important quality to win over the confidence of foreign investors and international goodwill.

- Unleashing tax inspectors to extract money out of foreign investors by constantly changing the rules of the game is not an attribute that a liberal democracy should be proud of.

3. Third, it is likely that the government might challenge the award at the seat of arbitration or resist the enforceability of this award in Indian courts alleging that it violates public policy.

- If the government indeed follows these options, there's a long, gruelling road ahead for Vodafone. The government would be ill-advised to go down this road because it would mean that India does not honour its international law obligation.

- It would send a deleterious signal to foreign investors reaffirming the sentiment that doing business in India is indeed agonising.

4. Fourth, this ruling might have an impact on the two other Investor-State Dispute Settlement (ISDS)claims that India is involved in with Cairn Energy and Vedanta on the imposition of taxes retrospectively.

- Cairn was slapped with a Rs 10,247 crore tax notice by Indian authorities in January 2014 raising a preliminary assessment of tax liability relating to alleged capital gains due to internal reorganisation done by the company in 2006.

5. Finally, this decision shows the significance of the Investor-State Dispute Settlement (ISDS)regime to hold states accountable under international law when in case of undue expansion of state power.

- The case is a reminder that the ISDS regime, notwithstanding its weaknesses, can play an important role in fostering international rule of law.

Why the criticism is unfair and unfounded?

Whilst much criticism has been levelled against the amendment, particularly its operation with retrospective effect, it should equally be recognised that the purpose of introducing the clarificatory amendment was to prevent multinational companies from escaping capital gains tax through indirect transfer of shares carried out in tax havens.

- Such deals were structured to take advantage of an ambiguity in the text of the Indian statute, and effectively transfer assets located in India on a tax-free basis. Moreover, the amendment was consistent with global trends in taxation of indirect transfer of assets.

- Apart from measures taken by States at a domestic level to address the mischief of avoidance of capital gains tax in the State where the underlying assets are located, there have also been international initiatives in this field.

  * For example, the Platform for Collaboration on Tax (a joint initiative of the IMF, OECD, UN and World Bank Group) released a 'toolkit' in June 2020 on taxation of offshore indirect transfers.

  * This 'toolkit' provides guidance on taxation of indirect transfer of assets.

- The Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI), an OECD-G20 led initiative which has the effect of modifying existing tax treaties of signatory States, also contemplates taxation of indirect transfers in the State from which the transferred shares or rights derive more than a certain part of their value.

The tax amendment introduced by India, when considered in light of these global developments, serves the important public policy objective of preventing tax leakage through clever structuring of transactions.

Conclusion:

- India is entangled in more than a dozen such cases against companies over retrospective tax claims and cancellation of contracts.

- The exchequer could end up paying billions of dollars in damages if it loses.

- To reduce future arbitration claims, India has ended such agreements with over 50 countries.

- India is working on a new law to protect foreign investors by offering relief from possible policy changes even as it upholds the right to tax them.

Economy-Issue related to foreign trade

32. G-20 Meeting of the Trade and Investment Ministers

» Prelims: G20 membership, Osaka Track

» Mains: Data Free Flow with Trust principle and India's concerns

Context:

- India's Union Minister for Commerce and Industry takes part in the G-20 meeting of the Trade and Investment Ministers.

Background:

- In the G20 Leaders' Summit held in Osaka, Japan in 2019, the 'Osaka Track' was signed by many countries including the EU, France, Germany, Japan, Russia, UK, USA, Singapore, Thailand, and Vietnam.

  * Osaka Track is an initiative that seeks to standardise rules in the global movement of data with better protection for personal information and intellectual property. It is a framework to promote cross-border data flow with enhanced protections.

  * The regime the advocates of this track sought to achieve has been termed 'Data Free Flow with Trust' or DFFT.

- India boycotted this Track along with South Africa, Egypt and Indonesia and many other developing nations.

- India boycotted it because it reportedly undermines multilateral negotiating processes based on consensus-based decision-making in global trade negotiations.

  * Developing countries have consistently demanded that negotiations on digital economy/e-commerce must be carried out on the basis of the 1998 WTO Work programme. Ministers adopted the Declaration on Global Electronic Commerce, recognizing that global electronic commerce was growing and creating new trade opportunities.

India's stand:

- India asserts that data is a form of trade and talks should remain under the WTO.

- India is among the many countries that have stressed on data localisation, with the Reserve Bank of India issuing a directive that mandated foreign firms to store their payments data within the country for "unfettered access and for supervisory purposes".

- American firms like Google, Mastercard, Visa and Amazon have lobbied against data localisation rules around the world, including India.

Details:

- In the virtual meeting, the Minister announced that India is not in a position to accept the concept of Data Free Flow with Trust (DFFT).

India's concerns:

- India is of the view that the concept of DFFT is neither well understood nor is comprehensive enough in the legislation of many countries.

- Given the huge digital divide among countries, there is a need for policy space for developing countries who still have to finalize laws around digital trade and data. India, like many other developing countries, is still in the phase of preparing a framework for its data protection and e-commerce laws.

- Data being a potent tool for development, equitable access to data is a critical aspect for India.

- The existing regulations on which DFFT is sought to be premised, such as uninhibited cross border flow of data do not address issues of data access or worse still could further deepen the digital divide.

INTERNATIONAL RELATIONS

1. Afghan Peace Process

» Prelims: Doha accord.

» Mains: Concerns with respect to current terms of negotiations and India's stand.

Context:

• The much awaited intra-Afghan talks between the Taliban and the Afghan High Council for National Reconciliation opened in Doha, Qatar in September 2020.

• The initiation of intra-Afghan talks was a key element in the U.S.-Taliban peace deal signed in Doha in February 2020 between the U.S. Special Representative for Afghanistan Reconciliation, Ambassador Zalmay Khalilzad, and the Taliban deputy leader, Mullah Abdul Ghani Barader.

Details of negotiations:

• Direct negotiations with the Taliban began with Ambassador Khalilzad's appointment as Special Envoy from the US side. Then subsequently, the negotiations became a three-way process.

  * The Doha track was with the Taliban.

  * A second track was with Islamabad/Rawalpindi to persuade the Pakistan Army to pressurise the Taliban to get them to the negotiating table.

  * The third was with Kabul to ensure that the Afghan government would accept the Doha outcome.

• The main objectives set out for the negotiation process involve the following:

  * An end to violence by declaring a ceasefire.

  * An intra-Afghan dialogue for a lasting peace.

  * The Taliban cutting ties with terrorist organisations such as al Qaeda.

  * U.S. troop withdrawal. Within months, the Taliban had whittled these down to just the last one with some palliatives regarding the third.

Concerns:

Open ended terms:

• The two elements that remained open ended in the U.S.-Taliban deal are the ceasefire declaration and the intra-Afghan talks.

Deviation from the set objectives:

• Instead of an Afghan-led, Afghan-owned and Afghan-controlled reconciliation, it has become a U.S.-led and Taliban-controlled process with nobody claiming ownership or responsibility.

Finite interests of major powers:

• The reality is major powers have limited interests. That is why no major power is taking ownership for the reconciliation talks, but merely content with being facilitators.

  * For the U. S., the peace talks provide U.S. President Donald Trump an exit opportunity before his re-election bid.

  * The European Union has made it clear that its financial contribution will depend on the security environment and the human rights record.

  * China can always lean on Pakistan to preserve its security and connectivity interests.

  * For Russia, blocking the drug supply and keeping its southern periphery secure from extremist influences is key.

India's stand:

• Addressing the opening session of the Doha meeting, India's External Affairs Minister reiterated that the peace process must be "Afghan led, Afghan owned and Afghan controlled".

• Both Ambassador Khalilzad and Russian Special Envoy to Afghanistan Ambassador ZamirKabulov have, on multiple occasions bluntly pointed out that if India had concerns regarding anti-India activities of terrorist groups, it must engage directly with the Taliban.

• With increasing Indian involvement in the Afghan Peace process, Indian policy seems to have evolved from its earlier hands-off approach to the Taliban.

Way forward:

• As much as the prospect for peace in Afghanistan depends on actual progress in the intra-Afghan talks, what is equally essential is regional consensus to support the peace process.

• India's vision of a sovereign, united, stable, plural and democratic Afghanistan is one that is shared by a large constituency in Afghanistan, cutting across ethnic and provincial lines.

• India should increase its active engagement in the peace process which would allow it to work with like-minded forces in the region to ensure that the vacuum created by the U.S. withdrawal does not lead to an undoing of the progress made so far.

2. Rules of engagement on the LAC

» Prelims : Boundary agreements between India and China

» Mains: Lacunae in the current agreements and the associated concerns

Context:

- Defence Minister's statement in the Parliament on the border tensions between India and China along the LAC.

Background:

- Given the differing perceptions of the LAC between India and China, a series of boundary agreements have been signed and confidence-building measures (CBMs) carried out to maintain peace and tranquillity while the two sides attempted to delineate the boundary through Special Representatives.

1993 agreement:

- It is also known as the agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Areas.

- The 1993 agreement states that in case personnel from either side cross the Line of Actual Control, "upon being cautioned by the other side, they shall immediately pull back to their side of the Line of Actual Control".

- The 1993 agreement, clearly states that both sides will "jointly check" the alignment of LAC where there is a doubt.

1996 agreement:

- It is also known as the Agreement on Confidence Building Measures in the Military Field along the Line of Actual Control in the India-China Border Areas.

- A key element of the 1996 agreement is that the two sides would keep their forces in the areas along the LAC to a minimum level.

- The 1996 agreement limits the deployment of major categories of armaments close to the LAC, including tanks, infantry combat vehicles, guns with 75-mm or bigger calibre, mortars with 120-mm or above and various missiles. It also limits combat aircraft from flying within 10 km of the LAC.

- Use of firearms on the LAC is strictly regulated as per the agreements of 1993, 1996 and 2005.

- The 1993 and 1996 agreements also mandate that pending a final solution to the boundary question, the two sides shall strictly respect the LAC.

2013 agreement:

- It is also known as the Border Defense Cooperation Agreement between India and China

- The agreement enumerates several mechanisms to reduce misunderstandings and improve communications between the two countries along their disputed border. It explicitly prohibits one side from actively following or tailing the patrols of another side and also stipulates procedures for resolving disputes in "areas where there is no common understanding of the line of actual control."

Concerns:

China's non adherence to agreements:

- China's track record on adhering to agreed CBMs and protocols on the LAC has been poor in the past few years more so in the ongoing confrontation.

  * As against the provisions of the 1993 agreement, China has unilaterally altered the status quo at the LAC and has built structures and stationed its troops despite cautionary warnings.

  * China had mobilised a large number of troops and armaments along the Line of Actual Control (LAC) and this goes against the bilateral agreements of 1993 and 1996.

  * The Violence in Galwan raises doubts whether Chinese troops followed this protocol set out by the 2013 India-China Border Defence Cooperation Agreement in which both sides agreed "to not follow or tail patrols".

Risk of escalation:

- Since the Galwan Valley clash, the Indian Army has empowered its local commanders to take appropriate action as situations unfold and recently shots have been fired in the air, the first on the LAC since 1975.

- Thousands of troops and armaments continue to be deployed in close proximity, in some places within a few hundred metres of each other, so the chances of an accidental or inadvertent escalation which can spiral into a major confrontation remain high.

Way forward:

- There is the urgent need to review the agreements and conclude new CBMs to maintain and enhance peace and tranquillity in the border areas.

International Relations: Relations between India and neighbouring countries

3. **India, China agree on 5-point action plan**

» Prelims: Shanghai Cooperation Organization

» Mains: Measures to be taken for de-escalation along the LAC

Context:

- External Affairs Minister S Jaishankar met his Chinese counterpart Wang Yi in Moscow on the sidelines of the Shanghai Cooperation Organisation (SCO) Foreign Ministers' meet.

- Before their bilateral meeting, they attended a 90-minute luncheon meeting hosted by Russian Foreign Minister – the three countries make the RIC (Russia, India China) grouping.

Details:

- The meeting comes amid a fierce standoff between India and China along the Line of Actual Control, which began in May 2020 and continues, even after multiple efforts to de-escalate.

- A five-point course of action has been agreed upon to disengage and reduce tensions along the Line of Actual Control (LAC).

- The two Foreign Ministers agreed that the border troops of both sides should continue their dialogue, quickly disengage, maintain proper distance and ease tensions.

- The immediate task is to ensure a comprehensive disengagement of troops in all the friction areas.

Five-point course of action:

- Following the consensus between Prime Minister NarendraModi and President Xi Jinping to not allow differences to become disputes.

- Disengaging quickly to ease tensions.

- Abiding by the existing India-China border protocols and avoiding escalatory action.

- Continuing the dialogue between the Special Representatives, National Security Adviser AjitDoval and Mr. Wang, as well as the other mechanisms.

- Working towards new Confidence-Building Measures (CBMs).

Significance:

- Although divergences remain, the joint statement invoked the consensus among the leaders of the two countries, developed since the June 2017 meeting in Astana between Prime Minister NarendraModi and Chinese President Xi Jinping, and reiterated at the two informal summits in Wuhan and Mahabalipuram.

Conclusion:

- Although the change in China's political tone is welcome, deep differences that continue to complicate the path towards comprehensive military disengagement and de-escalation persist.

- While India insists that the objective of the exercise is to "restore" the status quo ante, there is no explicit Chinese commitment to that goal.

- While China wants to separate the border conflict from the rest of the relationship, India says the two are inextricably interlinked.

- Foreign Ministers' meeting was to agree on the objectives and principles of disengagement and that had been achieved. Much would depend on the militaries following through on the ground, and completing the process quickly.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

4. Logistics pacts

» Prelims: Logistics agreements signed by India

» Mains: Significance of the logistics agreements

Context:

- India's logistics agreement with other countries.

Details:

- India has signed several logistics agreements in recent years, beginning with the Logistics Exchange Memorandum of Understanding (LEMOA) with the U.S. in 2016.

- In June 2020, India and Australia signed the Mutual Logistics Support (MLSA) and also announced a joint declaration on a shared vision for maritime cooperation in the Indo-Pacific.

- The logistics pact with Japan, Reciprocal Provision of Supplies and Services between armed forces was signed in September, 2020.

  * This agreement establishes the enabling framework for closer cooperation between the Armed Forces of India and Japan in the reciprocal provision of supplies and services while engaged in bilateral training activities, United Nations Peacekeeping Operations, Humanitarian International Relief and other mutually agreed activities.

  * The agreement will also help further increase the bilateral defence engagements under the Special Strategic & Global Partnership between the two countries.

- The agreement with Russia, the Agreement on Reciprocal Logistics Support (ARLS), is expected to be signed during the upcoming bilateral summit.

- India is now working on similar agreements with the U.K. and Vietnam.

Significance:

Sign of strengthening relationship:

- The signing of these logistics pacts have been in the backdrop of strengthening bilateral relation between the two countries.

  * India and the U.S. have gone on to sign other bilateral agreements like the Communications Compatibility and Security Agreement (COMCASA), indicative of the deepening relationship between India and the U.S.

  * The Reciprocal Provision of Supplies and Services pact with Japan comes with an agreement for deeper cooperation between the Navy and the Japan Maritime Self-Defence Force (JMSDF).

  * The Mutual Logistics Support Agreement (MLSA) with Australia comes in the backdrop of alleviating the bilateral relationship to comprehensive strategic partnership status.

Utility for the Navy:

- The India Navy will be the biggest beneficiary of these logistics pacts as this will enable the Indian Navy to extend their area of operation without the constraints of logistic supplies.

- Given that India now has military logistics agreements with all Quad countries, Australia, Japan and the U.S., this will significantly help improve interoperability between these countries as they also operate several common military platforms. The utility of the agreements will become evident during the upcoming Malabar naval exercise.

Agreement with Russia:

- The Reciprocal Logistics Support agreement with Russia will give India access to Russian facilities in the Arctic region which is seeing increased global activity as new shipping routes open up and resources become available.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

5. **Relevance of Non-alignment policy**

   » Prelims: Landmarks summits related to NAM

   » Mains: Relevance of NAM in the dynamic international relations scenario for India

Context:

- India's External Affairs Minister, S. Jaishankar, has stated recently that non-alignment as a foreign policy was a concept of relevance in a specific era and a particular context (Cold war era), though the independence of action enshrined in it remains a factor of continuity in India's foreign policy.

- This statement seems to strengthen the growing perception that India has abandoned the policy of non alignment.

Background:

Non-alignment policy:

- Non-alignment policy gained traction during the Cold War era. It meant not seeking to formally align with or against the two politico-military blocs led by the United States or the Soviet Union. It meant remaining independent or neutral and retaining autonomy of policy for the country.

Non-alignment movement:

- The Non-Aligned Movement (NAM) is an international organization based on the Non-alignment policy.

- The Non-Aligned Movement was established in 1961 in Belgrade, mainly based on the initiative of the Indian Prime Minister Jawaharlal Nehru, Ghanaian President Kwame Nkrumah, Indonesian President Sukarno, Egyptian President Gamal Abdel Nasser and Yugoslav President Josip Broz Tito.

- The Non-Aligned Movement (NAM) provided a platform for newly independent developing nations to join together to protect their autonomy. The members united around NAM's flagship campaigns for de-colonisation, universal nuclear disarmament and against apartheid.

Dynamics of foreign policy:

Alliance system of the cold war era:

- During the Cold War, the countries in an alliance had ideological convergence and also faced a common military threat. With the disintegration of the USSR and the end of the Cold war the international options of alliance partners widened.

- Notably, the strategic interests of former alliance partners are no longer congruent.

  * The growing differences between the EU and the U.S. and the divergences within the North Atlantic Treaty Organization (NATO) are a case in point.

The decreasing influence of NAM:

- The disintegration of the soviet union in 1990's, universal decolonization and the end of the apartheid regime in South Africa has resulted in the NAM countries diversifying their network of relationships across the erstwhile east-west divide and the Non-alignment policy losing its relevance.

Details:

- An analysis of the current geopolitical situation and understanding of India's options in the dynamic international relations realm is very important.

India's geo-strategic objectives:

- Two significant aspects for India's foreign policy has been to secure it's economic and security interests in the Indo-Pacific space and also to ensure strategic influence and security along the continental landmass to its north and west.

  * As part of its Indo-Pacific outreach, India has adopted the Act East policy of bilateral and multilateral engagements in Southeast Asia and East Asia and the Pacific.

  * India has been trying to establish Connectivity and cooperation with Afghanistan and Central Asia.

India's geo-strategic challenges:

- India's primacy in the Indian Ocean is being challenged by the growing presence of the Chinese navy in the Indian Ocean region and China's deepening relations with the Indian Ocean littoral countries.

- Given that India shares its northern and western border with two hostile and nuclear armed neighbours, India has not been able to establish its influence in the continental landmass. India has been busy addressing the security aspects along its borders. This has also limited India's access to Central Asian economies.

- The growing co-operation between Pakistan and China also raises the threat of a two front war for India.

- China has been making inroads into India's neighbouring countries like Nepal, Bangladesh and Sri Lanka. Chinese influence has been growing at the cost of India's strategic depth in these countries.

Aligning with the U.S.:

- In the wake of the border tensions with China along the LAC and China's increasing assertiveness, there have been calls for India's foreign policy to make a decisive shift towards the United States to counter China.

Convergence:

- Shared India-U.S. interests in dealing with the challenge from China in the maritime domain have been a strategic underpinning of the bilateral partnership between India and the U.S. since the early 2000s.

- The trade war between the U.S. and China and the deteriorating ties between the two superpower nations have brought India and the U.S. on a common platform to counter Chinese assertiveness.

Challenges:

- In the immediate-term, Indian and U.S. perspectives are less convergent in India's continental neighbourhood.

  * While India is keen on engagement with Iran and Russia to help increase its connectivity in the region, the U.S. on account of its deteriorating ties with Iran and Russia has pressed on India to reduce its interactions and dependency on these nations.

The way forward for India:

- Presently as reiterated by the current External Affairs Minister, the Indian foreign policy vis-a-vis its international relationships should be driven primarily by the objective to advance prosperity and influence of India.

- Given that China poses the single largest threat to India in the current circumstances, India's options should be guided by the intent to neutralize this threat posed by the Chinese.

Partnership with the U.S. based on mutual interests:

- Given the current circumstances it might seem that a decisive shift in the form of increased convergence with the U.S. is a viable option for India.

- India should see its ties with the U.S. as a joint venture and not as an alliance. The two countries should pursue shared objectives for mutual benefit and accept the differences of perspectives and try to address them.

  * The U.S. should acknowledge that India's development of trade routes through Iran would also serve its strategic interest of finding routes to Afghanistan and Central Asia, bypassing Pakistan and Russia, respectively.

  * As the U.S. confronts the challenge to its dominance from China, classical balance of power considerations would dictate a modicum of accommodation with Russia.

- Despite the growing partnership between India and the U.S., Indian administration has repeatedly clarified that the rejection of non-alignment does not mean alignment and the government has reiterated that India will not join an alliance system.

The Russia factor:

- While partnering with the U.S. India must also consider further broad basing its relations with Russia beyond the traditional defence and energy pillars. India should build a strong relation with Russia to try to exploit Russia's reluctance to be a junior partner of China.

Stitching together an alliance of like-minded countries:

- The countries in the Asia-Pacific region are having to face an assertive China in the South China Sea. These countries are reluctant to define China as a strategic adversary, because of their economic engagement with it and the huge military asymmetry.

- Deepening India's engagement with such countries might play to India's advantage.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

6. Shanghai Cooperation Organisation and conflict resolution

  » Prelims: Shanghai Cooperation Organization structure and members

  » Mains: Significance of SCO for India

Context:

- The five-point agreement negotiated between India and China on the sidelines of the Shanghai Cooperation Organisation (SCO) foreign ministers meeting.

Background:

Shanghai Cooperation Organisation:

- The SCO was founded in 2001, built on the 'Shanghai Five' grouping of Russia, China, Kazakhstan, Kyrgyzstan (Kyrgyz Republic) and Tajikistan.

- In 2001, the Shanghai Five inducted Uzbekistan into the group and named it the SCO.

- In 2015 in Ufa, Russia, the SCO decided to admit India and Pakistan as full members. Both signed the memorandum of obligations in 2016 in Tashkent, Uzbekistan, thereby starting the formal process of joining the SCO as full members. In 2017, at a summit in Astana, India and Pakistan officially joined SCO as full members.

- The SCO has four observer states — Afghanistan, Iran, Belarus and Mongolia.

- SCO has two permanent bodies — the SCO Secretariat based in Beijing and the Executive Committee of the Regional Anti-Terrorist Structure (RATS) based in Tashkent.

- The SCO Secretary-General and the Director of the Executive Committee of the SCO RATS are appointed by the Council of Heads of State for a term of three years.

Significance:

Conflict resolution:

- Conflict resolution has been an important goal of the SCO to ensure regional stability and security.

- Though the SCO Charter doesn't allow any bilateral dispute to be taken up, but it provides a comfortable platform for building mutual trust, expanding cooperation, finding common ground and eventually, creating conditions for dialogue between countries.

- The platform has previously played a key role in conflict resolution between China and Russia, and among Central Asian republics.

  * The 1996 meeting of the Shanghai Five, resulted in an 'Agreement on Confidence-Building in the Military Field Along the Border Areas' between China, Russia, Kazakhstan, Kyrgyzstan and Tajikistan, which led to an agreement on the mutual reduction of military forces on their common borders in 1997. Subsequently, it helped push the Central Asian countries to resolve some of their boundary disputes as well.

Strengthening co-operation:

- The SCO as stated in its Charter that was adopted in St. Petersburg in 2002, seeks to promote effective cooperation between member nations in politics, trade, economy, research and technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas.

Concerns:

Militarization of SCO:

- The SCO is viewed by the U.S. and Europe as an "Anti-NATO" organization given the proposals for military cooperation.

- In 2005, the Astana declaration of the SCO called for SCO countries to work on a "joint SCO response to situations that threaten peace, security and stability in the region", indicating the group's strategic ambitions.

India's views regarding the SCO:

- India joined the SCO as observer in 2005, and was admitted as a full member in 2015.

- India chose to join the SCO even when it was looking to strengthen its relationship with the west led by the U.S. and EU. Even though India has been part of the SCO, it has also strengthened its relationship with the maritime 'Quadrilateral' of the U.S., Japan and Australia.

- India membership of these two seemingly oppositely aligned groups is based on India's foreign policy principle of "strategic autonomy and multi-alignment".

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

7. **Defence Technology and Trade Initiative**

   » Prelims: Defence Technology and Trade Initiative objectives

   » Mains: Defence relations significance in the expanding India-US relations

Context:

- The 10th Defence Technology and Trade Initiative (DTTI) Group Meeting between India and the US.

Details:

- The Defence Technology and Trade Initiative (DTTI) is a mechanism by which senior leaders from the defence establishment of both India and the US meet and discuss challenges and opportunities for growth in defence cooperation.

- Generally, DTTI meetings are held twice a year.

- The aim of the DTTI Group is to bring sustained leadership focus to the bilateral defence trade relationship and create opportunities for co-production and co-development of defence equipment.

- Four Joint Working Groups focused on land, naval, air, and aircraft carrier technologies have been established under DTTI to promote mutually agreed projects within their domains.

Objectives of the DTTI:

- Transform the bilateral defence relationship into one that is limited only by independent strategic decisions, rather than bureaucratic obstacles or inefficient procedures.

- Strengthen India's defence industrial base by moving away from the traditional "buyer-seller" dynamic towards a more collaborative approach.

- Explore new areas of technological collaboration from science and technology cooperation through co-development and co-production.

- Expand U.S.-Indian business ties.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

8. **U.S. keen on finalising BECA at 2+2 dialogue**

   » Prelims: Foundational agreements between India and the US

   » Mains: Significance of the deepening bilateral ties with the US

Context:

- The U.S. is keen that India sign the last foundational agreement, Basic Exchange and Cooperation Agreement for Geo-Spatial cooperation (BECA), at the next India-U.S. 2+2 ministerial dialogue.

Background:

- Beginning 2016, India has signed three foundational agreements:

    * The Logistics Exchange Memorandum of Agreement (LEMOA).

    * The Communications Compatibility and Security Agreement (COMCASA).

    * While the General Security of Military Information Agreement (GSOMIA) was signed previously, an extension to the GSOMIA, the Industrial Security Annex (ISA), was signed at the last 2+2 dialogue.

Details:

- BECA will allow India to use US geospatial maps to get pinpoint military accuracy of automated hardware systems and weapons such as cruise and ballistic missiles.

- BECA will allow the United States to share satellite and other sensor data with India in order to improve the Indian military's targeting and navigation capabilities.

Note:

- There has been a sharp increase in India's maritime interactions with the Quad countries on a bilateral basis centred around information sharing for improved Maritime Domain Awareness (MDA) in the Indian Ocean Region and Indo-Pacific.

- A maritime information agreement is also under active deliberation between India and the U.S.

- Once concluded, India will have such arrangements with all Quad countries — Australia, Japan and the U.S.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

9. Indo - Pacific trilateral dialogue held

- » Prelims: Members included in the Indo-Pacific trilateral dialogue

- » Mains: Relevance of Indo-Pacific region for India

Context:

- India, Australia and France held the first trilateral dialogue, with a focus on enhancing cooperation in the Indo-Pacific region.

Details:

- The three countries discussed on the best ways to strengthen and reform multilateralism.

    * They had an exchange on the priorities, challenges and trends in regional and global multilateral institutions.

- Economic and geostrategic challenges and cooperation in the region, particularly in the context of the COVID-19 pandemic and domestic responses to it was discussed.

- Maritime security including in the areas of humanitarian assistance and disaster relief, maritime domain awareness, mutual logistics support, capacity-building of friendly countries in the Indo-Pacific region was a part of the discussion.

    * Cooperation on marine global commons — blue economy, marine biodiversity and environmental challenges such as marine pollution — was on the agenda of the meeting.

    * The Indian side underlined its interest in collaborating on sustainable fisheries in the Indian Ocean, technologies for harvesting of Deep Ocean Resources, Ocean Thermal Energy Conversion.

- They agreed on the importance of maintaining resilient global supply chains.

Significance:

- France and Australia are India's key partners in the Indo-Pacific region.

- The meeting provided a unique opportunity to build upon the progress that the three countries have achieved bilaterally in recent years.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

10. With China as backdrop, New Delhi's Moscow watch

- » Prelims: Kavkaz 2020

- » Mains: India-Russia ties

Context:

- India's decision to pull out of Russia's Kavkaz 2020 military exercises has led to questions about the possible impact of deteriorating India-China relations on the India-Russia partnership.

- While COVID-19 was cited as the official reason, the border tension with China is most likely to have prompted this decision.

LAC issue and Russia's role:

- With both its close partners at conflict, Russia has been playing a quiet diplomatic role during the recent border clashes without actively taking sides.

- India's Russia engagement has remained steady and Defence Minister visited Russia in June for the 75th Victory Day parade.

- Also, there have been discussions around furthering

the India-Russia defence relationship alongside the promise to accelerate certain supplies based on India's requirements.

- Defence Minister's latest visit coincided with the biannual Indo-Russian naval exercise, INDRA, in the Andaman and Nicobar Islands, in the strategically crucial waters of the Indian Ocean.

Importance of Multilateral Forums:

- From substantive defence engagement to regional questions in Central Asia, Afghanistan and West Asia, a conversation with Russia remains an important element of Indian foreign policy.

- The multilateral forums are important as they foster continued India-Russia cooperation at the bilateral and multilateral levels.

  * India and Russia, particularly since the 2018 Sochi informal summit have spent the past few years strengthening their partnership.

- India's External Affairs Minister has noted that we live in a 'curious world' where one cannot view engagement with different parties as a 'zero-sum game'.

  * The zero-sum game essentially means gain for one of the players and loss for the other.

- As a result, worsening India-China ties or a growing China-Russia relationship would not automatically mean a breakdown of the India-Russia strategic partnership.

Concerns for India:

- Both India and Russia recognise the value of having a diversified portfolio of ties.

- The combination of a changing regional order, closer Russia-China ties and India's alignment with the United States and other like-minded countries to manage China's rise has the potential to create hurdles for India-Russia cooperation in Asia.

- India would like to secure Russian support in this changing Asian regional order. However, Russia has seen China become its key partner as relations with the West have hit a new post-Cold War low since 2014.

- The U.S. policy towards Russia has further pushed it towards China. This has resulted in strengthening China's rising power, to the detriment of both Indian and western interests.

- India on its part has sought to include Russia in its vision of the Indo-Pacific that does not see the region as 'a strategy or as a club of limited members'.

- Russia has acknowledged that the Indo-Pacific does not include the aim of containment of another

power, however, it has been critical of the American conception of the region that in its strategy classifies China as a revisionist power.

Conclusion:

- A world split into two blocs would be detrimental to the interests of both India and Russia.

- The strategic space both provide to each other is critical. It highlights the need to insulate their bilateral relationship from the unpredictability of the international system.

- Although the evolving global order makes it difficult for India and Russia to pursue fully convergent policies, it does not prevent the bilateral relationship from retaining its relevance.

- India and Russia must pragmatically manage the seeming contradictions in their respective policies while taking a long-term view of the strategic partnership.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

11. Great power, little responsibility

» Prelims: Ongoing conflicts and map work associated with them

» Mains: Lacunae in the structure and functioning of the current international system

Context:

- This article discusses about the present international system and how it poses enormous obstacles to peace. The issue is further aggravated by the countries with economic and military might.

A look at stats:

- According to the World Population Review in 2019, eight countries — Afghanistan, Yemen, Syria, Turkey, Somalia, Iraq, Mexico and Libya — suffered at least 1,000 deaths each (mainly civilian deaths) through militarised attacks and battles.

  * Including the Maghreb and Sahel regions of North and West Africa, over 25 countries are being ravaged by deadly wars currently.

  * According to the UN Refugee Agency, 79.5 million were displaced at the end of 2019, due to armed conflicts, persecution and other reasons.

- The International Day of Peace is an occasion for deep reflection about the prevalence of war, violence and insecurity in many parts of the world.

International Day of Peace

- The International Day of Peace was established in 1981 by the United Nations General Assembly.

- Two decades later, in 2001, the General Assembly unanimously voted to designate the Day as a period of non-violence and ceasefire.

- Each year the International Day of Peace is observed around the world on 21 September.

- The UN General Assembly has declared this as a day devoted to strengthening the ideals of peace, through observing 24 hours of non-violence and ceasefire.

- To mark its 75th anniversary, the UN has invited millions of people worldwide to join UN75, the largest and furthest-reaching global conversation on building a peaceful and prosperous future.

- The 2020 theme for the International Day of Peace is "Shaping Peace Together."

Fuelling instability:

- While on paper, the U.S., Russia and China uphold peace and stability as the permanent members of the UN Security Council, in practice, they fuel instability or interfere in most ongoing wars. The U.S., Russia and China have catapulted into the ranks of top sellers of weapons.

Yemen:

- The current US administration is abundantly selling lethal weapons to its Gulf allies in the name of their 'security'.

- The tragedy in Yemen, which the UN has declared as the world's worst humanitarian disaster, is the outcome of indiscriminate attacks by the U.S.-backed coalition of Saudi Arabia and the UAE, whose geopolitical goal is to counterbalance Iran.

Libya:

- Libya going down into chaos is the result of the active involvement of mercenaries and weapons pumped in by Russia and the U.S.-allied Gulf Arab monarchies to push back Turkey's influence.

- Similar to Syria, Yemen and Libya are victims of the conduct of great powers who arm and finance regional actors to prey upon weak states for counterbalancing rivals and sustaining profits of their military-industrial complexes.

Clashes in Asia:

- China's hegemonic expansionism against its neighbours and its new Cold War with the U.S. have significantly raised risks of military clashes in Asia.

- Chinese small arms enable ethnic violence and extreme human rights abuses from South Sudan and the Democratic Republic of Congo to Pakistan and Myanmar.

Steps taken:

- UN Secretary General is campaigning for a "global ceasefire" so that everyone's attention shifts to fighting the COVID-19 pandemic.

- The UN as well as regional organisations like the African Union and the European Union are trying to negotiate cessation of hostilities in various war zones.

- Targeted micro-level diplomatic initiatives cannot ameliorate the underlying macro-level problem of great powers and their allies acting with brazen impunity.

Way forward:

- There is a need to diagnose the core problem, which is, the unjust structure that privileges great powers and permits their plots — and challenge it.

- The world must strive for altering the structure and nature of world politics.

- Intellectuals, social movements and responsible states should prioritize an equitable world order.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

12. Brexit deal in danger

- » Prelims: Northern Ireland location, Belfast Agreement

- » Mains: Concerns with a no deal Brexit

Context:

- The U.K.'s hardening stance in the post-Brexit U.K.-EU trade deal negotiations.

Background:

- Britain left the European Union on January 31, 2020 and there is a status-quo transition arrangement till December 2020.The trade negotiations are on between Britain and the European Union for a post-exit trade relation between the two.

- The talks have stalled over Britain's insistence that it should have full autonomy over state aid decisions and its demands over higher fishing rights.

- The Chief negotiator from U.K. had recently stated that the U.K. would not yield on its demands despite the lack of progress in the negotiations and it would be fine even with a no-deal Brexit.

- The British Prime Minister has set an October 15 deadline for reaching a post-Brexit U.K.-EU trade deal indicative of its hardened position in the negotiations.

- The above developments have raised fears of a no-deal exit and its consequent effects.

Details:

The Irish border issue:

- The Brexit agreement seeking to avoid a hard border between Northern Ireland, which is part of the U.K., and the Irish Republic, an EU member had the Northern Ireland protocol which expected Northern Ireland to follow some EU rules while trading with the neighbouring Irish Republic.

- The hard Brexiteers have been critical of Northern Ireland clause, claiming that it endangers U.K.'s sovereignty and are planning a domestic legislation titled 'the Internal Market and Finances Bill', empowering the U.K. to follow new U.K. laws rather than those agreed to in the Brexit agreement.

- Northern Ireland leaders have criticized the proposal for a domestic legislation. They fear that such a move would necessitate physical checking of trade items between the two Irelands. They also fear that it would lead to heightened tensions and threaten the Good Friday agreement that brought peace to the region.

  * The Good Friday Agreement or Belfast Agreement is a pair of agreements signed in 1998 that ended the political conflict in Northern Ireland. Northern Ireland's present devolved system of government is based on this agreement.

Other issues:

- There is lack of consensus on issues such as workers' rights, environmental regulations, state aid to businesses and the fishing rights issue as well.

- While the EU wants the U.K. to adopt rules that are close to its own to ensure a level playing field in the inter-European trade, the British government is reluctant to accept E.U. rules and has been arguing that the whole point of Brexit was to break free from common rules under the EU.

Concerns:

- A no-deal Brexit would have substantial costs involved for the U.K. as well as the EU.

  * It will inflict severe economic costs on U.K., at a time when the economy is in dire straits due to COVID-19. It would hinder the movement of goods and services between the E.U. and the U.K. and this would have a direct impact on the employment opportunities.

  * It would also have undesirable political consequences as it risks disrupting the hard-won peace in the island of Ireland.

Way forward:

- The U.K. needs to respect the withdrawal agreement, and be flexible in the talks as well as on deadlines.

- Both sides should focus on reaching a consensus on trade and other future relations.

International Relations: Effect of policies and politics of developed and developing countries on India's interests

13. **India and the Abraham Accords**

   » Prelims: Abraham accord

   » Mains: Impact of Abraham accords on India

Normalization of ties:

- The formal normalisation of Israel's ties with the United Arab Emirates (UAE) and the Kingdom of Bahrain has created a significant inflection point in regional history and geopolitics.

- With the newly established formal ties, the two Gulf States have joined Egypt and Jordan which had their peace treaties with Israel in 1979 and 1994.

Abraham Accords:

- It is the first Arab-Israeli peace deal in 26 years.

- The United Arab Emirates and Bahrain have agreed to establish full diplomatic ties with Israel as part of a deal to halt the annexation of occupied land sought by the Palestinians for their future state.

- The so-called "Abraham Accords", announced by United States President Donald Trump, secures an Israeli commitment to halt further annexation of Palestinian lands in the occupied West Bank.

Significance of the reconciliation:

- The UAE and Bahrain do not have any territorial dispute with Israel, nor have they ever been at war with it.

  * Although formally committed to an Arab consensus over a two-state resolution of the Palestine cause, these two countries have steadily, albeit secretly, moved towards having substantive links with Israel in recent years.

  * Hence, the 'Abraham Accords' entered with the

UAE and Bahrain are 'peace-for-peace' deals without any physical quid pro quo (exchange) by Israel.

- Multiple drivers are likely to spur the two new friendships to grow faster and deeper.

    * Externally, Israel, the UAE and Bahrain share the common threat perception of Iran against the backdrop of the ongoing shrinking of Pax Americana in the region.

    * Internally, while all three have their respective hotheads opposing this reconciliation, these seem manageable.

    * They are relatively more modern societies that share the overarching and immediate priority of post-pandemic economic resuscitation.

    * They have lost no time to set up logistics such as Internet connectivity and direct flights to pave the way for more active economic engagement.

- Subsequently, other moderate Arab countries are likely to build formal ties with Israel.

Implications for India:

- Israel's reconciliation with Egypt and Jordan did not have any major impact on India as its ties with them were relatively insignificant. At present, India has stronger, multifaceted and growing socioeconomic engagements with Israel and the Gulf countries.

    * Over eight million Indian diaspora in the Gulf annually account for remittances of nearly $50 billion.

    * India's annual merchandise trade with the Gulf is over $150 billion, sourcing of nearly two-thirds of India's hydrocarbon imports, major investments, etc.

Sustaining the diplomatic balance:

- Calling both the countries its strategic partners, India has welcomed the establishment of diplomatic relations between the UAE and Israel.

- But, the Israel-Gulf Cooperation Council (GCC) breakthrough widens the moderate constituency for peaceful resolution of the Palestine dispute, easing India's diplomatic balancing act.

    * The Israel-GCC ties could provoke new polarisations between the Jihadi fringe and the mainstream.

    * The possibility of the southern Gulf becoming the new arena of the proxy war between Iran and Israel cannot be ruled out, particularly in Shia pockets.

Managing the economic consequences:

- Defence and security cooperation could act as a stimulus. Both sides are ready to realise the full potential of their economic complementarity in defence and security cooperation.

- The UAE and Bahrain can become the entrepôts to Israeli exports of goods and services to diverse geographies.

- Israel has niche strengths in defence, security and surveillance equipment, arid farming, solar power, horticultural products, high-tech, gem and jewellery, and pharmaceuticals.

- Tourism, real estate and financial service sectors on both sides have suffered due to the pandemic and hope for a positive spin-off from the peer-to-peer interactions.

- Further, Israel has the potential to supply skilled and semi-skilled manpower to the GCC states, particularly from the Sephardim and Mizrahim ethnicities, many of whom speak Arabic.

- Even the Israeli Arabs may find career opportunities to bridge the cultural divide.

- Israel is known as the start-up nation and its stakeholders could easily fit in the various duty-free incubators in the UAE.

Conclusion:

- India has acquired a large and rewarding regional footprint in the Gulf. It is particularly preferred as the source of manpower, food products, pharmaceuticals, gem and jewellery, light engineering items, etc.

- Indians are also the biggest stakeholders in Dubai's real estate, tourism and Free Economic Zones.

- In the evolving scenario, there may be scope for a profitable trilateral synergy, but India cannot take its prevalence for granted.

- India must be careful and should monitor or even pre-empt any threat to its interests in the Gulf.

- Even more important for India is to manage the economic fallout of the Israel-GCC reconciliation.

ORGANIZATIONS/INSTITUTIONS IN NEWS

14. **International Criminal Court**

    » Prelims: Rome statute

    » Mains: Concerns with the structure and functioning of ICC

Context:

- The U.S. administration has announced sanctions, including asset freezes and visa bans against two officials of the International Criminal Court (ICC).

Background:

War crimes case of Afghanistan:

- The officials were involved in an investigation into alleged war crimes, extra-judicial killings, torture and targeting of civilian populations by U.S. forces and the Central Intelligence Agency (CIA) in Afghanistan since 2003.

U.S. sanctions:

- The U.S. has been arguing that since it never ratified the "Rome Statute", which created the ICC in 1998, it was not subject to its rulings and has also accused the ICC probe of having the dubious objective of maligning the U.S.

  * The Rome Statute has been signed by 139 countries and of these only 123 have ratified it through their Parliaments and internal process. Similarly Russia too withdrew from the statute after having signed it. The U.S. though had signed the statute has not ratified it. China and India have not even signed the Rome Statute.

- The latest sanction follows similar earlier sanctions imposed by the U.S. on the ICC.

Concerns:

- The U.S. decision has been criticised by the global community and have called for the sanctions to be reversed.

Blow to global order:

- The U.S.'s action would mark asetback to the international rules-based multilateral order.

  * In the last few years, the U.S. administration has walked out of several UN agencies and international agreements, including Human Rights Council, UNESCO, the Paris climate change agreement and the Iran nuclear accord.

- The U.S.'s unilateral sanctions would encourage other regimes accused of war crimes to flout the ICC's rulings.

  * This could also encourage countries like China to disregard international norms in the South China Sea and other areas.

Effect on victims:

- The decision to sanction officials assisting the ICC will deter victims of violence in Afghanistan from speaking out.

India's take on the ICC:

- India's decision to not sign the Rome statute is based on the following arguments.

Sovereign jurisdiction:

- India believes in the concept of sovereign jurisdiction within national territoryand fears the ratification could undermine this.

Independence of ICC:

- The Rome Statute provides the UN Security Council the power to refer cases to the ICC, the power to block such references. This provision would make the ICC subordinate to the UN Security Council.

- This calls into question the independence of the ICC and this could as well lead to big power politics in ICC's functioning.

Violative of existing international laws:

- The ICC arrogates to itself the right to prosecute matters against countries that aren't even signatories.

- The Rome Statute also provides power to the UN Security Council to bind non-States Parties to the ICC ; this violates a fundamental principle of the Vienna Convention on the Law of Treaties that no state can be forced to accede to a treaty or be bound by the provisions of a treaty it has not accepted.

Non-inclusion of critical aspects:

- India objects to the omission of cross-border terror, use of nuclear arms and weapons of mass destruction from the areas the ICC would institute its investigations.

Possible misuse of provisions:

- Beyond the above mentioned positions of principle, another aspect of India not wanting to submit to ICC jurisdiction was to avoid a scenario wherein allegations of human rights violations could be used as a pressure point against Indian security and armed forces engaged in combating insurgency and terrorism in Jammu and Kashmir, the North East and earlier Punjab.

ORGANIZATIONS/INSTITUTIONS IN NEWS

15. **Conference on Interaction and Confidence-Building Measures in Asia (CICA)**

  » Prelims: Conference on Interaction and Confidence-Building Measures in Asia; HQ and member nations

  » Mains: Important multilateral organizations in Asia.

Details:

- The Conference on Interaction and Confidence-Building Measures in Asia (CICA) is an inter-governmental forum for enhancing cooperation towards promoting peace, security and stability in Asia.

- It is a forum based on the recognition that there is a close link between peace, security and stability in Asia and in the rest of the world.

- The key idea of the Conference is based on the priority of the indivisibility of security, joint initiative and mutually beneficial interaction of small and large states.

- It was established in 1999.

- It is headquartered at Nur-Sultan, Kazakhstan.

- For becoming a member of CICA, a state must have at least a part of its territory in Asia.

- India is a member of CICA since its inception.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

16. UN 75

» Prelims: UN specialized agencies and programmes

» Mains: Lacunae in its present structure and functioning and the need for reforms

Background

- The League of Nations was created in 1919, after World War I, as part of the Treaty of Versailles. However, when the Second World War broke out in 1939, the League closed down.

- Atlantic Charter, was a joint declaration issued in 1941, during World War II, by the British prime minister, Winston Churchill, and Pres. Franklin D. Roosevelt of the United States.

  * They discussed the possibility of creating a body for international peace effort and a range of issues related to the war.

  * It was not a treaty, but only an affirmation that paved the way for the creation of the UN.

  * It declared the realisation of "certain common principles in the national policies of their respective countries on which they based their hopes for a better future for the world."

Birth

- It was born out of the horrors of World War II. At the time of its foundation, it was primarily tasked with the goal of maintaining world peace and saving future generations from the evils of war.

- The UN is headquartered on international territory in New York City, with its other main offices in Geneva, Nairobi, Vienna and The Hague.

The four main goals of the UN included

- maintaining international peace and security,

- developing friendly relations among nations,

- achieving international cooperation in solving international problems

- Being at the centre for harmonising the actions of nations in the attainment of these common ends.

Member Countries

- While at the time of its formation, the UN consisted of only 51 member states, independence movements and de-colonisation in the subsequent years led to an expansion of its membership.

- At present, 193 countries are members of the UN.

Achievements

- Soon after its formation, it passed a resolution to commit to the elimination of nuclear weapons in 1946.

- In 1948, it created the World Health Organisation (WHO) to deal with communicable diseases like smallpox, malaria, HIV. At present the WHO is the apex organisation dealing with the coronavirus pandemic.

- In 1950, the UN created the High Commissioner for Refugees to take care of the millions who had been displaced due to World War II. It continues to be on the frontlines of crises faced by refugees from countries across the world.

- In 1972, the UN environment programme was created.

- In 2002, the UN established the UN criminal court to try those who have committed war crimes, genocide, and other atrocities.

The UN has also met with its share of criticisms.

- In 1994, for instance, the organisation failed to stop the Rwandan genocide.

- In 2005, UN peacekeeping missions were accused of sexual misconduct in the Republic of Congo, and similar allegations have also come from Cambodia and Haiti.

- In 2011, the UN peacekeeping mission in South Sudan was unsuccessful in eliminating the bloodshed caused in the civil war that broke out in 2013.

Context

- The Member States had agreed to hold a high-level event on 21stSeptember to mark the UN's 75th anniversary, and to adopt a forward-looking political declaration which will be negotiated through an intergovernmental process.

- The meeting theme was "The Future We Want, the UN We Need: Reaffirming our Collective Commitment to Multilateralism'

Declaration adopted at the meeting

- It looks back at the glorious years of the UN and remarked upon its achievements as well as failures.

  * It also set out its goals for the next decade. "The next 10 years, which have been designated as the decade of action and delivery for sustainable development, will be the most critical of our generation. It is even more important as we build back better from the COVID-19 pandemic," read the report.

- The goals listed out for the next ten years include protection of the planet and environment, promoting peace, gender equality and women empowerment, digital cooperation, and sustainable financing.

India

- Prime Minister Narendra Modi called for reform of its "outdated structures", pointing out that in the absence of comprehensive changes, the world body today faces a "crisis of confidence".

Reforms

- India has been at the forefront of demanding reform in the UN, particularly its principal organ, the Security Council, for decades, staking its claim as one of the world's largest economies and most populous countries, with a track record in promoting a rules-based international order, and contributing to peacekeeping through UN forces.

- The UNSC's permanent, veto-carrying members, chosen by virtue of being "winners" of World War II — the U.S., the U.K., France, Russia and later China — can hardly claim adequate representation of the world's leadership today.

- The UNSC does not include a permanent member from the African, Australian and South American continents, and the pillars of the multilateral order, such as the G-4 group of Brazil, India, Germany and Japan, have been ignored for long.

- Frequent divisions within the UNSC P-5 end up blocking key decisions.

Inter-Governmental Negotiations (IGN)

- It is a group of nation-states working within the United Nations to further reform of the United Nations Security Council (UNSC)

The IGN is composed of several different international organizations, namely:

- The African Union;

- The G4 nations;

- The Uniting for Consensus Group (UfC), also known as the "Coffee Club";

  * Developed in the 1990s in opposition to the possible expansion of permanent seats in the United Nations Security Council.

  * Under the leadership of Italy, it aims to counter the bids for permanent seats proposed by G4 nations (Brazil, Germany, India, and Japan) and is calling for a consensus before any decision is reached on the form and size of the Security Council.

- The L.69 Group of Developing Countries;

  * It is a cross regional grouping of 42 developing countries from Africa, Latin America and the Caribbean, Asia and the Pacific, that is focused on achieving lasting and comprehensive reforms of the UN Security Council.

- The Arab League;

- The Caribbean Community (CARICOM).

Issue Area

It has not made progress over decades, despite commitments. The UN has chosen to "rollover" the discussions of the IGN, which are looking at five major issues:

- enlarging the Security Council

- categories of membership

- the question of the veto that five Permanent members of the UNSC wield

- regional representation

- Redistributing the Security Council-General Assembly power balance.

Hope

- It is some comfort that the UN's 75th anniversary declaration passed by all member countries pledges to "upgrade the United Nations" with a commitment to "instil new life in the discussions on the reform of the Security Council".

Conclusion

- The UN is a platform to address global issues. The global order is faltering in addressing transnational dangers of conflict, terrorism, proliferation of weapons of mass destruction, pandemics, climate crisis, cyber-security, and poverty.

- Advocating change of a status quo in turmoil, is a global good.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

17. **UN and the retreat from multilateralism**

  » Prelims: Sustainable development goals

  » Mains: Challenges faced by the UN

Context:

- The world is facing an unprecedented pandemic and is also witnessing a retreat from multilateralism.

- The pandemic has also brought in its wake, the deepest recession the world has seen since the 1930s.

- This has made it more difficult to achieve the Sustainable Development Goals (SDGs) the UN had adopted.

Challenge to multilateralism:

- The main stakeholders of the system are posing a challenge to multilateralism.

- The rift between the permanent members of the Security Council has already started affecting the work of the UN Security Council.

Europe:

- Brexit has shown that nationalism remains strong in Europe and has delivered a blow to the idea of a united and whole Europe.

The U.S.A:

- While the U.S. is not alone in withdrawing from multilateralism, the most important development is the position of the U.S.

- U.S. President Donald Trump stressed "America First" in his speech, and suggested that others too should put their countries first.

- The French President in his speech pointed out that the U.S., which created the international system, is no longer willing to be its guarantor of last resort.

  * He pointed out that while the U.S. is withdrawing, the world faces China's projection beyond its frontiers.

China:

- China has stepped in to take advantage of the West's retreat from multilateralism.

- However, China's assertion of a role on the world stage is not an embrace of the idea of multilateralism.

- Its flagship Belt and Road Initiative consists of a series of bilateral credit agreements with recipient countries with no mechanism for multilateral consultation or oversight.

- The European Union's and U.S.'s sanctions against Russia have driven it closer to China.

Hurdles:

The UN Secretary-General's report on the work of the organisation highlights some of the achievements and challenges the world body faces.

- The UN peacekeeping budget suffers from a paucity of resources.

- Over 40 UN political missions and peacekeeping operations engage 95,000 troops, police, and civil personnel. To be effective, there is a need for sound finances.

- Most of the humanitarian assistance, developmental work, and budgets of the specialised agencies are based on voluntary contributions.

- While there are calls for increasing public-private partnerships, this could not be a satisfactory arrangement.

  * The UN provides 'public goods' in terms of peace and development often in remote parts of the world. The corporations may not be as willing to do what the UN is doing in remote parts of the world.

Way forward:

- The Prime Minister of India called for reform of its outdated structures, pointing out that in the absence of comprehensive changes, the world body today faces a crisis of confidence.

- There is a need, not only to expand the permanent members' category of the Security Council but also to revitalise the role of the General Assembly.

- For the UN to continue being relevant in the changing world order, reforms are necessary.

International Relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's Interests

18. Managing the global commons

» Mains: Challenges in governing and managing global commons

Global Commons:

- 'Global Commons' refers to resource domains or areas that lie outside of the political reach of any one nation State.

- They are shared resources that cannot be managed within national jurisdictions.

- It is a term typically used to describe international, supranational, and global resource domains in which common-pool resources are found.

- Global commons include the earth's shared natural resources, such as the high oceans, the atmosphere and outer space and the Antarctic in particular.

- Cyberspace may also meet the definition of a global commons.

Context:

- Various events that have occurred in 2020 so far such as the pandemic, record-breaking forest fires, floods and droughts in various places, and the rapid melting of Arctic ice are majorly due to the disruption of the environment.

- These events point towards the need to increase efforts in managing interactions with the environment on a global scale.

Governing shared resources:

- For the management of shared resources, there is a need to balance both private and public interests.

- For example: Each individual farmer may benefit from turning on the pump to irrigate his/her land, but on a larger scale, it contributes to declining groundwater levels and electricity blackouts.

- The spread of zoonotic diseases like COVID-19; greenhouse gas emissions; biodiversity reduction; overfishing; and the accumulation of plastic waste are some of the problems within the scope of global commons.

- Garrett Hardin, a biologist popularised the notion of the tragedy of the commons, which implies that communities cannot manage their shared resources and require governmental interventions to regulate resource use or privatise the resource.

- A political scientist Elinor Ostrom in her book on governing the commons demonstrated that communities can govern on their own their shared resources, often better than imposed, well-intended solutions from outside. Ostrom was recognised in 2009 for her work by the Nobel Memorial Prize in Economic Sciences.

Challenges:

- The insights of what kind of governance might be successful at the local community level do not directly address the challenges we face on a global scale.

- The consequences of human activities on a global scale are only being recognised in recent times.

- The appropriate scale of governance of global commons is a highly debated topic.

  * Some argue that top-down governance with binding agreements is the only effective solution for problems of a global scale. However, multilateral negotiations on climate change and other global commons over decades have had limited success.

  * Others have emphasised a more decentralised multi-level or polycentric approach that builds on the observed successes of local solutions. However, empirical research demonstrates that well-intended solutions imposed on community members are typically short-lived.

Way forward:

- There is no panacea to solve this problem. Coordinated activities at different scales are needed to address the challenges in managing the global commons.

- To manage our global commons, there is a need to facilitate and accommodate the self-governance of local commons, but provide safeguards at different levels to avoid exploitation and manage risks.

- When rural and urban communities are allowed to self-govern their shared resources, there could be risks involved for which cities and nations need to accept responsibilities.

- At the local levels, initiatives and solutions could be developed that fit the local context.

- When expertise is not available, higher-level organisations could facilitate learning from peers in similar conditions.

- Failures will be inevitable when local-level experimentation is simulated, and higher-level authorities need to provide insurance for those cases.

- If local initiatives are successful, higher-level authorities need to ensure that the outcomes of those successes will not be grabbed by outsiders.

ART AND CULTURE

1. **Chendamangalam sari**

    » Prelims: Important GI tagged handlooms of India

    » Mains: Advantages of GI tagging products

    • Chendamangalam is a small town near Ernakulam

    • The town was part of the ancient port complex of Muziris and known for its fine cotton spun here by the Devanga Chettiars, a community of weavers originally from Karnataka.

    • The GI-tagged Chendamangalam sari is recognisable by its puliyilakara border, a thin black line that runs abreast with the sari's selvedge.

    ### State- wise list of handloom products

Geographical Indications	State
• Molakalmuru Sarees	Karnataka
• UppadaJamdani Sarees-	Andhra Pradesh
• Paithani Sarees and Fabrics-	Maharashtra

2. **Dhrupad**

    » Prelims: Major schools of Hindustani classical music

    » Mains: Difference between Hindustani and carnatic classical music systems

    • Dhrupad is the oldest surviving classical style of Hindustani vocal music.

    • Dhrupad music is of temple origin.

    • Although Dhrupad consolidated its position as a classical form of music in the 13th century, it reached its zenith during Akbar's reign.

    ### Context

    • The Gundecha brothers are a well known name under the Dagari Gharana of the dhrupad style.

    • The Dagar style puts great emphasis on alap and for several generations their singers have performed in pairs (often pairs of brothers).

SCIENCE AND TECHNOLOGY

1. **Ground breaking inventions in ICT**

   » Prelims: Cloud computing and deep learning applications

   » Mains: Groundbreaking inventions in ICT domain and their potential

   ### *Cloud Computing:*

   - Cloud computing is the delivery of on-demand computing services -- including servers, storage, databases, networking, software, analytics via processing power, and intelligence -- typically over the internet and on a pay-as-you-go basis.

   - The three main types of cloud computing include Infrastructure as a Service, Platform as a Service, and Software as a Service.

   ### **Significance:**

   - The cloud gives easy access to a broad range of technologies that provides an impetus to faster innovation.

   - Cloud computing allows one to scale resources up or down to instantly to grow and shrink capacity as per the needs of the business. This allows for a flexible resource base.

   - The cloud allows the businesses to reduce capital expenses (such as data centers and physical servers) and only pay for services consumed by the industry. These variable expenses would be much lower than the upfront capital expenses because of the economies of scale.

   ### *Deep Learning:*

   - Deep learning is a machine learning technique that teaches computers to learn by example.

   - Deep learning is a subset of machine learning in artificial intelligence that has networks capable of learning unsupervised from data that is unstructured or unlabeled. It is also known as deep neural learning or deep neural network.

   - Deep learning imitates the workings of the human brain in processing data and creating patterns for use in decision making.

   ### **Applications:**

   - Deep learning can be used for detecting objects, recognizing speech, translating languages, and making decisions.

   - Deep learning applications are used in industries from automated driving to medical devices.

   - Deep learning can be used to help detect fraud or money laundering.

2. **Graphene**

   » Prelims: Raman spectroscopy and Electron diffraction

   » Mains: Graphene and its potential applications

   ### *Context:*

   - A new low-cost method of upscaling most conductive material 'graphene' developed.

   ### *About the Study:*

   - Researchers from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous institute under the Department of Science & Technology, Government of India, through their recent research work have upscaled graphene production while retaining its thin layered properties.

   - The researchers used a combination of two techniques to understand and quantify how much single layer like behaviour exists in the graphene system.

   - Raman spectroscopy – a technique to understand whether a graphene species has single layer like behaviour arising because of no interlayer interaction.

   - Electron diffraction – a technique to study the morphology of the given twisted system.

   ### *Benefits:*

   - The new low-cost method of upscaling production of graphene while preserving its single layered properties may reduce the cost of producing this thinnest, strongest and most conductive material in the world.

   ### *What is Graphene?*

   - Graphene is an allotrope of carbon consisting of a single layer of atoms arranged in a two-dimensional honeycomb lattice.

   - The 2010 Nobel Prize in Physics was awarded to Andre Geim and Konstantin Novoselov for their research on graphene.

   - Graphene is a transparent and flexible conductor that holds great promise for various material/device applications, including solar cells, light-emitting diodes (LED), touch panels, and smart windows or phones.

   - Smartphone products with graphene touch screens are already on the market.

   - Graphene is a boon for energy storage, coatings, sensors as well as superconductivity applications.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

3. **Scramjet engine**

   » Prelims: Scramjet engine working principles

   » Mains: Significance and applications of scramjet technology

Context:

- The test flight of the Hypersonic Technology Demonstrator Vehicle (HSTDV).

Background:

- The Defence Research and Development Organisation (DRDO) conducted a flight test of the hypersonic technology demonstrator vehicle (HSTDV) off Odisha's coast.

- This HSTDV was able to fly at a hypersonic speed of Mach six for about 20 seconds.

Technologies involved:

Propulsion system:

- The most critical component of the HSTDV would be the propulsion system. The HSTDV's propulsion system is the indigenously developed air-breathing scramjet engine.

Ramjet engine:

- A ramjet operates by combustion of fuel in a stream of air compressed by the forward speed of the aircraft itself, as opposed to a normal jet engine, in which the compressor section (the fan blades) compresses the air.

- The air flow through a ramjet engine is subsonic, or less than the speed of sound. Ramjet-propelled vehicles operate from about Mach 3 to Mach 6.

Scramjet engine:

- A scramjet (supersonic combustion ramjet) is a variant of a ramjet airbreathing jet engine in which combustion takes place in supersonic airflow.

- A ramjet decelerates the air to subsonic velocities before combustion, while the airflow in a scramjet is supersonic throughout the entire engine. That allows the scramjet to operate efficiently at extremely high speeds.

- Scramjet powered vehicles are envisioned to operate at speeds up to at least Mach 15.

Heat resistant materials:

- Given the high speeds achieved by the HSTDV, high temperatures are experienced on the leading edges of the cruiser's wings, tail surface and nose tip due to air friction.

- This would require the development of high heat resistant materials.

- DRDO developed special materials to take care of the high temperatures generated in the HSDTV.

Significance:

- India mastering the scramjet engine technology will help pave the way for developing many more critical technologies like scramjet technology and high performance materials. This could find application in other fields (spinoff technologies).

- Mastering the air-breathing scramjet technology holds immense significance in the following ways.

    * Air-breathing scramjet technology will lead to the development of hypersonic missiles. Hypersonic missiles are extremely difficult to track and destroy with the existing missile defence systems. This would give India a strong defence deterrent against its rivals. So far, only US, Russia and China have the hypersonic missile technology.

    * Air-breathing scramjet technology could also help make civilian air transportation faster.

    * Given that air-breathing scramjet technology is based on taking the oxidizing element (Oxygen) from the surrounding atmosphere, this technology could help satellite launch vehicles avoid the need to carry oxidizers along with the fuel. This could help drastically reduce the launch load of the launch vehicles and will thus help decrease the launch costs of satellites.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

4. **India's first CRISPR test**

   » Prelims: CRISPR and Cas9

   » Mains: Potential applications of gene editing technology

Context:

- Tata CRISPR test, developed by CSIR-IGIB 'Feluda' (Council of Scientific and Industrial Research-Institute of Genomics and Integrative Biology) has received regulatory approvals from the Drug Controller General of India (DCGI) for commercial roll-out.

Details:

- The test uses indigenously developed CRISPR technology for the detection of the genomic sequence of the SARS-CoV-2 virus.

- The Tata CRISPR test is the world's first diagnostic test to deploy a specially adapted Cas9 protein to successfully detect the virus causing COVID-19.

Significance:

- The test can achieve accuracy levels of traditional RT-PCR tests, with quicker turnaround time, less expensive equipment, and better ease of use.

- It is a futuristic technology that can also be configured for the detection of multiple other pathogens in the future.

- While the RT-PCR test's price is capped at Rs.4500 in private labs, the FELUDA test could cost just about Rs.500.

- It is very easy to use, like the strip pregnancy tests which are available over the counter widely.

CRISPR technology:

- "CRISPR" stands for "Clustered Regularly Interspaced Short Palindromic Repeats".

- CRISPRs are specialized stretches of DNA. The protein Cas9 (or "CRISPR-associated") is an enzyme that acts like a pair of molecular scissors, capable of cutting strands of DNA.

- CRISPR technology was adapted from the natural defence mechanisms of bacteria and archaea (the domain of single-celled microorganisms). These organisms use CRISPR-derived RNA and various Cas proteins, including Cas9, to foil attacks by viruses and other foreign bodies. They do so primarily by chopping up and destroying the DNA of a foreign invader.

- CRISPR technology is a powerful tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.

- There were ways to edit the genomes of some plants and animals before the CRISPR method was unveiled in 2012 but it took years and cost hundreds of thousands of dollars. CRISPR has made it cheap and easy.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

5. **Indian Astronomers discover one of the farthest star galaxies in the universe**

  » Prelims: Astrosat, AUDFs01

  » Mains: Relevance of space studies

Context:

- Discovery of a new galaxy from a team of astronomers from the Inter-University Centre for Astronomy and Astrophysics (IUCAA) Pune.

Details:

- The galaxy, called AUDFs01, is 9.3 billion light-years away from Earth.

- The galaxy, one of the earliest, is located in the Extreme Deep field.

- Even though the observation was made in 2016, it took the scientists almost two years to analyse the data and ascertain that the emission was indeed from a galaxy.

- The scientists were able to discover the galaxy by detecting extreme UV radiation emanating from the galaxy.

- The discovery was made by the Indian space observatory AstroSat.

- It is remarkable that such faint UV radiation has been detected because usually, such low energy photons usually get absorbed on the way or by the earth's atmosphere. Even the Hubble Space Telescope (HST) of NASA could not detect this probably due to noise.

About AstroSat:

- AstroSat is India's first space observatory.

- It is the first dedicated Indian astronomy mission aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously.

- It enables the simultaneous multi-wavelength observations of the astronomical objects.

- The satellite is managed by the spacecraft control centre at Mission Operations Complex (MOX) of ISRO Telemetry, Tracking and Command Network (ISTRAC), Bengaluru.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

6. **Indian Brain Templates**

  » Prelims: Brain templates

  » Mains: India specific studies in Medicine

Context:

- Indian Brain Templates (IBT) and the brain atlas developed by neuroscientists from NIMHANS.

Background:

- The brain size and shape differ across ages, and across regions and ethnicities, and even within a population.

- While some countries have their own scale to measure the brain, India is still dependent on the Caucasian brain template to compare and diagnose the Indian brain scans.

Details:

- The neuroscientists studied over 500 brain scans of Indian patients to develop five sets of templates and a brain atlas for five age groups covering late childhood to late adulthood (six to 60 years).

Significance:

- The templates and atlas will provide more precise reference maps for Indian patients with neurological disorders like strokes, brain tumours, and dementia. The new templates and atlas will allow neurologists, neurosurgeons and psychiatrists in India to map the brain structure of their patients and make an accurate assessment.

- The templates and atlas will also help pool useful information of the human brain and psychological functions, aiding our understanding of psychiatric illnesses like Attention Deficit Hyperactivity Disorder, autism, substance dependence, schizophrenia and mood disorders.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

7. Neutrino Observatory

- » Prelims: Neutrinos and INO
- » Mains: Potential applications

Context:

- Government to set up Neutrino Observatory in the country.

Details:

Neutrinos:

- Neutrinos are subatomic particles created in a wide variety of nuclear processes.

  * Countless neutrinos came into existence fractions of a second after the Big Bang and new neutrinos are being created all the time; in the nuclear cores of stars, in particle accelerators and atomic reactors on Earth, during the explosive collapse of supernovas and when radioactive elements decay.

- They carry no electrical charge.

- Of the four fundamental forces in the universe, neutrinos only interact with two — gravity and the weak force, which is responsible for the radioactive decay of atoms.

  * Neutrinos are extremely difficult to detect because they have very little interaction with matter.

- Having nearly no mass, they zip through the cosmos at almost the speed of light.

India's Neutrino observatory:

- India based Neutrino Observatory (INO) will observe neutrinos produced in the atmosphere of the Earth.

- This observation will tell us more about the properties of neutrino particles, whose main source is the Sun and the Earth's atmosphere.

- The site identified is in Bodi West Hills, in Theni district, Tamil Nadu.

Potential applications:

- Understanding of the neutrino's can help in the better understanding of sun and our universe. Since neutrinos interact very little with the matter around them and travel long distances uninterrupted, these extragalactic neutrinos can act as inviolate messengers who can give us a clue about the origin of the universe and the early stages of the infant universe, soon after the Big Bang.

- Neutrinos can be used to monitor nuclear proliferation.

- Neutrinos can help in the exploration of mineral deposits in the earth's surface.

- They can also be used for communication purposes. They could result in faster global communication.

- Apart from direct future uses of neutrinos, there are technological applications of the detectors that will be used to study them. INO detectors may have applications in medical imaging.

Science and Technology-Achievements of Indians in science and technology; indigenization of technology and developing new technology

8. Fast Breeder Reactor

- » Prelims: Fast breeder reactors
- » Mains: India's three stage nuclear cycle and its significance

Context:

- Prototype Fast Breeder Reactor (PFBR) likely to be commissioned in 2022.

Details:

- The Prototype Fast Breeder Reactor is being constructed by Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI).

- On completion of commissioning, PFBR will be adding 500 MW of electrical power to the national grid.

Fast Breeder Reactors:

- A Fast Breeder Reactor (FBR) is a nuclear reactor that uses fast neutrons to generate more nuclear fuels than they consume while generating power, dramatically enhancing the efficiency of the use of resources.

- Hence, a breeder reactor is a nuclear reactor that generates more fissile material than it consumes.

- It achieves this because its neutron economy is high enough to create more fissile fuel than it uses, by irradiation of a fertile material, such as uranium-238 or thorium-232 that is loaded into the reactor along with fissile fuel.

Awareness in the field of Space

9. Gravitational lensing

- » Prelims: Gravitational lensing phenomenon

- As the light emitted by distant galaxies passes by massive objects in the universe, the gravitational pull from these objects can distort or bend the light. This is called gravitational lensing.

- Gravitational lensing enables observations of the distant universe.

- A recent scientific study has revealed that even smaller concentrations of matter can show gravitational lensing.

10. Copernicus Programme

» Prelims: TCopernicus programme

» Mains: Earth observation satellites

• It is the European Union's Earth Observation Programme

• The Programme is coordinated and managed by the European Commission.

• The main users of Copernicus services are policy makers and public authorities who need the information to develop environmental legislation and policies or to take critical decisions in the event of an emergency, such as a natural disaster or a humanitarian crisis.

Context:

• An international team has developed a powerful tool for a near real-time mapping of flood extent, using openly accessible satellite data and a cloud computing platform.

Details:

• Space-based sensors known as Synthetic Aperture Radar (SAR) have been used widely for monitoring and mapping of flood-water inundation.

• SAR is capable of acquiring data in all-weather condition, making it useful for mapping and monitoring flood inundation areas.

• These sensors operate on the constellation of two SAR satellites belonging to the Copernicus Programme launched by the European Space Agency.

• The data from the satellites was utilised on a cloud-based platform for the rapid processing of big data. The platform has publicly made available numerous satellite image collections and has functions for image processing and analysis.

Significance:

• Once the data is available, machine learning and computer vision techniques is applied to quickly generate the water inundation maps.

• This can help swiftly deploying the rescue team and rescue operations can be started immediately.

• Maps showing where flooding may occur or flood inundation maps can help in better flood risk preparedness

11. India's second Rocket Launching Port

» Prelims: India's space agencies and their locations

Context:

• Setting up of India's second space rocket launching port by ISRO.

Details:

• The Union Minister of State for Space informed the Lok Sabha that the Tamil Nadu State Government has identified over 961 hectares in Thoothukudi district for the country's proposed second rocket launch port.

• At present, rockets are launched from the Indian Space Research Organisation spaceport at Sriharikota, near Chennai.

• The government has decided to set up a second facility in the backdrop of an increase in the number of launches by ISRO for domestic and international customers.

• The proposed site is in Thoothukudi's Kulasekarapattinam town.

Reasons for choosing Kulasekarapattinam:

• A rocket launch pad at Kulasekarapattinam will be close to the equator and hence ideal for putting satellites in polar orbit.

• ISRO has a Liquid Propulsion Systems Centre (LPSC) is at Mahendragiri in Tirunelveli district, Tamil Nadu where it assembles the second and fourth stages/engines for the PSLV. Instead of transporting the second and fourth stages to Sriharikota from Mahendragiri, it will be easier to shift them to the launch pad if it is built in Kulasekarapattinam which is around 100 km away.

12. IN-SPACe

» Prelims: IN-SPACe

» Mains: Significance of private participation in the space sector

Details:

• IN-SPACe or Indian Space Promotion and Authorisation Centre is the institutional and regulatory mechanism established by the Government of India to facilitate greater private participation in the space domain.

• It has been created to enable private players to use Indian space infrastructure.

• It is expected to boost private investment and innovation in the space sector.

• It will support and facilitate the private sector in the following ways:

  * Provide technical support

  * Share cash-intensive facilities

  * Allow establishing temporary facilities in Dept. of Space premises

  * Allow bidding for requirements coming from NSIL (New Space India Ltd)

  * Partner in science and space exploration missions

• Private players can participate in:

  * Building satellites

  * Building launch vehicles

  * Carrying out launches

  * Developing applications & providing space-based services

  * Developing subsystems and systems for space sector activities

13. Cyanobacteria

» Prelims: Cyanobacteria

- It is also known as blue-green algae, is found worldwide especially in calm, nutrient-rich waters

- Some species of cyanobacteria produce toxins that affect animals and humans

  * People may be exposed to cyanobacterial toxins by drinking or bathing in contaminated water

    » Symptoms include skin irritation, stomach cramps, vomiting, nausea, diarrhoea, fever, sore throat, headache

  * Animals, birds, and fish can also be poisoned by high levels of toxin-producing cyanobacteria.

- They are similar to green plants because they can use the energy from sunlight to make their own food through photosynthesis.

- Many species of cyanobacteria can also "fix" atmospheric nitrogen—that is, they can transform the gaseous nitrogen of the air into compounds that can be used by living cells.

- Cyanobacteria flourish in some of the most inhospitable environments known. They can be found

  * in hot springs,

  * in cold lakes underneath 5 m of ice pack,

  * On the lower surfaces of many rocks in deserts.

Context:

- Toxins in water, produced by cyanobacteria (cyanobacterial neurotoxins) killed more than 300 elephants in Botswana.

14. Convalescent plasma therapy

» Prelims: Convalescent plasma therapy

» Mains: Advantages and challenges of Convalescent plasma therapy

Context:

- A multi-institutional study says that not all plasma from those who have recovered from COVID-19 in India may contain enough protective antibodies.

What is convalescent plasma therapy?

- Plasma therapy is the administration of filtered serum from the blood of those who had recovered from the infection to those who are battling it.

- It is among the permitted off-label interventions recommended by the Indian Council of Medical Research (ICMR) in patients with moderate disease but whose oxygen saturation levels are not improving in spite of the use of steroids.

Details:

- There are at least three kinds of antibodies produced in an infection: IgG, IgA, IgB but the neutralising effect was most visible only in the case of the IgGs.

- The study underscored that only those IgG(Immunoglobulin G) antibodies that bind to the receptor binding region of the coronavirus spike protein, which attaches itself to the body's healthy cells and infiltrates, had a neutralising response.

- Antibodies that bind to other parts of the virus did not succeed in provoking such a response.

- Thus, doctors, when assessing plasma therapy, must evaluate the quality of the plasma via an assay, or a chemical test, that specifically evaluates the levels of RBD (receptor-binding domain)-specific IgG titres and not just crude IgG levels.

15. RAISE 2020

Context:

- RAISE 2020 – Mega Virtual Summit on Artificial Intelligence to be held in October 2020.

About RAISE 2020:

- RAISE 2020- 'Responsible AI for Social Empowerment 2020,' is being conducted by the Ministry of Electronics and Information Technology (MeitY) and NITI Aayog.

- It will be a global meeting of minds to exchange ideas and chart a course for using AI for social transformation, inclusion and empowerment in areas like healthcare, agriculture, education and smart mobility, among other sectors.

- Representatives from the global AI industry will hold discussions at the summit.

- Chosen start-ups will also showcase their AI solutions in the summit.

Background:

- India is home to the world's third-largest start-up ecosystem.

- Industry analysts predict that AI could add up to $957 billion to India's economy by 2035.

SECURITY AND DEFENCE

1. Defence manufacturing in India

» Prelims: Government schemes aimed at indigenization of weapon systems

» Mains: Significance of domestic defence manufacturing

Context:

- Information given by the Minister of State for Defence in the Rajya Sabha regarding defence manufacturing in India.

Details:

- The following initiatives have been taken by the government to promote 'Make in India' in the defence sector.

   * Defence Ministry has prepared a 'Negative List' of 101 items for which there would be an embargo on the import beyond the timeline indicated against them. This is expected to help the domestic industry fill the gaps in the sector for the Indian armed forces.

   * A new category of capital procurement 'Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)}' has been introduced in Defence Procurement Procedure (DPP)-2016 to promote indigenous design and development of defence equipment.

   * The 'Make' Procedure of capital procurement has been simplified. There is a provision for funding of 90% of the development cost by the Government to the Indian industry under Make-I category. In addition, there are specific reservations for MSMEs under the 'Make' procedure.

   * Separate procedure for 'Make-II' category (industry-funded) has been notified under DPP to encourage indigenous development and manufacture of defence equipment.

   * An innovation ecosystem for Defence titled Innovations for Defence Excellence (iDEX) has been launched in April 2018.

   * In 2019, the government had decided to set up two defence industrial corridors in Tamil Nadu and Uttar Pradesh respectively to serve as an engine of economic development and growth of defence industrial base in the country.

   * An indigenization portal namely SRIJAN DEFENCE was launched in August 2020.

   * Defence EXIM portal has been created for enhancing the ease of doing business and to streamline Export authorisation procedures.

   * The 'Strategic Partnership (SP)' Model was notified in 2017 which envisages the establishment of long-term strategic partnerships with Indian entities through a transparent and competitive process, wherein they would tie-up with global Original Equipment Manufacturers (OEMs) to seek technology transfers to set up domestic manufacturing infrastructure and supply chains.

   * India signed an agreement with Russia in September 2019 by which the after-sales support and operational availability of Russian origin equipment currently in service in the Indian Armed Forces would be enhanced by organizing the production of spares and components in the territory of India by Indian Industry by way of creation of Joint Ventures/Partnership with Russian Original Equipment Manufacturers (OEMs) under the framework of the "Make in India" initiative.

   * Under the revised FDI policy of 2016, FDI in defence is allowed under automatic route up to 49% and beyond 49% through Government route.

   * Defence Products list requiring Industrial Licences has been rationalised and the manufacture of most of the parts or components does not require Industrial License.

2. Defence exports

» Prelims: Government policies aimed at increasing defence exports

» Mains: Potential of defence exports from India and its significance

Context:

- The Chief of Defence Staff has stated that in the past three years, India witnessed a staggering 700% growth in defence exports.

Steps taken to ramp up defence exports:

- A series of measures have been taken since 2014 to boost exports, including simplified defence industrial licensing, relaxation of export control and grant of No Objection Certificates (NOC).

- Specific incentives were introduced under the foreign trade policy.

   * The Ministry of External Affairs has facilitated a Line of Credit for foreign countries to import defence products.

* Where feasible, defence exports can also be financed through the Exim Bank.

- Defence attaches in Indian missions are empowered to promote defence exports, with a view to strengthen defence diplomacy.

- With the aim to achieve a manufacturing turnover of $25 bn or Rs. 1,75,000 crore, including exports of $5 bn in aerospace and defence goods and services by 2025, the Defence Ministry issued a draft 'Defence Production & Export Promotion Policy 2020'.

Note:

- India is the third largest spender on defence around the world.

Internal security-Cyber Security

3. National Cyber Security strategy

» Prelims: National Cyber Security Strategy 2020

» Mains: Growing significance and challenges in the domain of cyber security

Context:

- The National Security Advisor has said that the Union government is set to come up with National Cyber Security Strategy 2020 for ensuring a safe, secured, trusted and resilient cyber space.

Why does India need a National cyber security plan?

- Cyber intrusions have increased in scope and sophistication targeting sensitive personal and business data, and critical information infrastructure.

- Cyber attacks have a huge impact on Indian economy and national security.

- The present cyber threat landscape poses significant challenges due to rapid technological developments such as Cloud Computing, Artificial Intelligence, internet of Things, 5G, etc.

- Ransomware-related cyber-attacks on the Indian enterprises saw a significant rise in the first quarter of 2020-21, and the increase has been enabled by operators offering ransomware as a service (RaaS) to cyber attackers.

Challenges:

- Digitisation in India and across the globe, is expected to dramatically rise in a post COVID-19 scenario.

- Increased digitisation will increase the threat posed by cyber crimes.

- Challenges include data protection/privacy, law enforcement in evolving cyberspace, access to data stored overseas.

- Securing international cooperation on cybercrime & cyber terrorism could be a challenge.

- Misuse of social media platforms and their regulation is yet another challenge.

Steps taken by the government:

- The government recently banned several Chinese apps to protect the personal data of the Indian users.

- To keep the data of Indians to remain within the boundaries of the country, the government has envisioned the "National Cyber Security Strategy 2020".

Weapon/Weapon systems in news

4. ABHYAS

» Prelims: Abhyas-High speed expendable aerial target

Context:

- Successful Flight Test of Abhyas.

Details:

- Abhyas is a High-speed Expendable Aerial Target (HEAT) developed by the Aeronautical Development Establishment (ADE) of the DRDO.

- It offers a realistic threat scenario for the practice of weapon systems. The vehicle can be used as a target for the evaluation of various missile systems.

- Abhyas is designed for autonomous flying with the help of an autopilot.

5. Laser Guided Anti-Tank Guided Missile (ATGM)

» Prelims: Laser-guided anti tank guided missile (ATGM)

Context:

- Laser Guided ATGM Successfully Test-fired.

Details:

- The DRDO successfully test-fired the indigenously-developed Laser-Guided Anti-Tank Guided Missile (ATGM) from the Main Battle Tank (MBT) Arjun at KK Ranges in Ahmednagar in Maharashtra.

- The missile uses a warhead that has the capability to neutralise armoured vehicles which have reactive armours, which are specially-designed protective armours used in military vehicles.

- Laser-guided ATGMs lock and track the targets with the help of laser designation to ensure precision-hit accuracy.

- The missile employs a tandem HEAT warhead to defeat Explosive Reactive Armour (ERA) protected armoured vehicles.

- It has been developed with multiple-platform launch capability.

6. Pinaka Weapon System

» Prelims: Pinaka-artillery rocket system

Details:

- Pinaka is a free flight artillery rocket system having a range of 37.5 km.

- Pinaka rockets are launched from a multi-barrel rocket launcher which has the capability to launch a salvo of

12 rockets in 44 seconds.

- The weapon system is designed and developed by Pune based DRDO lab, Armament Research & Development Establishment (ARDE).

- Pinaka rockets and its ground systems are currently under bulk production at Ordnance Factories, BEML, BEL, Tata Power and L&T Defence.

Security related agencies/organizations/groups

7. Assam Rifles

- » Prelims: Assam rifles-Central paramilitary force

- Assam Rifles is a Central Para Military Force along with two other forces namely, Special Frontier Force and Coast Guard.

- However, only the Assam Rifles functions under the administrative control of the Union Home Ministry.

- The administrative control of the Assam Rifles is with the Ministry of Home Affairs while the operational control of Assam Rifles rests with the Ministry of Defence.

    * Despite the Assam Rifles personnel operating alongside the Army on similar duties, they have to bear inequity in the pay scale as compared to army personnel due to its categorisation as a 'Police' force.

- It is India's oldest paramilitary force.

- It fulfils the dual role of maintaining internal security in the North-eastern region and guarding the Indo-Myanmar Border.

Context:

- Keeping in mind the interests of servicemen and ex-servicemen of the Assam Rifles, the Delhi High Court has asked the Centre to take a call on the issue of bringing Assam Rifles out of the dual control of the Home Ministry (MHA) and the Defence Ministry (MoD).

Military exercises

8. Indra exercise

- » Prelims: Bilateral military exercise-Indra (India-Russia)

Context:

- India and Russia are scheduled to hold the bilateral naval exercise, Indra 2020, in the Andaman Sea.

Details:

- Amid high operational alert by the Indian Navy in the Indian Ocean Region (IOR) due to the ongoing stand-off with China in Ladakh, Indra2020, will be held in the Andaman Sea, close to the strategic Strait of Malacca.

- It comes just after India withdrew from the Kavkaz-2020 multinational exercise in Russia.

Naval Exercise Indra:

- It is a bi-annual bilateral exercise which began in 2003.

- India and Russia are the participating nations.

Note:

- In July 2020, frontline warships of the Indian Navy conducted a Passage Exercise (PASSEX) with the U.S. aircraft carrier USS Nimitz strike group in the same area near the Andaman and Nicobar (A&N) islands as it was transiting the Indian Ocean.

- USS Nimitz was returning from the South China Sea through the Malacca Strait where it undertook freedom of navigation operations.

9. PASSEX

- » Prelims: PASSEX between India and Australia

Context:

- Passage Exercise (PASSEX) between the Royal Australian Navy and the Indian Navy in East Indian Ocean Region.

PASSEX:

- PASSEXs are regularly conducted by the Indian Navy with units of friendly foreign navies, whilst visiting each other's ports or during a rendezvous at sea.

- A passage exercise or PASSEX is normally conducted when there is an opportunity in contrast to pre-planned maritime drills.

- The current exercise being conducted in the East Indian Ocean Region reflects the growing strength of Indo-Australian bilateral relations as comprehensive strategic partners, particularly in defence cooperation in the maritime domain.

- The exercise is aimed at enhancing interoperability, improving understanding and imbibing best practices from each other.

10. JIMEX 20

Context:

- » Prelims: Bilateral maritime exercise-JIMEX 2020

Context:

- The 4th edition of India – Japan Maritime bilateral exercise JIMEX was held in the North Arabian Sea

Details:

- JIMEX is conducted biennially between the Indian Navy and the Japanese Maritime Self-Defense Force (JMSDF).

- JIMEX series of exercises commenced in January 2012 with a special focus on maritime security cooperation.

- The last edition of JIMEX was conducted in October 2018 off Visakhapatnam, India.

ENVIRONMENT AND ECOLOGY

1. **Environmental conservation-issues and solutions**

   » Prelims: Environment Performance Index; Parameters and India's ranking

   » Mains: Issues related to environmental conservation in India and suggestions for improvement.

   Context:

   • The mainstreaming of environment issues and environmental conservation in recent times.

   Background:

   Environment Performance Index:

   • India secured 168th rank out of 180 countries in the 12th edition of the biennial Environment Performance Index (EPI Index 2020). India's rank was 177 in 2018.

      * The EPI Index 2020 measures the environmental performance of 180 countries by considering 32 indicators of environmental performance across 11 issue categories covering environmental health and ecosystem vitality.

      * The 2020 EPI features new metrics that gauge waste management, carbon dioxide emissions from land cover change, and emissions of fluorinated gases- all important drivers of climate change.

   • Ranked 168 out of 180 countries; all South Asian countries, except Afghanistan, were ahead of India in the ranking. India scored below the regional average score on all five key parameters on environmental health, including air quality, sanitation and drinking water, heavy metals and waste management.

   Concerns:

   • India faces a number of serious environmental health risks, like poor air quality and contaminated water.

      * The great winter smog and pollution in North India is a glaring example of this challenge. Indian cities often figure in the world's most polluted cities. The high water pollution level is only exacerbating the water scarcity problem in India.

   • There have been concerns over the alleged preoccupation with "ease of doing business" leading to lax environmental regulations which have proved to be detrimental to the environment.

      * The draft EIA has invited criticism from many experts and environmentalists.

   • There are also problems of environmental laws which seem to be only focussed on large sources of pollution and tend to neglect the smaller but numerically larger number of pollution sources.

      * While existing laws focus on point sources like industries they tend to neglect the agriculture-related pollution such as stubble burning or public usage pollution relating to vehicular and household sources.

      * Forest clearances for mining and industries and the population pressure on forests in the form of conversion of forest to cultivated land are both major drivers of deforestation. However, while diversion of forests for mining and industry is regulated by law and challenged in courts, the other major drivers are not even discussed.

   • The lack of co-ordination between the Centre and States has had a detrimental impact. 'Forests' was a State subject until transferred to the Concurrent list by the 42nd Amendment Act. However, de facto, the powers of the State governments continue and they have been reluctant to work together to find solutions to environmental challenges.

      * The stubble burning in North India exemplifies the anomalies of federalism, where the imperatives of the Centre and States differ.

   Way forward:

   • India needs to re-double national sustainability efforts on all fronts. The country needs to focus on a wide spectrum of sustainability issues, with a high-priority to critical issues such as air and water quality, biodiversity and climate change. India's decarbonisation agenda needs to be further accelerated.

   • There is the need to balance between the environment and development needs of the country.

   • The critical need of the hour is to harmonise the working of the central, State, and local governments.

   • There is the need for better monitoring and compliance with environmental laws.

   • The environment is a national issue which requires the unwavering participation of all governments, and all citizens.

2. **Evaluating India's forest policy**

   » Prelims: Forest policy of India.

   » Mains: Lacunae in current forest policy and the need for reforms.

   Context:

   • Based on the findings of the research paper titled the 'Impact of forest policies on timber production in India: a review' published in 2016 in the Natural Resources Forum, a United Nations Sustainable Development Journal, a senior official in the India Forest Service has

called for a review of the current forest policy in India.

Background:

Current forest policy in India:

- Following a 1996 Supreme Court order which regulated logging in government forests, the forest policies in India have focused on conservation. The policies prioritize conservation over production.

Concerns with present approach:

Fall in domestic production:

- The domestic demand for timber has been growing due to increasing population and per capita GDP.

- However, decades of policies focused on conservation instead of production has resulted in domestic timber production witnessing a slump.

Reliance on imports:

- Given the shortfall in domestic production, the timber imports have witnessed a rise.

   * The dependency on imports could backfire as the exporting countries have been shifting to a conservation-based approach. This could lead to a situation where India does not have sufficient domestic timber production ability nor would be in a position to import from other countries due to shortage of supplies.

   * The unimpeded timber imports have affected domestic pricing patterns. The low prices have dis-incentivized domestic production.

Details:

- The research paper argues in favour of a more balanced approach to forest policy making in India. It calls for an approach which takes care of both the conservation imperatives as well as the human needs for timber.

- There is a need for a forest policy characterised by equal importance given to restoration, conservation and production.

   * The conservation policy must focus on maintaining ecological balance and improving biodiversity through protected area management.

   * The restoration policy must target reclamation, rehabilitation and regeneration of degraded landscapes and wastelands.

   * The Production policy must focus on increasing forest productivity to meet human timber needs.

- The research paper calls for an amendment in the Indian forest policy to boost domestic production.

Steps to be taken:

- Production forestry should focus on sustainable increase in forest productivity from Trees Outside Forests (TOFs) and Recorded Forest Areas (RFAs).

Focus on TOFs:

- Considering the immense potential of timber production from Trees Outside Forests (TOFs) — grown outside government Recorded Forest Areas (RFAs), there is the need to incentivize and promote timber production in TOFs to meet the domestic timber demand.

   * The India State of Forest Report (2011) estimates timber production from government forests to be 3.17 million m^3 and potential timber production from TOFs to be 42.77 million m^3.

- For TOFs, a synchronised nationwide policy needs to be developed. This should also incentivize private sector participation.

Sustainable forestry in RFAs:

- For the RFAs there could be the demarcation of 10% of the forests for plantations in areas which would have the least impact on the ecology.

- There should be sustainable forest management in these areas based on certification to dis-incentivize logging in protected areas.

Framing of supportive policies:

- The import-export policy of the country should be reviewed to rectify its pricing impact in the market. The policy should consider restricting imports in a bid to help increase the prices in the market and make it economically viable to grow trees domestically.

- The lack of reliable data relating to growing stock, consumption and production of timber have constrained forecast of supply and demand projections. There is the need to ensure data availability on these to promote the timber industry in India.

Significance:

Mitigation efforts:

- Increasing wood production will result incarbon sequestration, and help in mitigating effects of climate change.

   * India remains highly vulnerable to the impact of climate change. India ranks 5th on the global climate vulnerability index.

- This could also help India meets its commitments made under the Paris climate deal.

   * Under the Paris Agreement, India had committed to creating a cumulative carbon sink of 2.5-3 billion tonnes of carbon dioxide equivalent by 2030.

Impact on rural economy:

- Policy initiatives aimed at increasing timber production from TOFs can help revive the agricultural sector and the rural economy by generating newer employment opportunities

- Agro forestry apart from helping the farmers supplement their incomes also helps increase the concentration of various nutrients or enhances nutrient cycling and thus helps improve overall soil quality.

Additional information:

- The Indian Institute of Forest Management (IIFM) is located in Bhopal.

Conservation efforts

3. **Wetlands being identified in Rajasthan to protect biodiversity**

   » Prelims: Ramsar sites in Rajasthan

   » Mains: Significance of wetlands and threats being faced by them.

Context:

- Efforts are being made in Rajasthan to protect the wetlands which have played an important role in the storage of sediment and nutrients.

- While six wetlands are already identified in the State, 52 more have been earmarked for time-bound development.

Steps taken:

- Such wetlands are being identified to stop encroachments on them and enable the local authorities to maintain them.

- The wetlands would be strengthened for increasing vegetation of aquatic plants and protecting biodiversity.

- No waste would be allowed to be dumped at the wetlands and effective steps would be taken for water conservation.

- Strict action would be taken against those running submersible pump sets for illegal salt mining in the world-famous Sambhar Lake.

  * A large number of migratory birds died in 2019 last year in the Sambhar Lake.

- The State Government's Directorate of Environment and Climate Change will function as the secretariat of the State Wetland Authority.

- Environment committees would take up the works for the conservation of wetlands and water bodies.

- Fresh and saline lakes supporting unique ecosystems in the State would be protected with the strict implementation of the Wetlands (Conservation and Management) Rules, 2019.

Wetlands (Conservation and Management) Rules, 2019

- As per the Wetlands Rules, the Wetlands Authority within a state is the nodal authority for all wetland-specific authorities in a state/UT.

- The Wetlands Authorities are responsible for ensuring the enforcement of the Wetlands Rules and other relevant acts, rules and regulations.

- Prohibited activities under the rules:

  * Setting up any industry and expansion of existing industries on wetlands.

  * Dumping solid waste or discharge of untreated wastes and effluents.

  * Encroachment or conversion of wetlands for non-wetland uses.

Importance of Wetlands:

- Wetland systems help check floods, prevent coastal erosion and mitigate the effects of natural disasters like cyclones and tidal waves. They store water for long periods.

- Their capacity during heavy rainfall to retain excess floodwater that would otherwise cause flooding results in maintaining a constant flow regime downstream, preserving water quality and increasing biological productivity for both aquatic life as well as human communities of the region.

- Flooded wetlands are very effective in storing rainwater and are the primary source for recharging groundwater aquifers.

- Wetlands provide shelter to wading birds, waterfowl and mammals.

Conservation efforts

4. **Inequitable climate proposal**

   » Prelims: Paris climate deal and India's commitments

   » Mains: Principle of CBDR and its relevance for developing countries like India.

Context:

- The UN Secretary General António Guterres, adviced India to give up coal immediately and reduce emissions by 45% by 2030, on par with the developed countries. Similar advice has also been issued to China too.

Criticism of the move:

Overlooking developmental needs of India:

- The UN Secretary General's advice to India amounts to asking for its virtual de-industrialisation, stagnation and abandon the population to a permanent low-development trap.

Against the principle of CBDR:

- This amounts to promoting the agenda of carbon neutrality by 2050 as national level goals applicable to all. The move amounts to pressurising the developing countries to bear an equal burden of climate mitigation. This goes against the widely accepted Common But Differentiated Responsibilities (CBDR) principles in climate action.

- The U.S. has rarely been called out for its withdrawal from the Paris Agreement, or the EU nations for their long-term reliance on gas and oil.

India's climate performance:

- India's renewable energy programme is ambitious while its energy efficiency programme is delivering, especially in the domestic consumption sector.

- India is one of the few countries with at least 2° Celsius warming compliant climate action.

- It is also a part of a much smaller list of those countries currently on track to fulfilling their Paris Agreement commitments.

- Despite the accelerated economic growth of recent decades India's annual emissions, at 0.5 tonnes per capita, are well below the global average of 1.3 tonnes. It is also below those of China, the United States and the European Union (EU), the three leading emitters in absolute terms, whose per capita emissions are higher than this average.

- In terms of cumulative emissions, India's contribution by 2017 was only 4% for a population of 1.3 billion, whereas the European Union, with a population of only 448 million, was responsible for 20%.

  * Cumulative emissions are what really count in determining the extent of temperature increase.

- By any yardstick, India is at least on a par, if not above, its weight in responsibility and economic capacity in climate action.

Why should India reject the proposal?

- India, with the lowest per capita income among the G-20, is undergoing the worst economic contraction.

- Renewables alongside coal will generate, directly and indirectly, far more employment than renewables alone.

- The UNFCCC itself has reported that between 1990 and 2017, the developed nations (excluding Russia and east Europe) have reduced their annual emissions by only 1.3%.

- The Global North has hidden the reality of continued dependence on oil and natural gas, both equally fossil fuels. Also, there are no timelines for their phase out.

- Also, they seem to be diverting attention by talks of "carbon neutrality" by 2050, and the passage of resolutions declaring a climate emergency.

- The foundational principles of the United Nations Framework Convention on Climate Change (UNFCCC) distinguish sharply between the responsibilities and commitments of developed countries vis-à-vis those of developing countries.

  * The UN Secretary General's climate diplomacy signals a deliberate setting aside of the foundational principle.

A First World strategy:

- Large sections of First World environmentalist, while unable to gather the domestic political support required for climate action, have turned to pressure the developing countries to bear the brunt of climate mitigation.

- Their strategies include:

  * Demonising of coal mining and coal-based power generation

  * Promoting claims that immediate climate mitigation would miraculously lower domestic inequalities and ensure climate adaptation.

  * Promoting Third World natural resources as active sites of mitigation and not adaptation.

  * Promoting theories of "de-growth" or the neglect of industrial and agricultural productivity for the pursuit of climate change mitigation.

- Increasing appeals are made to multilateral or First World financial and development institutions to force this agenda on to developing countries.

- A section of concerned youth in the developing countries, fearful of their futures, but unsensitised to global and international inequalities, have also helped promote the undifferentiated rhetoric of a climate emergency for which all are held equally responsible.

Consequences for India:

- Currently, manufacturing growth powered by fossil fuel-based energy is itself a necessity, both technological and economic, for the transition to renewables.

- Unlike the developed nations, India cannot substitute coal substantially by oil and gas. Despite some wind potential, a huge part of this growth needs to come from solar.

- None of this will really drive industry, particularly manufacturing, since renewables at best can meet residential consumption and some part of the demand from the service sector.

- Whether providing 70% to 80% of all generation capacity is possible through renewables depends critically on technology development, including improvements in the efficiency of conversion of energy from its source into electricity, in the management of the corresponding electricity grids, as well as advance in storage technologies.

  * Since the Copenhagen Accord signalled the end of legally binding commitments to emissions reduction by the developed countries, technology development in climate change mitigation technologies has registered a significant fall.

  * Annual filing of patents shows a decline.

- Lacking production capacity in renewable energy technologies and their large-scale operation, deployment on this scale will expose India to increasing and severe dependence on external sources and supply chains.

Conclusion:

- India must unanimously reject the UN Secretary General's call and reiterate its long-standing commitment to an equitable response to the challenge of global warming.

Conservation efforts

5. The benefits of a carbon tax

» Prelims: Global climate risks index, Carbon tax.

» Mains: Significance and concerns associated with the principle of Carbon tax

Context:

- China, the largest carbon dioxide emitter, has announced that it would balance out its carbon emissions with measures to offset them before 2060.

- With this development, the spotlight is on the U.S. and India, ranking second and third in emissions.

- Also, India ranks fifth in the Global Climate Risk Index 2020.

Climate change concerns:

- In the recent past, there have been several indications of the existential danger from global warming.

  * E.g.: record heat waves in Delhi, floods in southwest China, and catastrophic forest fires in California.

- According to a United Nations report, between 1998 and 2017, disaster-hit countries reported $2.9 trillion in direct economic losses, with 77% resulting from climate change.

  * The U.S. faced the highest losses, followed by China, Japan, and India.

- While air pollution levels have decreased worldwide after the COVID-19 outbreak, with the resumption of polluting activities, emissions in India are set to rise sharply unless strong action is taken.

  * Carbon dioxide, a major culprit in global warming, was 414 parts per million in August 2020 because of past accumulation.

  * As one half comes from the three top carbon emitters, they need to drive de-carbonisation.

Efforts by India:

- It is in the country's interest to take stronger action before 2030, leading to no net carbon increase by 2050.

- India has committed to:

  * 40% of electricity capacity being from non-fossil fuels by 2030.

  * Lowering the ratio of emissions to GDP by one-third from 2005 levels.

Way forward:

- A market-oriented approach to tax and trade carbon domestically and to induce similar action by others through international trade and diplomacy offers a way forward.

- The government can introduce incentives for electric vehicles.

- An environmental tax in the 2020-21 budget can prove to be beneficial.

- Another way to cut effluents while earning revenues is to price the carbon content of domestic production and imports (energy and transport).

  * Big economies like India should also use their global monopsony, or the power of a large buyer in international trade, to impose a carbon tariff.

  * With the IMF endorsing the European Union's plan to impose carbon levies on imports, India can be among the first movers in the developing world in taxing and switching from carbon-intensive fuels.

- Focusing on trade is important because reducing the domestic carbon content of production alone would not avert the harm if imports remain carbon-intensive.

  * Therefore, leading emitters should use their monopsony, diplomacy and financial capabilities to build a climate coalition with partners.

- Pricing carbon through emission trading, i.e., setting a maximum amount of allowable effluents from industries, and permitting those with low emissions to sell their extra space is also a suitable measure.

  * Pilot projects on carbon trading in China have shown success.

  * There is valuable experience in the EU and some American states.

- Carbon tax can be levied on economic activities — for example, on the use of fossil fuels like coal, as done in Canada and Sweden.

  * A carbon tax is a fee imposed on the burning of carbon-based fuels.

  * This is estimated to reduce greenhouse gas pollution by between 80 and 90 million tonnes by 2022.

Conclusion:

- India is among the nations that are hardest hit by climate impacts. While there is growing public support for climate action, the solutions must be in the country's interests.

Conservation efforts

6. Maharashtra to declare 600 acres of Aarey as reserve forest

» Prelims: Aarey reserve forest and other urban conservation areas in India, section 4 of India's forest act.

» Mains: Urban Conservation efforts; associated concerns.

Context:

- Maharashtra Chief Minister has announced the reservation of 600 acres of Aarey land near Sanjay Gandhi National Park (SGNP) as forest.

Details:

- It has been claimed as the first instance of an extensive forest protected within the limits of a metropolis anywhere in the world.

- It was decided to apply Section 4 of the Indian Forest Act (IFA) to almost 600 acres of the land.

  * It is within the power of a State Government to issue a preliminary notification under Section 4 of the Act declaring that it has been decided to constitute such land, as specified in a Schedule with details of its location, area and boundary description, into a Reserved Forest.

  * Such a notification also appoints an officer of the State Government as Forest Settlement Officer.

- This implies that it will be declared a reserve forest after a hearing for suggestion and objections.

  * Reserved Forest is an area mass of land duly notified under the provisions of the Indian Forest Act or the State Forest Acts having a full degree of protection.

  * In Reserved Forests, all activities are prohibited unless permitted.

  * Reserved Forest is notified under Section 20 of the Indian Forest Act, 1927 or under the reservation provisions of the forest acts of the State Governments.

- The Maharashtra state government has assured that it will ensure that all the rights of tribal communities which reside within it would stand protected.

Conservation efforts

7. Kaziranga set to be expanded

  » Prelims: Kaziranga National Park; location and important fauna and flora

  » Mains: The need for increasing area of protected areas in India.

Context:

- The Assam government has approved the addition of new area to the Kaziranga National Park.

Details:

- The additional area would make the Kaziranga National Park and Tiger Reserve (KNPTR) grow to 1085.53 sq km, while the core area of the KNPTR is around 430 sq km.

  * Kaziranga National Park is one of India's oldest reserve areas. It is located in the KarbiAnglong district of Assam in northeast India.Kaziranga National Park is a UNESCO world heritage site of India and known for Great Indian one horned Rhinoceros.

  * Kaziranga is a vast expanse of tall elephant grass, marshland, and dense tropical moist broadleaf forests, criss-crossed by four major rivers, including the Brahmaputra.

  * Spread across the floodplains of the Brahmaputra River, its forests, wetlands and grasslands host a wide range of flora and fauna like the tigers, elephants, swamp deer, wild water buffalo and the world's largest population of Indian one-horned rhinoceroses.

  * Kaziranga is also recognized as an Important Bird Area by BirdLife International for conservation of avifaunal species.

Significance:

- The additions would include habitat corridors that would help provide connectivity to Orang and Nameri National Parks across river Brahmaputra.

- It also provides connectivity to the hills of Karbi Anglong to the south of the park, where the rhino, tiger, deer and other animals take refuge during the floods.

- The additions include encroachment-evicted areas and suitable wildlife habitat on river islands (sandbars) that are vulnerable to encroachment.

- It is a move to consolidate the wildlife areas anticipating better wildlife conservation and reduction in human-wildlife negative interactions in the future.

Conservation efforts

8. Climate Smart Cities Assessment Framework

  » Prelims: Climate Smart Cities Assessment Framework

  » Mains: significance of climate change inclusive policy framing

Context:

- The Climate Smart Cities Assessment Framework (CSCAF) 2.0 was launched.

About the CSCAF:

- The objective of CSCAF is to provide a clear roadmap for cities towards combating Climate Change while planning and implementing their actions, including investments.

- In the backdrop of increasing events of cyclones, floods, droughts, etc. in the last decade, the CSCAF initiative intends to inculcate a climate-sensitive approach to urban planning and development in India.

- The Ministry of Housing and Urban Affairs has initiated the Framework to incentivize a holistic, climate responsive development in the 100 Smart Cities under the Smart Cities Mission. This is a first-of-its-kind public assessment framework on climate-relevant parameters.

- The first edition of CSCAF was launched in 2019 and 2020 is the second edition.

- The idea behind this initiative is to anchor climate actions within activities catering to urban development.

- In the first edition, 100 Smart cities were encouraged to explore the ideas of low carbon development, rapid deployment of energy-efficient technologies, and investment in climate-resilient infrastructure at the local level. The objective was to enable cities to assess their preparedness to tackle climate change and help them with a roadmap to achieve sustainable climate actions on the ground.

- The current edition's framework has 28 indicators across five categories, namely,

    * Energy and Green Buildings

    * Urban Planning, Green Cover and Biodiversity

    * Mobility and Air Quality

    * Water Management

    * Waste Management

Conservation efforts

9. G20 Environment Ministers Meet

» Prelims: Land degradation neutrality

» Mains: Land degradation and coral bleaching issues and necessary conservation measures

Context:

- Global Initiative to reduce Land Degradation and the Coral Reef program was launched at the recently held G20 Environment Ministers Meet.

Background:

Land Degradation:

- Land degradation is the deterioration or loss of the productive capacity of the soil.

- It is a global challenge that affects everyone through food insecurity, higher food prices, climate change, environmental hazards, and the loss of biodiversity and ecosystem services.

    * When land is degraded, soil carbon and nitrous oxide are released into the atmosphere, making land degradation one of the most important contributors to climate change.

    * Scientists opine that 24 billion tons of fertile soils are being lost per year, largely due to unsustainable agriculture practices. This would lead to food insecurity and higher food prices.

- Land degradation is one of the world's most pressing environmental problems and it will worsen without rapid remedial action. Globally, about 25 percent of the total land area has been degraded.

- If the current trend of land degradation continues, 95 percent of the Earth's land areas could become degraded by 2050.

Threats to coral reefs:

- Coral reefs are in decline around the world. Threats to coral reefs come from the following factors.

    * Physical damage or destruction from coastal development, dredging, quarrying, destructive fishing practices and gear, boat anchors and groundings.

    * Pollution that originates on land and finds its way into coastal waters. Excessive nutrient flow into the oceans leads to the growth of algae that blocks sunlight and consumes oxygen corals need for respiration. This often results in an imbalance affecting the entire ecosystem. Excess nutrients can also support growth of microorganisms, like bacteria and fungi, that can be pathogenic to corals.

    * Toxic substances, including metals, organic chemicals and pesticides found in industrial discharges, sunscreens, urban and agricultural runoff, mining activities, and runoff from landfills

    * Increased ocean temperatures and changing ocean chemistry are the greatest global threats to coral reef ecosystems. These threats are caused by warmer atmospheric temperatures and increasing levels of carbon dioxide in seawater.

Details:

- The Global Initiative on Reducing Land Degradation aims to strengthen the implementation of existing frameworks to prevent, halt, and reverse land degradation within G20 member states and globally, taking into account possible implications on the achievement of other SDGs and adhering to the principle of doing no harm.

- The Global Coral Reef R&D Accelerator Platform is an innovative action-oriented initiative aimed at creating a global Research and Development (R&D) program to advance research, innovation and capacity building in all facets of coral reef conservation, restoration, and adaptation, and strengthen ongoing efforts and commitments to enhance coral reefs conservation.

Conservation efforts

10. Blue Flag Label

» Prelims: Beaches recommended for blue flag certification; BEAMS India.

» Mains: Sustainable development along India's coasts

Context:

- Eight beaches of India have been recommended for the coveted "Blue Flag" International eco-label.

Details:

- The eight beaches are – Shivrajpur in Gujarat, Ghoghla in Daman and Diu, Kasarkod and Padubidri beaches in Karnataka, Kappad in Kerala, Rushikonda in Andhra Pradesh, Golden Beach in Odisha and Radhanagar beach in Andaman and Nicobar.

India's Eco-Label BEAMS:

- India has also launched its own eco-label BEAMS.

- "BEAMS" (Beach Environment & Aesthetics Management Services) has been launched by the Society of Integrated Coastal Management (SICOM, MoEFCC) under its Integrated Coastal Zone Management Project (ICZM).

- It is one of the several other projects of ICZM that the government is undertaking for the sustainable development of coastal regions striving for globally recognized and the coveted eco-label Blue Flag.

- The objective of BEAMS is to abate pollution in coastal waters, promote sustainable development of beach facilities, protect & conserve coastal ecosystems & natural resources, and seriously challenge local authorities & stakeholders to strive and maintain high standards of cleanliness, hygiene & safety for beachgoers in accordance with coastal environment & regulations.

- This program promotes beach recreation in absolute harmony with nature.

Integrated Coastal Zone Management Project (ICZM):

- The Environment Ministry launched the ICZM activities in India with a view to protect and conserve the coastal and marine ecosystems and the environment through holistic coastal management.

- The project promotes the sustainable development & management of coastal zones through its own wing SICOM.

- The concept of ICZM was introduced in 1992 during the Earth Summit at Rio de Janeiro and most of the coastal countries in the world have been adopting ICZM principles for managing their coastal zones.

Environmental Pollution and degradation

11. Fees must for forest use, Mines Ministry told

- » Prelims: Net Present Value, CAMPA act.

- » Mains: Sustainable development and governmental schemes and measures in this direction.

Context:

- The Environment Ministry has rejected a plea from the Ministry of Mines for exemption from forest penalty.

Details:

- The SC mandates that Net Present Value (NPV) must be paid by those who use forest land for non-forestry purposes.

- The Ministry of Mines has requested an expert advisory committee of the Environment Ministry to exempt it from the Supreme Court-mandated fees that prospectors pay when they dig exploratory boreholes in forests.

  - * For prospecting on a site, large boreholes are dug to determine the existence, location and quantity of metal.

- In August 2020, officials from the Ministry of Mines requested that 'prospecting and exploring' in forests be exempted from 'the purview of the Forest Conservation Act.'

  - * It was highlighted that all areas of exploration were not converted into mining and only about 1% cases are converted to mining.

  - * It was argued that the payment of NPV was regarded as an avoidable expenditure.

  - * It said that the payment of NPV at a rate of 2% or 5% was one of the major challenges which lead to delay in the exploration activities.

- The Forest Advisory Committee, the Environment Ministry-constituted expert committee decides on whether forests can be diverted for projects.

  - * It said that it was not possible to do away with NPV but recommended that the Environment Ministry "may consider charging NPV on borehole basis instead of the present practice of charging 2 or 5% NPV of the total forest area in the lease area."

Net Present Value (NPV):

- NPV is a monetary approximation of the value that is lost when a piece of forest land has been razed.

- NPV is decided on the basis of the services and ecological value. There are prescribed formulae for calculating this amount.

  - * It depends on the location and nature of the forest and the type of industrial enterprise that will replace a particular parcel of forest.

Note:

- In 2018, the Coal Ministry, the Mines Ministry and the Ministry of Petroleum and Natural Gas had sought to be exempted from forest clearances for digging exploratory boreholes.

- The Forest Advisory Committee refused but agreed to simplify the procedure.

Environmental Pollution and degradation

12. Ozone

- » Prelims: Ground level ozone formation mechanism

- » Mains: Factors contributing to ground level ozone formation and remedial measures

Context:

- Low ozone levels recorded over the Brahmaputra River Valley.

Details:

- Researchers have found that the concentration of near-surface ozone in the Brahmaputra River Valley in the North-East corner of India is low compared to the other urban locations in India.

- Scientists from Aryabhatta Research Institute of Observational Sciences (ARIES), Nainital, evaluated the near-surface ozone in the Brahmaputra River

Valley (BRV) and found a relatively low concentration of Ozone over Guwahati compared to the other urban locations in India.

Ground-level Ozone:

- Tropospheric, or ground-level ozone, is created by chemical reactions between oxides of nitrogen (NOx) and Volatile Organic Compounds (VOC).

- It usually increases when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight, impacting human health.

Difference between ground level ozone and stratospheric ozone

- The ozone found near the surface of the earth is considered bad because of its many adverse effects on human, animal and plant health.

- The stratospheric ozone layer is considered good since it absorbs the harmful UV rays from the Sun.

Species in news-Fauna

13. Sloth bears

» Prelims: Sloth bear habitat and range, IUCN status and Nandankanan Zoological park

» Mains: Biodiversity conservation efforts in India

Context:

- Authorities at the Nandankanan Zoological Park (NZP) are concerned over the back-to-back deaths of two sloth bears at the park.

Sloth Bear:

- Sloth bear (Melursusursinus) is a nocturnal insectivorous species of bears found in India.

- It feeds on fruits, ants and termites.

- It is listed as Vulnerable on the IUCN Red List.

- The sloth bear is listed in Schedule I of the Indian Wildlife Protection Act, 1972.

- International trade of the sloth bear is prohibited as it is listed in Appendix I of the Convention on International Trade in Endangered Species (CITES).

Nandankanan zoo:

- It is located in Bhubaneswar, Odisha.

- It lies in adjacent to Chandaka-Dampara Wildlife Sanctuary.

- It is the only zoological park in India to become an institutional member of World Association of Zoos and Aquarium (WAZA).

- The Nandankanan zoo hosts India's only pangolin conservation breeding centre.

- It is the first zoo in the World to breed White tiger and Melanistic tiger.

Species in news-Fauna

14. World Rhino Day

» Prelims: Rhino habitat and range, IUCN status

» Mains: Conservation efforts aimed at India's one horned rhino.

Context:

- 22nd September is celebrated as World Rhino Day.

  * The day aims to emphasize the importance of the conservation of the Rhinoceros species and its habitats.

Threat status of rhinos:

- Three of the five rhinoceros species living in Africa and Asia have been declared 'critically endangered'.

- These species are – Javan Rhinos, Sumatran Rhinos and Black Rhinos.

- The White Rhinos have been declared 'near threatened' while one-horned rhinos are said to be vulnerable.

Indian Rhinoceros:

- The Indian rhinoceros (Rhinoceros unicornis), also called the Indian rhino, greater one-horned rhinoceros or great Indian rhinoceros is a rhinoceros species native to the Indian subcontinent.

- IUCN Red List – Vulnerable

- Indian rhinos once ranged throughout the entire stretch of the Indo-Gangetic Plain, but excessive hunting and agricultural development reduced its range drastically to 11 sites in northern India and southern Nepal.

- Today, approximately 75% of the entire population of Greater One-horned Rhinoceros now occurs in India in the three States viz, Assam, Uttar Pradesh and West Bengal.

Efforts to save the Indian rhino

- Efforts are currently ongoing in the country to protect the existing rhino population and also to increase the distribution of the species through the Indian Rhino Vision (IRV) 2020 programme.

- Success was achieved in restocking the rhino population in the World Heritage Site Manas National Park recently through wild to wild translocations.

- The one-horned Rhinoceros is also one of the 21 species identified for the Recovery programme for critically endangered species by the Ministry.

- The Ministry has also launched the "National Conservation Strategy for the Indian One-Horned Rhinoceros" with the goal to repopulate the Rhinoceros population in those areas also which used to hold the Rhinoceros earlier by augmenting the existing conservation efforts and strengthening them through scientific and administrative measures.

Species in news-Fauna

15. Weeding out lantana restores grasslands in Rajasthan

» Prelims: Lantana Camara

» Mains: Invasive species and threats posed by them to ecological balance

Context:

• "Mission Lantana" has helped in ecological restoration of grasslands and saved biodiversity of Sajjangarh wildlife sanctuary.

Issue with Lantana Camara:

• Lantana Camara is a thicket forming shrub.

• It has covered vast tracts of land in the sanctuary. This is stopping the natural light and nutrition for flora and fauna. Its expansion has stopped the natural growth of grass and other shrubs.

• Lantana was first introduced in 1807. It had spread to wildlife reserves, river banks and the Project Tiger areas where it had obliterated native grass and reduced biodiversity.

• In some regions, the plant has made inroads into pastures and shrunk the cattle grazing areas, affecting the livelihood of villagers.

• The toxic substance in its foliage and ripe berries affect the animals.

• With the herbivores not getting sufficient forage, the prey base for carnivorous animals was declining, leading to ecological disturbances in the food chain.

Reasons why L. camara has been successful as an invasive species:

• Less prone to being eaten by animals due to toxicity

• Tolerance of a wide range of environmental conditions

Mission Lantana:

• It is a special drive to uproot the invasive lantana bushes in the famous Sajjangarh wildlife sanctuary.

• The drive involved collective efforts and 'shramdaan' (voluntary physical work) by the forest officials, police personnel, wildlife lovers, representatives of voluntary groups and local villagers.

Sajjangarh wildlife sanctuary:

• Sajjangarh wildlife sanctuary is located in Rajasthan's Udaipur district in the southern Aravalli Hills.

• The park houses an artificial lake named Jiyan Sagar popularly known as the "Tiger Lake".

• It was declared a protected area in 1987.

Miscellaneous

16. Animal welfare

» Prelims: Prevention of Cruelty to Animals (PCA) Act, 1960 provisions

» Mains: Concerns associated with PCA act

Issue:

• Over the last one year, India has seen multiple instances of animals being subjected to abuse, acid attacks, being thrown off rooftops, and being burnt alive.

• A major factor that enables such violence is an inept legal framework in the country to prevent cruelty to animals.

Concerns:

• There are several shortcomings in the Prevention of Cruelty to Animals Act.

Paltry fine:

• The Prevention of Cruelty to Animals (PCA) Act, 1960 punishes the most serious forms of animal violence with a meagre fine of ₹50. This is one of the many issues plaguing the PCA Act.

• Several petitions, social media campaigns and amendment bills seeking stricter punishment for animal abuse have all gone in vain.

Classification of offences:

• Section 11 lists a series of offences, which vary from abandoning an animal to kicking it, mutilating it or killing it, and prescribes the same punishment for all these offences.

* Severe offences are treated on par with less severe ones.

• At present, a majority of the offences under the Act are non-cognisable, which means the police cannot investigate the offence or arrest the accused without the permission of a Magistrate.

• This facilitates police inaction and ensures that most culprits of animal abuse go scot-free.

Exceptions diluting the protection to animals:

• Though Section 11 criminalises several forms of animal cruelty, sub-section (3) carves out exceptions for animal husbandry procedures such as dehorning, castration, nose-roping, and branding.

• These procedures cause tremendous physical and psychological pain to animals.

• Moreover, the law does not provide any guidelines for these procedures. This allows individuals to resort to cruel methods.

Ambiguity in definition:

• The PCA Act was enacted to "prevent the infliction of unnecessary pain or suffering on animals". However, this phrase is not defined anywhere in the Act.

• This is crucial because what constitutes unnecessary is entirely a matter of subjective assessment.

• In the absence of a clear statutory definition, crucial questions of animal welfare are left to the subjective moral compass of judges.

Way forward:

- Given that the aim of the law is to achieve a certain standard of objectivity in questions of animal welfare, it is essential that the expression "unnecessary pain or suffering" be defined in the Act.

- There is an urgent need to reconsider the exceptions in favour of animal husbandry practices as there are viable alternatives that would prevent animals from undergoing such trauma.

  * A petition by PETA (People for the Ethical Treatment of Animals) India suggests mandating the use of anesthetics prior to castration, and the replacement of cruel practices such as nose-roping with face halters and branding with radio frequency identification.

  * As opposed to dehorning cattle, it recommended that farmers breed hornless cattle.

- An amendment is required to grade the offences according to their severity and specify punishments accordingly.

- More severe offences must be made cognisable and non-bailable.

17. Invisible killer threatens country's sandalwood forests

  » Prelims: Sandalwood spike disease

  » Mains: Major diseases affecting important commercial crops

Context:

- India's sandalwood trees are facing a serious threat with the return of the destructive Sandalwood Spike Disease (SSD) with the disease having resurfaced in the aromatic tree's natural habitats in Karnataka and Kerala.

Sandalwood Spike Disease (SSD):

- The disease is caused by phytoplasma (bacterial parasites of plant tissues) which are transmitted by insect vectors.

- The disease was first reported in Kodagu in 1899.

- More than a million sandalwood trees were removed in the Kodagu and Mysuru region between 1903 and 1916, prompting the Maharaja of Mysuru to announce a reward in 1907 for anyone finding a remedy.

- The devastating impact in natural habitats resulted in sandalwood being classified as vulnerable by the International Union for Conservation of Nature in 1998.

- So far, no cure has been found for SSD but to cut down and remove the infected tree to prevent the spread of the disease.

Concerns:

- SSD has been one of the major causes of the decline in sandalwood production in the country for over a century.

- Each year, between 1 and 5% of sandalwood trees are lost due to the disease.

- Scientists have raised concerns that it could wipe out the entire natural population if measures are not taken to prevent its spread.

- Also, they fear that any delay in arresting the trend may result in the disease spreading to cultivated sandalwood trees.

- According to a study, the present rapid spread of the infection is largely due to restrictions on green felling in forests, which has allowed vectors to spread the disease to healthy trees.

18. Polar Opposites

- The extent of sea ice in the Arctic region has decreased to record lows in July 2020.

- However, the extent of sea ice recorded in the Antarctic has been higher than average levels.

- This indicates the non-uniformity in the impact of the global warming phenomenon and climate change.

19. Steep decline

- A report brought out by the World Wildlife Fund notes that on average, wildlife populations dropped by 68% between 1970 and 2016.

- Latin America and the Caribbean have been the worst hit regions with a decline of about 94%.

- The report points to food production as the biggest driver of this wildlife loss.

Threats to flora and fauna

20. Australia Whale Strandings

  » Prelims: SONAR, Map work related to Australia

Context

- About 380 whales have died in what is suspected to be Australia's largest stranding on record

- The whales largely washed up on sand spits in the waters around an area called Macquarie Heads.

Australia whale strandings

Hundreds of whales have died after getting stranded

Launceston

Strahan

TASMANIA

Macquarie Harbour

Hobart

30 km

Pilot whale

One of the largest members of the dolphin family

Long finned:
Globicephala melas

Short finned:
Globicephala macrorhynchus

Named pilot whales because it was thought that each pod followed a "pilot" in the group

Weight: up to 2,300 kg

Length: up to 7.6 m

Diet: mainly arrow squid, common octopus, mackerel

► Commonly seen in tight, sociable pods of 20 - 100 individuals

► Estimated Antarctic population around 200,000

Single Stranding

- Live (or recently-dead) whales or dolphins often come onto the shore because they are old, sick, injured and/ or disorientated.

Multiple Stranding

- Live or recently dead animals of the same species coming ashore in a group typically belong to species that have a "lead animal"

What makes it a 'hotspot'?

- Researchers say it's difficult to pinpoint any single cause.

- It could be the nature of the coastline, misadventure, disorientation caused by complex or shallow waterways or rough seas, prey coming close to shore or a flight response from a perceived threat.

Sonar navigation

Pilot whales are one of the most common species for mass strandings, and like other toothed whales, they use echolocation to find their way
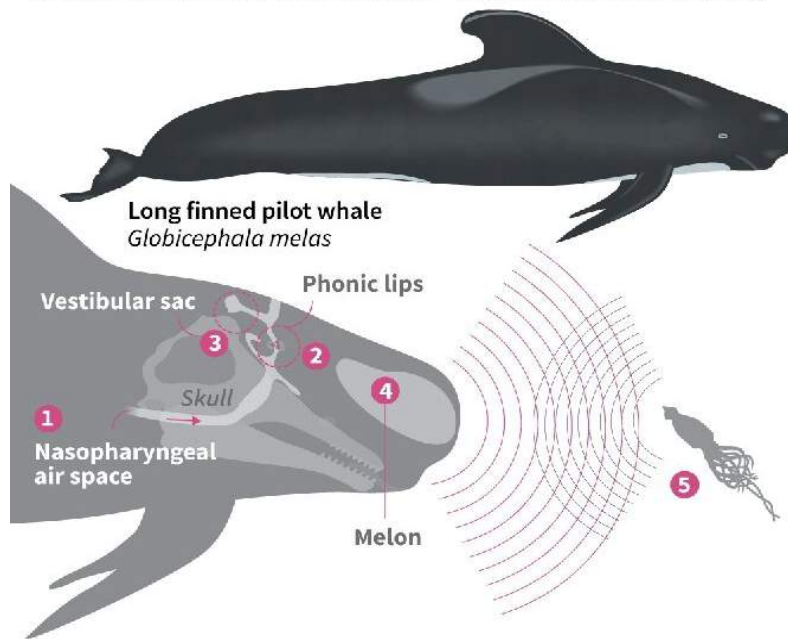
Long finned pilot whale
Globicephala melas

Vestibular sac

Phonic lips

3

2

Skull

4

1

Nasopharyngeal air space

Melon

5

1 Whale pushes compressed air through the narrow passage

2 Like vocal chords, the *phonic lips* shape the sound of the sonar clicks

3 The clicked air ends up in the cavity known as a *vestibular sac*

4 Mass of wax and fat called the *melon* helps to modulate calls and clicks

5 The whale "sees" by reading the sound waves that bounce back

What goes wrong in beachings?

Still a matter of debate, several theories are prominent

Including

- **Sickness**
  Diseased individuals have been known to beach themselves. In social pods, groups could be following

- **Predators or prey**
  A pod could be forced into danger by predators, or else by following prey

- **Extreme weather**
  Bad conditions could scramble sonar, even bubbles caused by raindrops could muddy the data

- **Noise pollution**
  Oceans are filled with human-made noises, including shipping and high-frequency anti-submarine sonars

- **Long gently sloping beaches**
  Very shallow inclines of some beaches could make it difficult for whales to "see" the danger as their sonar fails to detect any obstructions

HEALTH ISSUES

1. Reducing India's cancer burden

» Prelims: ICMR, Government efforts

» Mains: Reducing cancer burden in India

Background:

- As per the data provided by the Indian Council of Medical Research (ICMR)-National Centre for Disease Informatics and Research (NCDIR) National Cancer Registry Programme Report of August 2020 there are an estimated 13.9 lakh cancer cases in India.

- India has witnessed a steady rise in cancer cases over the years. India's cancer burden has increased by 2.6 times between 1990 to 2016.

Details:

Government efforts:

- India is committed to achieving a one-third reduction in cancer-related deaths by 2030 as part of the Sustainable Development Goals.

- Given that personal hygiene account as a distant driver of cancer, the Swachh Bharat Abhiyan could play a significant role in India's efforts in reducing the impact of Cancer in India.

- The FSSAI's (Food Safety and Standards Authority of India) new labelling and display regulations will encourage inter-sectoral and multi-sectoral action against cancer causing chemicals in food ietms.

- Initiatives such as the National Tobacco Control Programme will help address the major risk factor associated with Cancer in Indian men.

- The Government of India has been implementing National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) since 2010 up to District level under the National Health Mission.

- The government initiatives like Ayushman Bharat, Swasthya Bharat, PoshanAbhiyaan and Pradhan Mantri Bhartiya Janaushadhi Pariyojana, the National Health Policy focussed on preventive healthcare would play a critical role in India's efforts against cancer.

Way forward:

- Given the socioeconomic impact of cancer,reducing cancer is a prerequisite for addressing social and economic inequity, stimulating economic growth and accelerating sustainable development.

- However apart from investing in cancer treatment there is also the need to focus on three key aspects: risk reduction, early detection and programmatic and policy solutions.

Risk reduction:

- As per the available data nearly 50%-60% of cancer cases can be avoided by tackling the known risk factors effectively. Promoting certain behaviour can help reduce such potential risk factors.

  * Tobacco use is a major avoidable risk factor for the development of cancer in 27% of cancer cases. Other important risk factors include alcohol use, inappropriate diet, low physical activity, obesity, and pollution.

  * In men, the most common cancers are of the lung, oral cavity, stomach and oesophagus.

Increasing awareness:

- There is the need for a multisectoral approach that brings together government, private practitioners and civil society to increase health literacy regarding cancer.

- In women, breast, cervix, ovary and gall bladder cancers are the most common forms of cancer. Timely and quality information on the symptoms can help in identifying the cancer in its early stages and this will reduce the mortality rates due to cancer substantially.

Strengthening health infrastructure:

- The existing health systems need to be strengthened so that there is greater access to screening, early detection, and timely, affordable treatment.

Focussing on cancer research:

- Domestic cancer research is of crucial importance to guide our efforts on cancer prevention and control.

- Making cancer a notifiable disease could help drive Cancer research further by providing greater access to accurate, relevant data that can drive policy decisions.

  * A notifiable disease is any disease that is required by law to be reported to government authorities. The collation of information allows the authorities to monitor the disease

Data driven policies:

- There is the need to focus on programmatic and policy solutions for large-scale impact.

- Programmatic and policy-level solutions need to be driven by data. The information collected through the National Cancer Registry Programme can be helpful in this direction.

Issues relating to development and management of social sector/services relating to health

2. 40% children not fully vaccinated: NSO report

» Prelims: Indradanush mission.

» Mains: Challenges with respect to universal vaccination

Context:

- 'Health in India' report has been published by the National Statistical Organisation (NSO).

- The report is based on the 75th round of the National Sample Survey (July 2017-June 2018) on household social consumption related to health.

Key findings:

- Across the country, only 59.2% of children under five years are fully immunised.

  * This contradicts the Centre's Health Management Information System portal data, which claimed that full immunisation coverage for 2017-18 stood at 86.7%.

- It points out that although almost all children in India are vaccinated against tuberculosis, and receive their birth dose of polio vaccine, two out of five children do not complete their immunisation programme.

  * Most of these children remain unprotected against measles, and partially protected against a range of other diseases.

- About 97% of children across the country received at least one vaccination — mostly BCG and/or the first dose of OPV at birth. This remains steady across income groups and geographies.

- However, only 67% of children are protected against measles.

Note:

- Full immunisation means that a child receives eight vaccine doses in the first year of life.

- Among States, Manipur (75%), Andhra Pradesh (73.6%) and Mizoram (73.4%) recorded the highest rates of full immunisation. At the other end of the spectrum lies Nagaland, where only 12% of children received all vaccinations, followed by Puducherry (34%) and Tripura (39.6%).

Issues relating to development and management of social sector/services relating to health

3. World Bank seeks 'universal eligibility'

» Prelims: World bank initiatives

» Mains: Role of international organizations in COVID-19 response

Context:

- The $1 billion World Bank loan comes with a condition of "universal eligibility" in procurements.

Background:

- In April 2020 the World Bank's Board of Executive Directors had approved a fast-track $1 billion India COVID-19 Emergency Response and Health Systems Preparedness Project to help India prevent, detect, and respond to the COVID-19 pandemic and strengthen its public health preparedness.

- It is the largest ever health sector support from the Bank to India.

India COVID-19 Emergency Response and Health System Strengthening Project:

- It is a joint initiative of the Government of India and the World Bank.

- The World Bank has the $1 billion loan disbursed by the International Bank for Reconstruction and Development (IBRD).

- The Railway Ministry is one of the implementing agencies of the project.

What does the condition of "universal eligibility" mean?

- This would mean that all preferential market access policies, including Public Procurement (Preference to Make in India) Order, Micro Small & Medium Enterprises (MSME) Policy, certain benefits to start-ups, shall not be applicable on purchases made while implementing the national project.

- The contractors must agree to comply with the relevant provisions of the World Bank's anti-corruption guidelines and prohibited policies of the Asian Infrastructure Investment Bank (AIIB).

- Apart from making way for universal eligibility in the supply system, the World Bank would have the right to review the procurement documents, inspect/audit all accounts, records and other files relating to the project.

  * Compliance to these conditions has been made mandatory for the funding.

Details:

- The first component of the project deals with emergency response to the pandemic and would be implemented until April 2022.

- The Railways will spend ₹399 crore across its network to strengthen health infrastructure in the combat against COVID-19 in this financial year.

  * Railways would have to make procurements in accordance with the World Bank guidelines, the Railway Board said and added that the funds allocated should not be exceeded.

  * These funds would be utilised for establishing isolation wards by purchasing ventilators, oxygen cylinders, laboratory machines, Personal Protection Equipment (PPE) kits, face shields, hospital furniture, medical equipment, gloves, goggles and other consumables.

Issues relating to development and management of social sector/services relating to health

4. Health worker safety deserves a second look

> » Mains: Issues with respect to health worker safety

World Patient Safety Day:

- The World Health Organization observes World Patient Safety Day on September 17th every year.

- The day is celebrated to highlight the issue of harm in health-care settings.

- The theme for 2020 was 'Health Worker Safety: A Priority for Patient Safety' with a call to action to 'Speak up for health worker safety'

Patient safety

- It is the reduction of unnecessary harm associated with health care to an acceptable minimum.

Harm in health-care settings:

- The world over, one in 10 patients experiences or is subject to harm in health-care settings.

- Studies in India have shown that:

  * More than 2/3rd of injections are given in an unsafe manner.

  * Over 2/3rd of injections in primary care are unnecessary in the first place.

- Much harm done to patients is because of unsafe health-care practice and unsafe health-care communication.

  * Unsafe health-care practice refers to unsafe or unnecessary procedures, wrong medications, medications given in a wrong dosage, etc.

  * Unsafe health-care communication refers to mistakes made in health-care settings due to miscommunication between health professionals.

Why is health worker safety important for patient safety?

- The quality of both practice and communication is dependent on the safety and well-being of health workers.

- For example, health workers who have been on duty for more than 24 hours at a stretch, have a higher risk of making mistakes.

- During the current pandemic situation, health workers' physical and mental health are being affected due to long work hours under increasingly difficult circumstances.

- The mental health of health workers is linked to workplace culture.

COVID-19 and reporting cases:

- At instances of patient harm, whether health workers report them or not depend on the organisation's culture and leadership.

- Reporting helps prevent similar future occurrences.

- Power differences can further prevent reporting and cooperative organisational learning and may increase chances of verbal, physical, emotional and sexual abuse.

  * In India, many health-care organisations observe strict hierarchies between specialties, between designations.

Overcrowding:

- India simply does not have enough health facilities to cater to all its population, even without a pandemic.

- Additionally, there is a lack of adequate social care, such as care homes, community health services and community-based rehabilitative and palliative services.

- Lack of health facilities and overcrowding unduly increase the burden on health-care facilities.

Numerous persons find healing and restoration in health care, but some are harmed as well. In crises such as COVID-19, quality of care can be compromised further.

Way ahead:

- Organisational learning is more important than individual learning because instances of patient harm are often an end result of a chain of organisational failures.

- Moreover, good systems can mitigate the effects of individual mistakes.

- Creating sustainability would involve taking a systems approach to make sure all parts of the system, both of health care and of supportive social care are well functioning.

- There is a need for a systems approach with the involvement of all stakeholders.

  * Patients themselves need to be aware of patient safety and be empowered to demand safe health care, resist unnecessary medications and procedures.

  * Systems of reporting, monitoring and organisational learning need to be created.

Policymakers must prioritise staffing, co-designing functional and safe workplaces, and ethics in health care.

There is a need for the promotion of a culture of health worker safety and well-being to ensure patient safety.

Diseases in news

5. Scrub typhus

- Scrub typhus, also known as bush typhus, is a disease caused by a bacteria called Orientiatsutsugamushi. Scrub typhus is spread to people through bites of infected larval mites.

  * The mites are found in grasslands, forests, bush

areas, wood piles, gardens, and beaches.

- Scrub Typhus can also be transmitted through unscreened blood transfusions and unhygienic needles. It does not spread from person to person.

- The most common symptoms of scrub typhus include fever, headache, body aches, and sometimes rash.

Context:

- The outbreak of scrub typhus has claimed the lives of five people in Nagaland's Noklak district and more than 600 others have tested positive for the disease.

6. Brucellosis Control Programme

Context:

- Technology License Agreement on "Brucella abortus S19Δ per vaccine" between ICAR- Indian Veterinary Research Institute (IVRI) and Hester Biosciences Limited.

What is Brucellosis?

- Brucellosis is one of the most important zoonotic diseases worldwide which is also endemic in India causing huge economic losses to the dairy industry due to infertility, abortion, birth of weak offsprings and reduced productivity.

- It is responsible for abortions in cattle, buffalo, sheep and goats leading to infertility.

- Prevention of abortions will add new calves to the animal population leading to enhanced milk production.

- Brucellosis is an economically important zoonotic disease. Economic losses due to this disease is almost Rs.350 million per annum.

- It is a highly contagious disease.

Brucellosis Control Programme

- This programme was formerly known as the National Control Programme on Brucellosis.

- It was introduced during the 10th Plan and renamed during the 12th Plan.

- It includes the vaccination of female calves aged between 6 – 8 months in all Indian states.

- It also includes the vaccination of all un-vaccinated adult female bovines.

- The programme also covers biannual village screening of pooled milk samples, mass screening and castration of infected bulls.

- The programme is being implemented on a 60:40 sharing basis between Centre and States except in North Eastern and the Himalayan States where the funding is on 90:10 Centre: State sharing basis, whereas 100% central share is being provided for

Union Territories.

- The new vaccine strain developed at ICAR-IVRI, a modified strain of B. abortus S19, overcomes several drawbacks of the currently-used vaccine B. abortus S19, such as residual virulence to human and animals, not suitable for vaccination in adult animals, causing abortion when used in pregnant animals and also interfering with sero-diagnosis of clinical infection.

7. Study links rice intake to diabetes

Context:

- According to a paper published after studying individuals from 21 countries over 9.5 years, higher consumption of white rice regularly is associated with an increased risk of diabetes.

Details:

- The highest risk, according to the paper, was seen in South Asia, which had the highest consumption of white rice at 630 grams a day.

- The study acknowledges the role of reduced physical activity as a contributing factor, as also increase in obesity rates, while it does adjust for various other diabetogenic factors, including family history.

- Trying to establish the link, the paper advances a couple of theories.

  * It is known that excess rice consumption leads to postprandial glucose spikes that, in turn, lead to compensatory hyperinsulinemia [excess secretion of insulin] to maintain euglycemia [normal blood sugar levels]. Over time, the b-cells become exhausted, leading to b-cell failure and diabetes, the paper states.

Institutes/organizations in news

8. Ind-CEPI mission (India Centric Epidemic Preparedness) for Rapid Vaccine Development and Supporting Indian Vaccine Development

Context:

- The Department of Biotechnology (DBT) launches Programme for "Strengthening Clinical Trial Research Capacity in Neighbouring Countries".

Details:

- The DBT, through the mission, aims to strengthen the development of vaccines and associated competencies/technologies for the diseases of epidemic potential in India.

- One of the key focus areas of the mission is to support capacity building and regional networking with LMICs (Low and Middle-Income Countries).

- The DBT has initiated the first phase of the "Training program to strengthen clinical trial research capacity

for neighbouring countries" in partnership with the Ministry of External Affairs, Government of India.

- The objective of these trainings would be to support researchers and investigator teams for enhancing and strengthening their clinical trial capabilities for conducting clinical trials in compliance with ICH-GCP (International Conference on Harmonisation – Good clinical practice).

- Through this training program and knowledge sharing efforts, GOI is fulfilling its commitment of building various technical capacities in its neighbouring countries.

- Efforts to network with South Asia, ASEAN and African regions for this purpose would be aided through Ind-CEPI.

CEPI

- The Coalition for Epidemic Preparedness Innovations (CEPI) is a global partnership launched in 2017 to develop vaccines to stop future epidemics.

- CEPI finances and coordinates the development of vaccines against infectious diseases.

- It is headquartered in Oslo, Norway.

9. Indian Council of Medical Research (ICMR)

Context:

- Union Minister of Health and Family Welfare unveiled a timeline depicting ICMR's historical achievements.

About ICMR:

- The ICMR is the apex body in India for the formulation, coordination and promotion of biomedical research and is one of the oldest medical research bodies in the world.

- The ICMR was established in 1911 as the Indian Research Fund Association (IRFA) by Sir Harcourt Butler. It was set up with the specific objective of sponsoring and coordinating medical research in the country.

- In 1949, the IRFA is renamed as the Indian Council of Medical Research (ICMR) with an expanded scope of functions.

- The ICMR is neither a statutory body nor a regulatory body.

- The ICMR performs research on and control and management of communicable diseases, fertility, maternal and child health, nutritional disorders, health care delivery (including the development of alternative strategies), environmental and occupational health problems; major non-communicable diseases such as cancer, cardiovascular diseases, blindness, diabetes and other metabolic and haematological disorders; mental health; and drugs (including traditional remedies).

- The Council also promotes biomedical research through intramural and extramural research.

- Much of the intramural research is carried out by the council's Permanent Research Institute and Centres.

- Extramural research is carried out by the establishment of centres for advanced research, task forces, and through open-ended research.

- The ICMR is funded by the Government of India through the Ministry of Health & Family Welfare.

SOCIAL ISSUES

1. **The great greying of China**

   » Prelims: Total fertility rate, replacement fertility rate

   » Mains: Total factor productivity principle based population planning

   • Note- Though the article is based on facts and figures for China, an understanding of China's experience in handling its population problem will provide insights for India's population policy, given that India too hosts a very large population.

   Background:

   • China's one child policy (OCP) was conceived by Deng Xiaoping in 1979.

   • The one-child policy was part of a birth planning program designed to control the size of the rapidly growing population of the People's Republic of China. It set a limit on the number of children for a couple.

   Details:

   • China's one child policy (OCP) has had a detrimental impact on its population structure and the economy.

   Impact on absolute population

   • Total fertility rate in China has fallen to 1.6 births per woman in 2017, much below the population replacement rate of 2.1. This would imply that the absolute population would decrease over time.

     * Total fertility rate (TFR) refers to total number of children born or likely to be born to a woman in her life time if she were subject to the prevailing rate of age-specific fertility in the population.

     * In India the average birth rate stands at 2.24.

   Impact on child sex ratio

   • Fewer children are being born and of them, fewer were females given the preference for boys in Chinese society. This would have an adverse impact on the sex ratio.

     * There are concerns that skewed sex ratios lead to more violence against women, as well as result in human-trafficking.

   Impact on child bearing attitude of Chinese

   • Despite the raising of the limit to two children in 2016, the number of newborns has not improved in China and has slipped to the pre-2016 level.

   • The one child policy has had a negative impact on China's child-bearing attitudes as many young couples do not want to have two babies for economic and lifestyle reasons.

   Increasing share of aged people

   • The proportion of China's population aged above 65 years would increase from 10% in 2010 to 32.6% in 2050 (corresponding figures for India are 5.6% and 14.2%).

   • China will need huge expenditures on health, social welfare and pensions.

   Economic impact

   • As against the popular perception that the population decline will help create a richer society in China, It is very much possible that the country's aging population will incrementally impede its economic growth

     * The available labour force (aged between 20 and 64) will reduce from about a billion in 2017 to 787 million by 2050. The fall in the number of people in the labour force will lead to a decline in manufacturing, exports, and also mean lower revenues for government.

     * The higher dependency ratio will reduce the savings rate and subsequent investment rates in the economy.

   • This could impede Chinese attempts to increase their annual per capita income to the levels of rich countries like the United States, Singapore, Japan and others.

     * In the last 70 years, only 15 countries have managed to climb from middle to high income status, e.g. Singapore, South Korea, Taiwan.

   Way forward:

   Focus on total factor productivity

   • Developed countries too have faced the problem of an aging population. Example: Japan and Germany.

   • Developed countries have reduced the impact of declining population by raising the Total Factor Productivity (TFP) growth rate.

     * Total factor productivity (TFP) is a measure of productivity calculated by dividing economy-wide total production by the weighted average of inputs i.e. labour and capital. It represents growth in real output which is in excess of the growth in inputs such as labour and capital.

   • The major efforts needed in this direction are:

     * Shifting human resources from primary economic activities like agriculture to the more productive sectors like manufacturing and service sectors.

     * Reforms in the various sectors of the economy to make them more efficient.

     * Improvement in governance which could help ensure ease of doing business

* Improvement in education and skill levels of the human resources.

* Increasing use of technology in the development process

Social issues-Related to specially-abled persons

2. Barriers for the disabled

» Prelims: UNESCO's Global Action on Disability (GLAD) Network

» Mains: Issues faced by the disabled people

Background:

- According to the World Health Organization, nearly 15% of the world's population suffers from some form of disability. This amounts to a billion people worldwide being impacted by disability and the stigma surrounding it.

- About 80% of the estimated one billion persons with disabilities worldwide live in developing countries.

Concerns:

For the disabled people:

- Continuous discrimination and lack of understanding of the special needs of the disabled and their rights often leads to denial of equal access to education, employment, healthcare and other opportunities to such people.

  * Despite the considerable improvement in enrolment rates of children with disabilities in schools, there is very little capacity available currently to ensure inclusive education which can meet the special and diverse needs of the disabled children. The COVID-19 pandemic has only worsened the situation for the students with disabilities as they have found it extremely difficult to access remote learning through digital platforms.

  * The International Labour Organization, reports that 73.6% of persons living with disabilities in India are outside the labour force. This would have a detrimental impact on the financial and economic needs of such people.

  * Women and girls with disabilities are at a higher risk of experiencing sexual and other forms of gender-based violence.

  * People with mental disabilities, women with disabilities and those in rural areas have to face higher discrimination.

- In such a scenario, it becomes very difficult for the disabled people to attain their full potential.

For the society:

- Given that the disabled account for a substantial proportion of the total population, the lack of opportunities for their meaningful involvement in the development process has led to a situation where an enormous reservoir of untapped resources are being excluded from the workforce.

- An unequal society is not sustainable as the pandemic has shown us that we are only as healthy as our neighbour. The inequality being faced by the disabled will only hold back India from realizing its full potential and ensure a sustainable society.

Way forward:

- The society needs to reaffirm faith in the dignity and worth of humans, and in the equal rights of all.

- All persons with disabilities must be able to enjoy the full range of human rights. This would require the need to make inclusion the norm in all future endeavours.

- The marginalised PWD community must be brought back into the developmental mainstream with appropriate governmental measures.

Additional Information:

- UNESCO's Global Action on Disability (GLAD) Network aims to raise awareness about the need to put in place strategies to mitigate the impact of school closures on learners with disabilities.

Social issues-Related to specially-abled persons

3. Rights of Persons with Disabilities Act, 2016

» Prelims: Salient provisions of RPWD act, 2016.

Background:

- The Rights of Persons with Disabilities Act, 2016 was passed by the Indian Parliament to fulfill its obligation to the United Nations Convention on the Rights of Persons with Disabilities, which India ratified in 2007.

Salient provisions:

- The RPWD Act, 2016, has increased the list of scheduled disabilities to 21 conditions.

- The act provides that the appropriate Government shall ensure that the PWD enjoy the right to equality, life with dignity, and respect for his or her own integrity equally with others.

- It is stipulated in the section 3 that no PWD shall be discriminated on the ground of disability, unless it is shown that the impugned act or omission is a proportionate means of achieving a legitimate aim and no person shall be deprived of his personal liberty only on the ground of disability.

- The Government is to take steps to utilize the capacity of the PWD by providing appropriate environment. The Act provides for the access to inclusive education, vocational training, and self-employment of disabled persons.

4. Empowering the youth

» Prelims: National Youth policy, 2014

» Mains: Measures needed for empowering the youth in India

Gross under-investment:

- The 2014 National Youth Policy (NYP) defines youth as persons between 15 and 29 years. According to this definition, the youth accounted for 27.5% of the population then.

- According to the NYP report, the Central government spends about Rs. 2,710 per youth on education, skill development, employment, healthcare and food subsidies. Assuming that States spend an equal amount, the total investment in the youth would be under 1% of the GDP. This is grossly inadequate considering that they account for a large proportion of the population and hold immense potential for India's development.

Cost of under-investment:

- A World Bank report estimates the opportunity cost of not investing in children and youth at 4% of the GDP every year.

- The lack of investment leads to illiteracy, poor health outcomes and also unemployment among the youth.

  * As per the 2018 State of Working India Report, the youth unemployment rate in India stands at 18.3%. Almost 1/3rd of the youth fall under the 'neither in employment nor in education' category.

  * Around 50 lakh youth are expected to be entering the workforce annually.

- This threatens to disrupt the economic development process in India by turning the coveted demographic dividend into a demographic disaster.

The way forward:

- Given the fact that India has just a decade's time to seize the opportunity and realise its youth demographic dividend, there is the urgent need for a government intervention for empowering India's youth.

Indian Youth Guarantee (IYG) programme:

- India needs to launch an Indian Youth Guarantee (IYG) programme, to address the employment needs of the youth.

- An IYG initiative, with statutory backing, can function as a facilitatory framework for ensuring gainful and productive engagement of youth. It would help ensure that young people graduating from college or losing a job either find a good quality job suited to their education and experience or acquire skills required to find a job through an apprenticeship.

- Existing youth schemes and skilling infrastructure need to be dovetailed and streamlined into the Indian Youth Guarantee (IYG) programme.

Using the Youth Development Index (YDI) as a guide:

- Before the initiation of the Indian Youth Guarantee (IYG) programme there is the need to identify the needs of the youth.

- The Youth Development Index (YDI) in India can be used as an advisory and monitory tool for youth development in India. It can help recognise priority areas, gaps and alternative approaches specific to each State.

  * The Youth Development Index (YDI), developed by the Commonwealth Secretariat, measures the status of young people in 183 countries around the world.

  * The index is a comprehensive measure across 5 domains that are critical to youth development:

    » Education

    » Health

    » Employment

    » Civic participation

    » Political participation.

Allocating requisite financial resources:

- To ensure the availability of sufficient financial resources for the Indian Youth Guarantee (IYG) programme, there is the need to create a Youth Component Plan, earmarking a specific percentage of the total budgetary allocations under a separate head.

Co-ordination between the stakeholders:

- The IYG should engage the district administration and local bodies for effective outcomes while also leveraging industry to enable employment generation.

5. Housing rights of the urban poor

» Prelims: Constitutional provisions under right to life

» Mains: Issues faced by the urban poor

Background:

- The Supreme Court, in an order had directed removal of 48,000 slums along the railway tracks in the national capital within three months.

- The Court ordered that there should not be any interference, political or otherwise.

- The order also stated that no Court shall grant any stay with respect to removal of the encroachments and in case any such interim order is granted that shall not be effective.

- It is also worth noting that the National Green Tribunal had already constituted a special task force for the removal of encroachments.

Why is the SC order flawed?

- The Supreme Court order has raised serious legal questions.

Violates principles of natural justice and due process:

- It is opined that the order is fundamentally flawed because the Court has ignored principles of natural justice, judicial precedents on the right to shelter, and state policies governing evictions.

- The order violates principles of natural justice and due process since it decided on the removal of slums without hearing the affected party - the dwellers.

Unconvincing connection made:

- The order was passed in the long-running case, M.C. Mehta vs. Union of India &Ors., regarding pollution in Delhi and was in response to a report by Environment Pollution (Prevention & Control) Authority for the National Capital Region on the piling up of garbage along railway tracks.

- Neither the case nor the report concerned itself with the legality of informal settlements.

- The Court made an unconvincing connection between the piling of garbage and the presence of slums.

Right to livelihood and shelter ignored:

- The Supreme Court ignored its long-standing jurisprudence on the right to livelihood and shelter that it has upheld in various judgments.

    * A five-judge Bench of the SC in Olga Tellis & Ors vs. Bombay Municipal Corporation &Ors. (1985) held that the right to life also includes the "right to livelihood" and that no eviction shall take place without notice and hearing those affected.

    * In Chameli Singh vs. State Of U.P. (1995), the SC recognised the "right to shelter" as a component of the right to life under Article 21 and freedom of movement under Article 19(1)(e).

Policies on slum eviction and rehabilitation in Delhi were not considered:

- In Sudama Singh & Others vs Government of Delhi &Anr. (2010), the Delhi High Court held that prior to any eviction, a survey must be conducted and those evicted should have a right to meaningful engagement with the relocation plans.

    * The procedure laid down in this judgment formed the basis for the Delhi Slum and JJ Rehabilitation and Relocation Policy, 2015.

- In Ajay Maken&Ors. vs Union Of India &Ors. (2019), a case concerning the demolition of Shakur Basti on railway land, the Delhi HC invoked the idea of the "Right to the City" to uphold the housing rights of slum dwellers.

Concerns:

- The Supreme Court order that threatens to leave lakhs of people homeless amid a pandemic is callous and unconscionable.

* A recent report of the Housing and Land Rights Network (HLRN) shows that, over 20,000 people were displaced in 45 incidents of forced evictions when India was under lockdown.

* Over the last three years, over five lakh people have been evicted, most often for various "city beautification" projects.

- The UN Special Rapporteur on the right to adequate housing has called on member-states to declare an end to forced evictions.

- In certain cases, PIL jurisprudence takes a dangerous turn whereby its procedural relaxations are used to deny principles of natural justice to the most marginalised groups.

Conclusion:

- The promise of the right to housing is now being undone by an order that pre-empts other courts from giving orders to stop the eviction. These residents would now need to employ a combination of political and legal strategies to protect their housing rights and ensure that no eviction or rehabilitation is conducted without their prior informed consent.

Miscellaneous

6. **Digital divide**

Context:

- National Statistical Organisation (NSO) has released the findings of the survey on household social consumption related to education, as part of the NSO's 75th round, conducted from July 2017 to June 2018.

Details:

- The report shows just how stark the digital divide is, across States, cities and villages, and income groups.

- Across India, only one in 10 households have a computer — whether a desktop, laptop or tablet.

- However, almost a quarter of all homes have Internet facilities, accessed via a fixed or mobile network using any device, including smartphones.

    * Most of these Internet-enabled homes are located in cities, where 42% have Internet access.

    * In rural India, however, only 15% are connected to the Internet.

    * The national capital has the highest Internet access, with 55% of homes having such facilities.

    * Himachal Pradesh and Kerala are the only other States where more than half of all households have Internet.

    * Odisha has the least Internet-enabled homes.

SEPTEMBER-2020

Social Issues - Related to women

7. Weighing in on the efficacy of female leadership

» Prelims: Constitutional provisions with respect to women in India

» Mains: Challenges to and significance of women in leadership roles.

- The Article analyses the necessity to get rid of inherent biases and perceptions about the effectiveness of women in roles of authority, specifically with respect to India.

Women leadership across the Globe:

- With women leaders heading their governments, Germany, Taiwan and New Zealand have garnered much-deserved appreciation for having managed the pandemic much better than their neighbours.

- A detailed study by researchers in the United States reports that States which have female governors had fewer COVID-19 related deaths.

  * Perhaps partly because female governors acted more decisively by issuing earlier stay-at-home orders.

  * The authors of the study conclude that women leaders are more effective than their male counterparts in times of crisis.

- While it is dangerous to make sweeping generalisations based on one study, the important takeaway is the necessity of getting rid of inherent biases and perceptions about female effectiveness in leadership roles.

India's gram panchayats:

- A study was conducted by Nobel Laureate Esther Duflo and co-author Raghabendra Chattopadhyay, who used the system of mandated reservations of pradhans in gram panchayats to test the effectiveness of female leadership.

Note:

- The 1993 amendment to the Indian Constitution mandated that all States had to reserve one-third of all positions of pradhan for women.

- Since villages chosen for the mandated reservations were randomly selected, differences in investment decisions made by gram panchayats could be attributed to the differences in gender of the pradhans.

- The study demonstrated that women perform significantly better than men in implementing policies that promote the interests of women.

- They concluded that pradhans invested more in rural infrastructure that served better the needs of their own gender.

Gender Equality:

- What needs evaluation is: What proportion of women stand for election to the various State and central legislatures? How many are elected? How many women occupy important positions in the executive branch of government?

- In addition to the importance of promoting more space for women in public policy, this is also an important goal from the perspective of gender equality.

Suffrage in India:

- The right to vote is arguably the most important dimension of participation in public life.

- Independent India can rightly be proud of its achievement in so far as women's suffrage is concerned.

- In Independent India, women were allowed to vote from 1950 onwards. Therefore, women could participate on an equal footing with men from the first general election of 1951-52.

- This is in striking contrast to the experience in the so-called "mature democracies" of western Europe and the United States.

  * In the U.S., it took several decades of struggle before women were allowed to vote in 1920.

  * Most countries in Europe also achieved universal suffrage during the inter-war period. Since most able-bodied men went away to the battlefields during the First World War, increasing numbers of women could show that they were adequate substitutes in activities that were earlier the sole preserve of men.

  * This is believed to have mitigated the anti-female bias and earned women the right to vote in European countries.

- Also, India has had and have charismatic female leaders like Indira Gandhi, Jayalalitha, Mayawati, Sushma Swaraj and Mamata Banerjee among several others.

Concerns:

Under-representation of female ministers:

- At present, there is an underrepresentation of female ministers in India.

- The female representation in the government at the Centre is probably not very far from the typical gender composition in Indian central and State governments.

  * Female members make up only about 10% of the total ministerial strength.

- The underrepresentation of women in Indian legislatures is even more striking.

  * Note: Rwanda comes out on top with a staggering 60% of seats in its lower house occupied by women.

The women's Bill languishes:

- Attempts have been made to extend quotas for women in the Lok Sabha and State Assemblies through a Women's Reservation Bill.

- When the bill was introduced (1996), male members from several parties opposed the Bill on various pretexts.

- Despite the fact that 24 years have passed since it was first presented in the Lok Sabha and the Bill has been introduced in successive Parliaments, there has been no success in this regard.

- Unfortunately, the fate of this Bill represents a blot on the functioning of the Indian Parliament.

Way forward:

- The establishment of quotas for women is the best way forward.

- A sure way of increasing numbers of women in legislatures and subsequently in cabinets is by avoiding the logjam in the Parliament by reserving say a third of party nominations for women.

- Quotas have both a short-term and long-term impact.

    * There is substantial evidence showing that increased female representation in policymaking goes a long way in improving perceptions about female effectiveness in leadership roles.

    * It would decrease the bias among voters against women candidates.

    * Voter perceptions about the efficacy of female leadership may change so drastically in the long run that quotas may no longer be necessary.

- Since women running for elections face numerous challenges, it is essential to create a level-playing field through appropriate legal measures

  » Prelims: Digital divide meaning

  » Mains: Governmental interventions to counter digital divide in India

GEOGRAPHY

1. Venus in focus

» Prelims: Phosphine, features of Venus and its atmosphere, important telescopes, important missions to Venus

» Mains: Relevance of scientific studies into extra-terrestrial lifeforms

Context:

- The discovery of traces of phosphine in the atmosphere of Venus

Background:

Venus:

- Venus is the second closest planet to the sun in the Solar system and is often referred to as 'Earth's twin' because its size and shape are very much similar to that of the earth.

- Venus has no satellite.

- Venus is considered hostile to life due to the following reasons:

  * Venus is the hottest planet in the solar system with surface temperatures being above 460° Celsius. It possesses a dense atmosphere of carbon dioxide (Green House Gas) which is said to be causing the heating of Venus.

  * Also the presence of sulphuric acid in the atmosphere of Venus makes it a highly corrosive environment.

Details:

- Phosphine, a compound of one phosphorous atom and three hydrogen atoms, has been discovered in the Venus's atmosphere. The researchers estimate that phosphine forms about 20 parts per billion of Venus's atmosphere.

  * Phosphine was first identified in Venus's atmosphere in 2017, using the James Clerk Maxwell Telescope in Hawaii. This was further confirmed through observations made using the Atacama Large Millimeter/sub-millimeter Array facility in Chile.

- Phosphine is given out by some species of bacteria during biochemical processes (in the absence of oxygen). It occurs from the breakdown of organic matter and is thus considered an important biomarker.

  * Biomarkers are chemical molecules which are considered indicative of life.

* In 2011, the European Space Agency's mission, Venus Express had found signs of ozone (considered a biomarker) in the upper atmosphere of Venus.

- Phosphine gets oxidized in an atmosphere rich in Carbon dioxide and hence should be shortlived in the Venus's atmosphere. The presence of phosphine despite this has led to speculations of presence of life forms in the hostile conditions of Venus.

Conclusion:

- To be able to conclusively correlate the discovery of Phosphine and the presence of lifeforms on Venus, the following actions are required.

  * Currently, the discovery of phosphine is based on telescopic observations. To conclusively confirm the presence of Phosphine there is the need to make in situ measurements in the atmosphere of Venus.

  * Given that the atmospheric conditions are drastically different between the earth and Venus, the presence of phosphine alone may not prove the presence of life on Venus. Phosphine could have also originated from unknown photochemistry or geochemistry processes on Venus. Thus, there is the need to also evaluate the source of phosphine on Venus.

Additional Information:

Missions to venus:

- More than 40 spacecraft have explored Venus so far. The '90s Magellan mission of NASA mapped the entire surface of Venus. The Japanese satellite Akatsuki is currently orbiting Venus to study its atmosphere.

- Missions to Venus have been planned by NASA and ISRO. While NASA's mission named DAVINCI (Atmospheric probe) is slated for launch in 2021, ISRO is looking for the launch of the Shukrayaan-1 (orbiter and atmospheric balloon) in 2023.

2. Krishna-Godavari (KG) basin

» Prelims: Methanogens

» Mains: Distribution of fossil fuel resources in India

Context:

- Recent studies have shown that the methane hydrate deposits located in the Krishna-Godavari (KG) basin are of biogenic origin.

Details:

- The research team has identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy.

  * Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.

  * Methanogens are microorganisms that produce methane as a metabolic by-product in hypoxic conditions.

- Until recently, there have been only a few investigations of the methanogenic communities associated with methane hydrate-bearing sediments.

- Understanding of these methane-producing methanogenic communities under such extreme pressures and temperatures marks a significant progress.

Significance of the Study:

- Methane is a clean and economical fuel. It is estimated that one cubic meter of methane hydrate contains 160-180 cubic meters of methane.

- Even the lowest estimate of methane present in the methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.

Krishna-Godavari Basin:

- The KG Basin is a proven petroliferous basin of continental margin located on the east coast of India.

- The basin contains about 5 km thick sediments with several cycles of deposition, ranging in age from Late Carboniferous to Pleistocene.

- The site is known for the D-6 block where Reliance Industries discovered the biggest natural gas reserves in India in 2003.

Geography-Climatology

3. **How African Sahara amplified a drought in Asia**

   » Prelims: El Nino

   » Mains: Global climatology

Details:

- About 4,000 to 5,000 years ago, a severe drought crippled countries of Southeast Asia forcing a shift in human settlement patterns of the area and also induced many lifestyle changes in the mainland Southeast Asian countries of Myanmar, Thailand, Laos, Cambodia and Vietnam.

- Recent scientific studies point to a connection between the end of the Green Sahara and this mega-drought.

  * As the Sahara started losing its vegetation, the reduced plant growth led to increased airborne dust which cooled the Indian Ocean and shifted the atmospheric circulation patterns and caused a condition similar to today's El Niño events.

  * This ultimately led to a large reduction in monsoon moisture across Southeast Asia that lasted more than 1,000 years.

- Previous studies have shown the link between the end of the Green Sahara and the collapse of the Akkadian Empire of Mesopotamia and the de-urbanisation of the Indus Valley Civilization.

EDUCATION

1. **AICTE-SPICES**

   » Prelims: All India Council for Technical Education - SPICES

   Context

   • AICTE-SPICES (Scheme for Promoting Interests, Creativity and Ethics among Students) launched by the Union Education Minister.

   Details:

   • The idea behind this scheme is to promote healthy co-curricular activity amongst the students for their all-round development.

   • The Scheme provides financial support to institutions for developing students club for the well-rounded development of students by promoting their interests, creativity and ethics.

   Eligibility

   a) AICTE approved institutes with minimum 5 years of existence.

   b) Only one proposal per institute for a club (with minimum student members 50) will be admissible. Institute may choose its best performing club for applying under the scheme for the grant.

HISTORY

1. **Rare Renati Chola era inscription unearthed**

   » Prelims: Renati Chola dynasty; era, region and contributions

   » Mains: Important Southern kingdoms and their contributions

   Context:

   • A rare inscription dating back to the Renati Chola era has been unearthed in a remote village of Kadapa district in Andhra Pradesh.

   Details:

   • The inscription was written in archaic Telugu.

   • It was assigned to the 8th century A.D. when the region was under the rule of the Chola Maharaja of Renadu.

   • The inscription also throws light upon the priority given to morality in those days.

   Renati Cholas:

   • The Telugu Cholas of Renadu (also called Renati Cholas) ruled over the Renadu region, the present-day Kadapa district.

   • Renandu Cholas were the feudatories of the Chola dynasty.These kings claimed that they belonged to KarikalaChola's dynasty.

   • They are said to be the first kingdom to use Telugu in administration and inscriptions, instead of Sanskrit. They had the unique honour of using the Telugu language in their inscriptions belonging to the 6th and 8th centuries. The inscriptions at Gandikota at Jammulamadugu and Proddatur are proof of this fact.

Modern India-Important personalities from South India

2. **Subramanian Bharathi**

   » Prelims: Important works of Subramanian Bharathi

   » Mains: Important personalities from South India

   • Subramanian Bharathi also known as Bharathiyar was a Tamil writer, poet, journalist, Indian independence activist and a social reformer. Popularly known as "Mahakavi", he was a pioneer of modern Tamil poetry and is considered one of the greatest Tamil literary figures of all time.

   • Subramanian Bharathi worked as a journalist with many newspapers, including The Hindu, the Swadesamitran and India.

   • One of his famous literary works is the 'Gnanaratham'.

Post Independence India-States reorganization

3. **Post-independence states reorganization**

   » Prelims: Important committees associated with states re-organization in India

   » Mains: States reorganization movement in India and the associated concerns in Indian context

   Dhar Commission:

   • The Linguistic provinces commission under the chairmanship of S K Dhar was set up by the central government in June 1948.

   • The commission recommended that the formation of provinces on exclusively or even mainly linguistic considerations is not in the larger interests of the Indian Nation.

   JVP committee:

   • The Congress set up the JVP committee comprising of Jawaharlal Nehru, Vallabhai Patel and Pattabhi Sitaramayya to study the recommendations of the Dhar Commission.

   • It too rejected language as the basis for reorganization of states for the time being but also acknowledged that overwhelming public sentiment could necessitate this in the future.

   Fazl Ali Commission:

   • The three member states reorganization commission under the chairmanship of Fazlali was appointed in 1953 to re-examine the issue.

   • It recommended the abolition of the existing four-fold classification of states. It stated that it is neither possible nor desirable to reorganize the states on the basis of language alone and that the promotion of the welfare of the people must be the priority.

   • Consequently, the states reorganization act was passed in 1956.

DISASTER MANAGEMENT

1. **California wildfires**

   » Prelims: Santa Ana winds

   » Mains: Reasons for California wildfires and threat posed by it

   Context:

   • Northern California wildfire has been spreading at a rapid rate

   Concerns:

   • California has set a record with nearly 2.5 million acres burned already in 2020, and historically the worst of the wildfire season doesn't begin until fall.

   • It is now entering what traditionally is the most dangerous time for fires.

      * The second stage of this year's fire season is yet to come.

   • Northern California wildfire smoke is posing a major health hazard to millions of people on the West Coast of the US.

   Reasons for the Wildfire in California:

   The changing climate:

   • California gets most of its moisture in the fall and winter (like much of the West).

   • Its vegetation spends much of the summer slowly drying out because of a lack of rainfall and warmer temperatures. That vegetation then serves as kindling for fires.

   • California's fire record dates back to 1932; the 10 largest fires since then have occurred since 2000.

   • However, the link between climate change and bigger fires is inextricable.

   Anthropogenic causes:

   • While sometimes the trigger is nature, more often than not humans are responsible.

   • Many deadly fires have been started by downed power lines.

   • People are increasingly moving into areas near forests, known as the urban-wildland interface, that are inclined to burn.

   Fire Suppression:

   • The history of suppressing wildfires has actually made present-day wildfires worse.

   • To counter this, in recent years, the U.S. Forest Service has been trying to rectify the previous practice through the use of prescribed, or controlled burns.

Santa Ana Winds:

   • Each fall, strong gusts known as the Santa Ana winds bring dry air from the Great Basin area of the West into Southern California.

   » **G**Prelims: Legal aspects with respect to Disaster management in India

   » Mains: Urban Disasters and disaster management

   Context:

   • Bhiwandi, a suburban town in the Mumbai Metropolitan Region, witnessed a building collapse killing at least 20 people including minors, and exposing once again, the precarious condition of many dwellings

   • There are other instances of building collapse, foot-over-bridge accidents and other life-threatening incidents. The situation gets aggravated during the monsoon.

   Legal liability and responsibility for the disaster

   • They have inevitably fallen on the owner of the structure and some municipal officials, for failing to abide by pre-monsoon safety and Structural audits.

   Structural audit

- It is an examination of the overall health of a building to ensure that it is safe, risk-free and habitable.

- The purpose of a structural audit is to correctly identify parts or sections of a building that may be in need of immediate repair, renovation or replacement

Pre-monsoon safety audit

- Before the monsoon every year, the development authority conducts a structural audit of these buildings.

- After the structural audit report, the authority's repair board takes precautionary steps such as vacating dangerous buildings or repairing the structure

- It usually starts in March and normally ends in May

People should also be blamed

- Most cases residents are to be blamed for their lack of responsibility towards their building

- People spend so much money on interior designers and architects for a false ceiling, marble flooring and periodically revamping their homes. But they are reluctant to spend a bit for a structural survey

Measures to be taken

- The tragic episodes of building collapses will require Maharashtra to raise the bar for municipal services, beginning with safety audits.

- It is true that Mumbai's municipal government has been identifying and classifying buildings based on hazard levels for some time, and in 2019 found 499 to be in a dangerous state.

- This programme must now include suburban local bodies such as the BhiwandiNizampur City Municipal Corporation, which lack the capacity and resources to carry out a comprehensive check.

    * We need to promote the idea of planned suburbs on the periphery of Mumbai to de-congest existing infrastructure and ensure ease of mobility.

- On the other hand, building owners must be incentivised to carry out safety repairs, with support from the Centre and the State, making such certified expenditure tax-deductible.

- Mumbai's municipal engineers have, in the past, complained of political interference in the enforcement of safety norms. Rules should be laid to prevent the interference.

Conclusion

- The immediate priority for Maharashtra is to understand the scale of the problem, identify the weakest structures and launch a plan to prevent disasters.

GOVERNANCE

1. **Decentralized planning in rural areas**

   » Prelims: Constitutional provisions with respect to decentralized planning

   » Mains: Significance and challenges of decentralized planning systems

   Context:

   • Self Help Groups across the country are gearing up to prepare the Village Poverty Reduction Plan for integration with the Gram Panchayat Development Plans.

   Background:

   • Article 243G of the Constitution intended to empower the Gram Panchayats (GPs) by enabling the State Governments to devolve powers and authority in respect of all 29 Subjects listed in the Eleventh Schedule for local planning and implementation of schemes for economic development and social justice.

   • The local bodies (GPs) play a significant role in the effective implementation of flagship schemes on subjects of national importance, for the transformation of rural India.

   • In 2015, the Fourteenth Finance Commission grants were devolved to GPs that provided them with an enormous opportunity to plan for their development themselves.

   • Since then, local bodies across the country are expected to prepare context-specific, need-based Gram Panchayat Development Plans (GPDP).

   Gram Panchayat Development Plans (GPDP):

   • Gram Panchayat Development Plan (GPDP) brings together both the citizens and their elected representatives in the decentralized planning processes.

   • GPDP is expected to reflect the development issues, perceived needs and priorities of the community, including that of the marginalized sections.

   • Apart from the demand related to basic infrastructure and services, resource development and convergence of departmental schemes, GPDP has the potential to address the social issues as well.

   • Since the last two years, self-help groups and their federations under the Deendayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-NRLM) are expected to participate in the annual GPDP planning process and prepare the Village Poverty Reduction Plan (VPRP). This is as per the PPC guidelines and also as per a joint advisory issued by the ministries of Panchayati Raj and Rural Development.

   Village Poverty Reduction Plans (VPRP)

   • VPRP is a comprehensive demand plan prepared by the Self Help Group (SHG) network and their federations for projecting their demands and local area development which needs to be integrated with the Gram Panchayat Development Plan (GPDP).

   • The VPRP is presented in the Gram Sabha meetings.

   Objectives of VPRP:

   • Prepare a comprehensive and inclusive demand plan of the community for local development.

   • Facilitate an interface between the SHG federation and Panchayati Raj institutions for the development of demand plans.

   • Strengthen the community-based organisations and their leadership for active participation in poverty reduction activities.

2. **FCRA**

   » Prelims: FCRA provisions

   » Mains: Significance of the recent amendments and the associated concerns

   Context:

   • The government has introduced the Foreign Contribution (Regulation) Amendment Bill, 2020, seeking to make significant changes to the Foreign Contribution (Regulation) Act (FCRA).

   Foreign Contribution Regulation Act (FCRA):

   • FCRA regulates foreign donations and ensures that such contributions do not adversely affect the internal security of the country.

   • The Act, first enacted in 1976 was amended in the year 2010 when a slew of new measures was taken by the Union Home Ministry to regulate foreign donations.

   Need for amendment:

   • The FCRA Bill, 2020, says the need to strengthen the Act has arisen due to several organisations "misutilising or misappropriating" the funds leading to the government cancelling 19,000 such registrations in the past few years.

- The annual inflow of foreign contribution has almost doubled between the years 2010 and 2019, but many recipients of foreign contribution have not utilised the same for the purpose for which they were registered or granted prior permission under the said Act.

- Many of the recipients were also found wanting in ensuring basic statutory compliances such as submission of annual returns and maintenance of proper accounts, leading to a situation where the Central Government had to cancel certificates of registration.

- Criminal investigations also had to be initiated against dozens of such non-governmental organisations which indulged in outright misappropriation or misutilisation of foreign contribution.

Features

- Under the Act Section 3, sub-section (1) clause (c) No foreign contribution shall be accepted by any Judge, Government servant or employee of any corporation or any other body controlled or owned by the Government;

  * The Bill adds public servants (as defined under the Indian Penal Code section 21) to this list.

  * Public servant includes any person who is in service or pay of the government, or remunerated by the government for the performance of any public duty.

Reduction in use of foreign contribution for administrative purposes:

- Under the Act, a person who receives foreign contribution must use it only for the purpose for which the contribution is received. Further, they must not use more than 50% of the contribution for meeting administrative expenses. The expenses include:

  * Salaries, wages, travel expenses or any remuneration

  * Expenditure related to consumables like electricity and water charges, telephone charges, postal charges, repairs to premise(s) from where the organisation or Association is functioning

- The Bill reduces this limit to 20%.

Aadhaar for registration

- The Act states that a person may accept foreign contribution if they have: (i) obtained a certificate of registration from central government, or (ii) not registered, but obtained prior permission from the government to accept foreign contribution.

  * Any person seeking registration (or renewal of such registration) or prior permission for receiving foreign contribution must make an application to the central government in the prescribed manner.

- The Bill adds that any person seeking prior permission, registration or renewal of registration must provide the Aadhaar number of all its office bearers, directors or key functionaries, as an identification document.

  * In case of a foreigner, they must provide a copy of the passport or the Overseas Citizen of India card for identification.

Suspension of registration

- Under the Act, the government may suspend the registration of a person for a period not exceeding 180 days.

- The Bill adds that such suspension may be extended up to an additional 180 days.

Significance

- The Bill says the amendment is required to enhance transparency and accountability in the receipt and utilisation of foreign contributions worth thousands of crores of rupees every year and facilitating the "genuine" non-governmental organisations or associations who are working for the welfare of society.

Concerns

- During the ongoing pandemic and the migrant workers' crisis, NGOs and activists routinely make up for gaps in government programmes, by reaching the unreached, supplementing the quality and quantity of services provided, and speaking for those whose voices are marginalised.

  * Several elements of the FCRA rules and their vague definitions of national interest might hinder their programmes.

- The government wants to limit the proportion of administrative expenses in the utilisation of foreign funds to 20%. This one is truly an example of a regulation that serves no purpose but to make life difficult for larger organisations who have higher overheads (administrative costs).

  * If donors determine that funds are not being used on direct delivery of programmes but instead are being wasted on administrative expenses, it is up to them to respond.

  * There is hardly any need for the government to get involved in such matters.

- Finally, this Bill gives the Ministry of Home Affairs powers to suspend FCRA certificates for more than 180 days, without specifying an upper limit. In the current circumstances, this should worry NGOs and civil society organisations.

  * By suspending the FCRA certificate, the government can starve organisations of funds while it investigates them

MISCELLANEOUS

1. **Mission Karmayogi**

   Context

   - The Union Cabinet's approval for Mission Karmayogi.

   Mission Karmayogi:

   - Mission Karmayogi – National Program for Civil Services Capacity Building is a new capacity-building scheme for civil servants aimed at upgrading the post-recruitment training mechanism of the officers and employees at all levels.

   - The mission will be delivered through a digital platform, that will be set up, called 'iGOTKarmayogi'.

   - The platform will act as a launchpad for the National Programme for Civil Services Capacity Building (NPCSCB), which will enable a comprehensive reform of the capacity building apparatus at the individual, institutional and process levels.

     * NPCSCB will be governed by the Prime Minister's Human Resource Council.

   - An appropriate monitoring and evaluation framework will be put in place for performance evaluation of all users of the iGOT-Karmayogi platform so as to generate a dashboard view of Key Performance Indicators.

   Significance:

   - Mission Karmayogi is expected to radically enhance the quality of human resource management practices across the country.

   - It will augment the capacity of civil servants. The mission aims to prepare make the Indian civil servants more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled.

   - The programme will support a transition from "rules-based to roles-based" HR management so that work allocations can be done by matching an official's competencies to the requirements of the post.

2. **e-Gopala App**

   Context

   - PM to launch e-Gopala App.

   Details:

   - e-Gopala App is a comprehensive breed improvement marketplace and information portal for the direct use of farmers.

   - The e-Gopala App will provide solutions to farmers on the following aspects.

     * Information regarding buying and selling of disease-free germplasm in all forms (semen, embryos, etc.); availability of quality breeding services (Artificial Insemination, veterinary first aid, vaccination, treatment, etc.) and guiding farmers for animal nutrition, treatment of animals using appropriate ayurvedic medicine/ethno-veterinary medicine.

     * The app would send alerts on the due date for vaccination, pregnancy diagnosis, calving, etc. and also inform farmers about various government schemes and campaigns in the area.

3. **SAROD-Ports**

   Context

   - Union Minister of State for Shipping launches 'SAROD-Ports' (Society for Affordable Redressal of Disputes – Ports).

   About SAROD-Ports:

   - SAROD-Ports is a dispute redressal mechanism to facilitate affordable and timely resolution of disputes for the maritime sector.

   - It has been established under the Societies Registration Act, 1860 for affordable and timely resolution of disputes in a fair manner.

   - It will advise and assist in the settlement of disputes through arbitrations in the maritime sector, including ports and shipping sector in Major Port Trusts, Non-major Ports, including private ports, jetties, terminals and harbours.

   - The panel of technical experts as arbitrators will enrich the Dispute Resolution Mechanism.

   - The mechanism is similar to the provision available in the highway sector in the form of SAROD-Roads constituted by the National Highways Authorities of India (NHAI).

4. **Five Star Villages Scheme**

   Context

   - India Post launches Five Star Villages Scheme.

   Details:

   - The Department of Posts has launched a scheme called Five Star Villages, to ensure universal coverage of flagship postal schemes in rural areas of the country.

   - The scheme seeks to bridge the gaps in public awareness and reach of postal products and services, especially in interior villages.

   - All postal products and services will be made available

and marketed and publicized at the village level, under the scheme.

- Branch offices will function as a one-stop-shop to cater to all post office-related needs of villagers.

- The schemes covered under the Five Star scheme include:

  * Savings Bank Accounts, Recurrent Deposit Accounts, NSC/KVP certificates

  * Sukanya Samridhi Accounts/PPF Accounts

  * Funded Post Office Savings Account linked India Post Payments Bank Accounts

  * Postal Life Insurance Policy/Rural Postal Life Insurance Policy

  * Pradhan Mantri Suraksha Bima Yojana Account/ Pradhan Mantri Jeevan Jyoti Bima Yojana Account.

- The scheme will be implemented by a team of five Gramin Dak Sevaks who will be assigned a village for the marketing of all products, savings and insurance schemes of the Department of Posts.

- The team of Gramin Dak Sevaks will conduct a door-to-door awareness campaign on all schemes, covering all eligible villagers.

5. Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit

Context

- The Department of Science and Technology and the Defence Research and Development Organisation will be organising a month-long session of webinars and online discussions as a part of Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit involving non-resident Indian (NRI) scientists.

Details:

- The VAIBHAV Summit is being organised to help develop a comprehensive road map to leverage the expertise and knowledge of global Indian researchers for solving emerging challenges.

- The summit is designed with the goal of creating an ecosystem of Knowledge and Innovation in the country through global outreach.

- By bringing the Indian overseas and resident academicians/scientists together, a structure of association will be evolved.

- The end product will be a road map and broad direction on the kind of research that will benefit India in the future.

- Key areas of discussion will include: quantum technologies, artificial intelligence and machine learning, electronics and semi-conductor technologies, communications technologies, photonics, computational and data sciences and aerospace technologies among others.

6. Global Innovation Index (GII)

Context

- India ranked among the top 50 nations in the Global Innovation Index.

Details:

- India has climbed four spots and has been ranked 48th by the World Intellectual Property Organization (WIPO) in the Global Innovation Index 2020 rankings.

- India was at the 52nd position in 2019 and was ranked 81st in the year 2015.

- The WIPO had also accepted India as one of the leading innovation achievers of 2019 in the central and southern Asian region because of its consistent improvement in the last five years in the innovation ranking.

7. Global Multidimensional Poverty Index (Global MPI)

Context

- NITI Aayog, has been assigned the responsibility of leveraging the monitoring mechanism of the Global Multidimensional Poverty Index (MPI) to drive reforms.

Details:

- The NITI Aayog will leverage the monitoring mechanism of the Global Multidimensional Poverty Index (MPI) to push forward reforms in the country and for this, it has also set up a coordination committee, called the Multidimensional Poverty Index Coordination Committee (MPICC).

- The MPI is one of the 29 global indices that the government has selected to monitor India's performance in.

- This exercise called the Global Indices to Drive Reforms and Growth (GIRG), has the objective of enabling the utilisation of these indices as tools for self-improvement, bring about reforms in policies, while also improving last-mile implementation of government schemes.

Identification of Reform Areas and Reform Actions
Preparing an Action Plan to improve country's Global MPI performance

STEP 6 — Priority setting –High/Medium/Low
STEP 5 — Defining targets & timelines
STEP 4 — Consultations with States/UTs, Ministries
STEP 1 — Disaggregate MPI parameters
STEP 2 — Map schemes and high frequency administrative indicators
STEP 3 — Identify relevant Ministries

MPI Action Plan
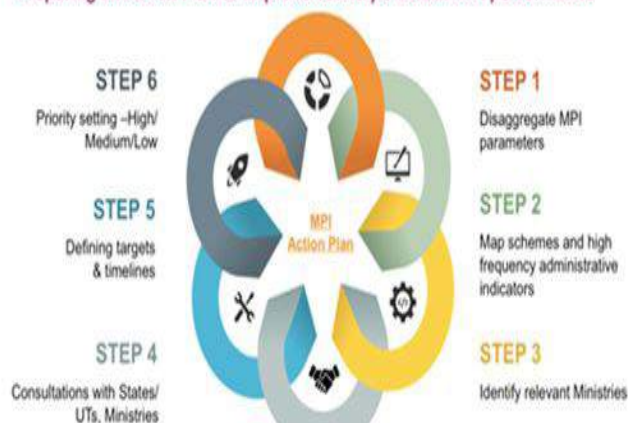
About Global MPI:

- Global MPI is an international measure of multidimensional poverty covering 107 developing countries.

  * In Global MPI 2020, India was 62nd among 107 countries.

- It was first developed in 2010 by Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) for UNDP's Human Development Reports.

- The index is released at the High-Level Political Forum (HLPF) on Sustainable Development of the United Nations in July every year.

Methodology

- It is calculated by assigning scores for each surveyed household on 10 parameters.

- These are based on nutrition, child mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing, and household assets.

- The index complements traditional monetary poverty measures by capturing the acute deprivations in health, education, and living standards that a person faces simultaneously.

8. EASE 2.0 Index

Context

- Finance Minister declares EASE 2.0 Index Results.

EASE 2.0 Index

- EASE Banking Reforms Index is a common reform agenda for PSBs aimed at institutionalizing clean and smart banking.

- The six themes of the Reforms Agenda include 'Responsible Banking', 'Governance and HR', 'Udyamimitra for MSMEs', 'Customer responsiveness', 'Deepening Financial Inclusion and digitization' and 'Credit off-take'.

- EASE 1.0 was launched in 2018. EASE 2.0 built on the foundation laid in EASE 1.0 and furthered the progress on reforms.

- Reform Action Points in EASE 2.0 aimed at making the reforms journey irreversible, strengthening processes and systems, and driving outcomes.

How PSBs have fared?

- PSBs have shown a healthy trajectory in their performance over four quarters since the launch of EASE 2.0 Reforms Agenda.

9. Startup rankings of India

Context

- The second edition of startup ranking of States and Union Territories has been released by the Department for Promotion of Industry and Internal Trade (DPIIT).

Details:

- Gujarat has been categorised as the best performer in the second edition of startup ranking of states among all States and one Union Territory (UT) Delhi, barring north-eastern States and other UTs.

- It has again emerged as the best performer in developing start-up ecosystem for budding entrepreneurs.

- A total of 22 States and 3 UTs participated in the exercise.

- The ranking is based on seven broad reform areas consisting of 30 action points ranging from institutional support, easing compliances, relaxation in public procurement norms, incubation support, seed funding support, venture funding support, and awareness and outreach.

- States have been recognised as best performers, top performers, leaders, aspiring leaders and emerging startup ecosystems.

- The rankings are aimed at further promoting the start-up ecosystem by the Centre, States and UTs.

10. 'State of the Young Child' report

Context

- The 'State of the Young Child' in India report was launched by the Vice President of India.

  * Two indices have been released as a part of the 'State of the Young Child' in India report.

  * It has been brought out by non-governmental organisation Mobile Creches.

Young child outcomes index:

- The young child outcomes index measures health, nutrition and cognitive growth with the help of indicators such as infant mortality rate, stunting and net attendance at the primary school level.

- The index has been constructed for two time periods (2005–2006 and 2015–2016) to enable inter-State comparisons as well as provide an idea of change over time.

Key Findings:

- Kerala, Goa, Tripura, Tamil Nadu and Mizoram are among the top five States for well-being of children.

- It identifies eight States that have scores below the country's average: they are Assam, Meghalaya, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, Uttar Pradesh and Bihar.

Young child environment index:

- The index has been launched to understand the policy and environment enablers that influence a child's well-being.

- It uses five policy enablers that influence child well-being outcomes, including poverty alleviation, strengthening primary healthcare, improving education levels, safe water supply and promotion of gender equity.

- The environment index was constructed for 2015–2016 only due to limitations of data availability.

Key Findings:

- According to the environment index, Kerala, Goa, Sikkim, Punjab and Himachal Pradesh secured the top five positions.

- The eight States that have a below average score on the outcomes index also fared poorly on this one.

Suggestions and way forward:

- The report points out that while the budgetary allocation for the Ministry of Women and Child Development has seen a year-on-year increase, all the additional funds have been allocated towards nutrition delivery under the Integrated Child Development Scheme (ICDS).

  * While the population of children under six years of age is 158.8 million, the ICDS covers only 71.9 million children as calculated from the total number of beneficiaries across States.

- According to its analysis on expenses towards child nutrition, healthcare, education and other necessary protection services, India spent ₹1,723 per child in 2018–2019, an amount that is insufficient and fails to reach the entire eligible population.

- The report calls for an increase in public spending on children.

Miscellaneous

11. Artemisia annua

- It is originally from Asia, but grows in many other parts of the world with sunny and warm conditions.

- It's been used in Chinese traditional medicine for more than 2,000 years for treating a number of diseases, including malaria, as well as to relieve pain and combat fever.

- It is also called sweet wormwood or annual wormwood, and is used as an alternative therapy - and even put into some alcoholic drinks.

Context

- President Rajoelina of Madagascar said that trials conducted on the Covid-Organics drink - which uses artemisia - showed its effectiveness against the disease.

- The World Health Organization has also endorsed a protocol for testing African herbal medicines as potential treatments for the coronavirus and other epidemics.

12. Make ethics code must for all news channels, NBA tells SC

Context

- The News Broadcasters Association (NBA) has told

the Supreme Court to make its code of ethics against airing malicious, biased and regressive content applicable to all TV news channels.

Details:

- The NBA suggested that the Court direct the government to include its ethical code in the Programme Code of the Cable Television Networks Rules, 1994.

  * By doing so, all news channels, whether they are NBA members or not, will then have to follow the Programme Code containing the proposed amendments.

The NBA suggested that:

- The News Broadcasters Services Authority (NBSA) should be granted recognition as an "independent self-regulatory mechanism" to receive and deal with complaints.

- The orders passed by the NBSA should be made binding and enforceable on the channels.

- The penalties mentioned therein could be made more stringent.

13. Kondapochamma reservoir

Context

- Water has been leaking from the Kondapochammasagar reservoir located at the Markookmandal in Telangana.

Details :

- The Kondapochamma reservoir is a part of Kaleshwaram lift irrigation project. It is being constructed in the Medak district of Telanagana.

  * The Rs 1 lakh crore Kaleshwaram Multipurpose Lift Irrigation Project is on River Godavari.

  * As part of the Kaleswaram Project, water is pumped from the Medigadda Barrage on the Godavari into several reservoirs through canals, tunnels and aqueducts to be distributed to several districts in the state.

- From the river to the Kondapachamma reservoir which is over 200 kms away, through various lifts and pumps, the water is lifted to a height of over half km to the reservoir.

  * While the Godavari river flows at a lower level, all the reservoirs are at a higher level which requires lifting and pumping the water.

14. World Tourism Day

- It is celebrated annually across the world on September 27. It was initiated by United Nations World Tourism Organization in 1980.

  * It is the United Nations specialized agency entrusted with the promotion of responsible, sustainable and universally accessible tourism.

  * The nodal agency in India that works with the

UNWTO is the Ministry of Tourism.

- The theme of World Tourism Day 2020 is "Tourism and Rural Development".

- It encourages the celebration of the unique role played by tourism in job creation in small towns and rural areas.

- The day highlights the unique role of tourism sector in preserving cultural and natural heritage all around the world apart from being a leading employer and economic pillar.

15. O-SMART Scheme

Details:

- O-SMART stands for Ocean Services, Modelling, Applications, Resources and Technology Scheme.

- It is a scheme being piloted by the Ministry of Earth Sciences.

- The scheme integrates a total of 16 sub-projects addressing ocean development activities such as Services, Technology, Resources, Observations and Science.

- Recognizing the importance of implementing schemes that are highly multi-disciplinary in the ocean sector keeping in mind national interests and international commitments, the Ministry had proposed to continue the existing schemes in a focused way as a part of the O-SMART umbrella scheme.

Objectives of the scheme:

- To generate and regularly update information on Marine Living Resources and their relationship with the physical environment in the Indian Exclusive Economic Zone (EEZ).

- To periodically monitor levels of seawater pollutants for health assessment of coastal waters of India, to develop shoreline change maps for assessment of coastal erosion due to natural and anthropogenic activities.

- To develop a wide range of state-of-the-art ocean observation systems for the acquisition of real-time data from the seas around India.

- To generate and disseminate a suite of user-oriented ocean information, advisories, warnings, data and data products for the benefit of society.

- To develop high-resolution models for ocean forecast and reanalysis system.

- To develop algorithms for validation of satellite data for coastal research and to monitor changes in the coastal research.

- To develop technologies to tap the marine bio-resources, to generate freshwater and energy from the ocean, and develop underwater vehicles and technologies.

- To establish a ballast water treatment facility.

- To support operation and maintenance of 5 Research vessels for ocean survey/monitoring/technology demonstration programmes.

- To establish a state of the art seafront facility to cater to the testing and sea trial activities of ocean technology.

16. Shinkun La Tunnel

Context

- National Highways and Infrastructure Development Corporation Limited (NHIDCL) expedites Detailed Project Report (DPR) work on the Shinkun La Tunnel.

About the Shinkun La Tunnel:

- On completion of this tunnel, the Manali – Kargil highway will remain open throughout the year.

- The 13.5 km long tunnel under the Shingo La pass will enable all-weather road connectivity between Manali and Nimu via Shingo La and Padum.

- The tunnel will provide all-weather road connectivity between Himachal Pradesh and Jammu and Kashmir in Zanskar valley.

- With the construction of the tunnel, inhabitants of around 15-odd villages of Zanskar Valley in Jammu and Kashmir will be relieved since the valley remains cut off due to heavy snowfall during the winter.

Shingo La:

- Shingo-la (also known as Shinku La) is a mountain pass in India, on the border between Ladakh and Himachal Pradesh.

- This pass may be considered as an entry point to Lugnak Valley in Zanskar.

PRACTICE QUESTIONS

1. **Consider the following statements with respect to "contempt of court":**

   1. Provisions in the Constitution of India empower both the Supreme Court and the High Court to punish people for their respective contempt.

   2. The Constitution includes contempt of court as a reasonable restriction to the freedom of speech and expression under Article 19.

   3. Wilful disobedience of a court order or judgment or wilful breach of an undertaking given to a court amounts to criminal contempt.

   Which of the given statement/s is/are correct?

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

2. **Which of the following are quantitative methods of credit control by RBI?**

   1. Bank Rate
   2. Credit Rationing
   3. Open Market Operations
   4. Variable Cash Reserve Ratio

   Choose the correct option:

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

3. **Consider the following statements with respect to the River Wainganga:**

   1. It originates in the Mahadeo Hills in Madhya Pradesh.

   2. Gosi khurd irrigation project is being constructed on the Wainganga River.

   3. It is a tributary of River Ganga.

   Which of the given statement/s is/are incorrect?

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

4. **Rezang La is a mountain pass in:**

   A. Sikkim
   B. Ladakh
   C. Himachal Pradesh
   D. Uttarakhand

5. **Which of the following is/are correctly matched?**

   1. INDRA – Russia
   2. EKUVERIN – Japan
   3. MAITREE – Thailand
   4. KAZIND – Bangladesh

   Choose the correct option:

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

6. **The militant organization Hamas operates out of which of the following region?**

   A. Gaza Strip
   B. Israel
   C. Syria
   D. Turkey

7. **Which of the following are correctly matched?**

   1. Strait of Gibraltar – The Atlantic Ocean and the Mediterranean Sea

   2. Strait of Malacca – The Pacific Ocean and the Indian Ocean

   3. Bab-el-Mandeb – The Gulf of Aden and the Red Sea

   4. Hormuz Strait – Gulf of Oman and the Persian Gulf

   Choose the correct option:

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

8. **The Gopalakrishnan Committee dealt with:**

   A. Non-Personal Data Governance Framework
   B. Civil Services Reforms
   C. Data Protection Law
   D. Draft National Education Policy

9. **Consider the following statements:**

1. Question hour is mentioned in the Rules of Procedure of the House.

2. A starred question is one to which a written answer is desired by the member

3. A starred question cannot have supplementary questions.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 and 3 only

C. 2 only

D. None of the above

10. **Consider the following statements with respect to the Global Innovation Index 2020:**

1. India is ranked among the top 50 nations.

2. Israel is ranked among the top 10 nations.

3. It is published by WIPO in association with Cornell University and INSEAD.

Which of the given statement/s is/are INCORRECT?

A. 2 only

B. 1 and 3 only

C. 2 and 3 only

D. None of the above

11. **Recently approved - Mission Karmayogi is a part of:**

A. Labour Reforms

B. Defence Sector Reforms

C. Civil Services Reforms

D. Health Sector Reforms

12. **Consider the following statements with respect to Pangong Tso:**

1. It is an endorheic, brackish water lake.

2. It is identified as a wetland of international significance under the Ramsar Convention.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

13. **Consider the following statements with respect to the Environment Pollution Control Authority (EPCA):**

1. EPCA is a Supreme Court-mandated body tasked with taking various measures to tackle air pollution in all the metropolitan cities across India.

2. The body is constituted under the provisions of the Environment (Protection) Act, 1986.

3. It is mandated to enforce the Graded Response Action Plan (GRAP) in the Delhi-NCR (National Capital Region).

Which of the given statement/s is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 3 only

D. 1, 2 and 3

14. **Consider the following statements with respect to Paradip Port:**

1. It is a natural, deep-water port.

2. It is the largest port by size and shipping traffic.

3. It is situated at the confluence of the Mahanadi river and the Bay of Bengal.

Which of the given statement/s is/are INCORRECT?

A. 1 and 3 only

B. 2 and 3 only

C. 2 only

D. 1 only

15. **Consider the following statements with respect to Assam Rifles:**

1. It functions under the administrative control of the Union Home Ministry.

2. The Assam Rifles was formed under the British in 1835.

3. It is India's oldest paramilitary force.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 1 only

C. 1 and 2 only

D. 1, 2 and 3

16. **Which of the following Indian state/s share/s international border with both Myanmar and Bangladesh?**

1. Tripura

2. Mizoram

3.   Manipur

4.   Nagaland

Choose the correct option:

A. 1 and 2 only

B. 2 only

C. 1, 3 and 4 only

D. 2 and 4 only

17. Consider the following statements regarding the North Atlantic Treaty Organization (NATO):

1.   It is an intergovernmental military alliance established by the Brussels Treaty.

2.   It is headquartered in Brussels, Belgium.

3.   Montenegro is the latest to join NATO as its member.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 only

D. 1, 2 and 3

18. India is a signatory to which of the following convention/s?

1.   Convention on Narcotic Drugs, 1961

2.   Convention on Psychotropic Substances, 1971

3.   United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988

Choose the correct option:

A. 3 only

B. 1 and 3 only

C. 1, 2 and 3

D. None of the above

19. Consider the following statements with respect to Orang National Park:

1.   Orang National Park is located on the northern bank of the Brahmaputra River.

2.   Rivers Pachnoi, Belsiri and Dhanshiri border the park.

3.   It has also been declared a tiger reserve.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 1 only

C. 1 and 2 only

D. 1, 2 and 3

20. Consider the following statements with respect to the Collective Security Treaty Organisation (CSTO):

1.   The organization supports arms sales and manufacturing as well as military training and exercises.

2.   Afghanistan, Serbia and Uzbekistan are among its member nations.

3.   The CSTO is headquartered in Moscow, Russia.

Which of the given statement/s is/are correct?

A. 1, 2 and 3

B. 1 and 2 only

C. 1 and 3 only

D. 3 only

21. Which of the following countries have signed and ratified the Rome Statute?

1.   India

2.   China

3.   Russia

4.   U.S.

5.   Japan

Options:

A. 3 and 5 only

B. 1, 2 and 3 only

C. 5 only

D. 3,4 and 5 only

22. Which of the following statement/s is/are correct with respect to the functioning of the International Criminal Court (ICC)?

1.   The Rome Statute provides the UN Security Council the power to refer cases to the ICC and also the power to block such references.

2.   The ICC arrogates to itself the right to prosecute matters against countries that aren't even signatories.

3.   The issue of cross-border terrorism and the use of nuclear arms and weapons of mass destruction are not part of the ICC's mandate.

Options:

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1,2 and 3

23. **What are the possible benefits of the vehicle scrappage policy?**

   1. Help mitigate vehicular pollution
   2. Reduce import dependency
   3. Helps save forex reserves
   4. Enhance government revenue
   5. Enhance economic growth
   6. Increase employment opportunities

   Options:

   A. 5 and 6 only
   B. 1, 2, 3, 4, 5 and 6
   C. 1, 4, 5 and 6 only
   D. 1, 5 and 6 only

24. **Which of the following statement/s is/are correct?**

   1. The Ease of Doing Business (EODB) state ranking is a joint initiative of the Department for Promotion of Industries and Internal Trade of the Finance ministry and the World Bank.

   2. The Ease of Doing Business (EODB) state rankings are based on the implementation of State Business Reform Action Plan 2019.

   Options:

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

25. **Which of the following places is popularly known as the land of 7 languages in India?**

   A. Bhopal
   B. Lucknow
   C. Kasaragod
   D. Guwahati

26. **Which of the following statement/s is/are correct with respect to the Ajmer Sharif dargah?**

   1. It is dedicated to the Suhrawardiyya silsila of the Sufi saints.

   2. Its construction was initiated by the Mughal king, Akbar.

   Options:

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

27. **Which of the following pairs is/are correctly matched?**

   1. 25th Amendment: Empowered the Parliament to amend any part of the Constitution

   2. 91st Amendment: Limiting the size of the Council of Ministers

   3. 52nd Amendment: Anti-defection law

   4. 86th Amendment: Right to education for children between 6-14 years

   Options:

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

28. **Which of the following statement/s is/are correct with respect to the Directorate of Revenue Intelligence (DRI)?**

   1. It is the apex anti-smuggling agency of India, tasked with detecting and curbing drug trafficking and illicit international trade in wildlife and environmentally sensitive items.

   2. It works under the Ministry of Home Affairs.

   Options:

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

29. **Consider the following statements with respect to Sa-Dhan:**

   1. It is an association of Micro Finance Institutions.

   2. It is recognised as a self-regulatory organisation by the Reserve Bank of India.

   3. It is recognized as a National Support Organization (NSO) by the National Rural Livelihood Mission (NRLM).

   Which of the given statement/s is/are correct?

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

30. **Consider the following statements with respect to Special Frontier Force (SFF):**

   1. It was established in the immediate aftermath of the 1962 Sino-India war.

   2. The SFF units function under the operational control of the Army.

3.   It falls under the purview of the Cabinet Secretariat.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. None of the above

31. Consider the following statements with respect to G-Secs:

1.   G-Secs carry no risk of default and are called risk-free gilt-edged instruments.

2.   The G-Secs issued by the Central government includes both, treasury bills and bonds.

3.   The state governments issue treasury bills only.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 1, 2 and 3

C. 1 only

D. 1 and 2 only

32. Consider the following statements with respect to Scramjet engines:

1.   They operate efficiently at hypersonic speeds and allow supersonic combustion.

2.   They are a variant of a category of jet engines called the air breathing engines.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

33. Consider the following:

1.   Global Economic Prospects (GEP) – World Bank

2.   World Economic Outlook (WEO) – World Economic Forum (WEF)

3.   Global Financial Stability Report – International Monetary Fund (IMF)

Which of the given pairs is/are correctly matched?

A. 1 and 3 only

B. 1, 2 and 3

C. 2 and 3 only

D. 1 only

34. Consider the following statements:

1.   Khangchendzonga National Park in Sikkim is the only UNESCO Mixed World Heritage Site in India.

2.   Jaipur has been recognised as a UNESCO World Heritage Site.

3.   Rajasthan is the only state to have both Cultural and Natural sites in the UNESCO World Heritage List.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 3 only

C. 1 and 2 only

D. 1, 2 and 3

35. Arrange the following from West to East:

1.   Kedarnath

2.   Badrinath

3.   Yamunotri

4.   Gangotri

Choose the correct option:

A. 3, 4, 1, 2

B. 4, 3, 1, 2

C. 4, 3, 2, 1

D. 2, 1, 3, 4

36. Consider the following statements:

1.   National Bamboo Mission (NBM) is a sub-scheme under the Mission for Integrated Development of Horticulture (MIDH).

2.   Mission for Integrated Development of Horticulture is a centrally sponsored scheme.

3.   In 2017, the Indian Forest Act, 1927 was amended to include bamboo in the category of trees.

Which of the given statement/s is/are correct?

A. 1, 2 and 3

B. 1 only

C. 1 and 2 only

D. 1 and 3 only

37. Which of the following are members of the Shanghai Cooperation Organisation (SCO)?

1.   Tajikistan

2.   China

3.   Pakistan

4.   Turkmenistan

5.   Kyrgyzstan

6.   Afghanistan

Choose the correct option:

A. 1, 2, 3 and 5 only

B. 2, 3, 4, 5 and 6 only

C. 2, 3, 5 and 6 only

D. 1, 2, 3, 5 and 6 only

38. **Consider the following statements with respect to National Commission for Backward Classes (NCBC):**

1.   It is a statutory body under the Ministry of Social Justice and Empowerment.

2.   It consists of five members including a Chairperson, Vice-Chairperson and three other Members appointed by the President.

3.   NCBC is entrusted with the additional function of grievance redressal of backward classes.

4.   It has all the powers of a civil court while trying a suit.

Which of the given statement/s is/are INCORRECT?

A. 1 and 4 only

B. 1 only

C. 2, 3 and 4 only

D. 3 and 4 only

39. **Consider the following statements with respect to PM SVANidhi Scheme:**

1.   It is a special micro-credit facility plan to provide affordable loans of up to ₹10,000 to street vendors.

2.   Small Industries Development Bank of India is the technical partner for the implementation of the scheme.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

40. **Consider the following statements:**

1.   The Genetic Engineering Appraisal Committee (GEAC) is the apex body that allows for the commercial release of Genetically Modified (GM) crops in India.

2.   GEAC allowed the commercial release of Bt cotton in 2020.

3.   Bt cotton is the only GM crop allowed to be cultivated in India.

Which of the given statement/s is/are INCORRECT?

A. 2 and 3 only

B. 2 only

C. 3 only

D. 1 and 2 only

41. **Bru (or Reang) tribe is recognised as a Particularly Vulnerable Tribal Group (PVTG) in which of the following state/s?**

1.   Assam

2.   Tripura

3.   Mizoram

4.   Arunachal Pradesh

Choose the correct options:

A. 3 and 4 only

B. 1 and 2 only

C. 2 only

D. 1, 2 and 3 only

42. **Consider the following statements about the Deputy Speaker:**

1.   The Deputy Speaker must resign from the original party soon after his/her election to the post.

2.   The Constitution of India states that the position of Deputy Speaker should be offered to the opposition party in India.

3.   The Deputy Speaker can be removed from office by a resolution passed in the Lok Sabha by an absolute majority.

Which of the given statement/s is/are INCORRECT?

A. 3 only

B. 2 and 3 only

C. 1 and 2 only

D. 1, 2 and 3

43. **'SAROD-Ports' is:**

A. A dispute redressal mechanism to facilitate affordable and timely resolution of disputes in the maritime sector.

B. An application launched as a part of the Maritime Crime Programme (MPC) to counter piracy activities in the Indian Ocean.

C. A flagship programme of the Ministry of Shipping to promote port-led development by modernising India's ports.

D. A scheme for providing financial support to oil handling Major Ports for the creation of Tier-I oil spill response facility.

44. **Consider the following statements with respect to Monetisation of deficit:**

1.   One of the methods of monetisation of deficit includes RBI buying government securities directly from the primary market to fund the government's expenses.

2.   The exercise leads to an increase in the total money supply in the system.

3. Monetisation of deficit carries a risk of inflation.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1, 2 and 3

D. 2 and 3 only

45. Consider the following statements with respect to FCRA (Foreign Contribution (Regulation) Act) 2010:

1. Foreign donations to all the NGOs in India are exempted from the provisions of FCRA.

2. No person who receives foreign contribution as per provisions of this Act shall transfer to another person unless that person is also authorized to receive foreign contribution under FCRA.

3. Any organisation of a political nature and any company engaged in the production and broadcast of audio or audiovisual news or current affairs programmes are prohibited from accepting foreign contributions.

Which of the given statement/s is/are correct?

A. 1, 2 and 3 only

B. 2 and 3 only

C. 3 only

D. 1 only

46. Consider the following statements with respect to Comptroller and Auditor-General (CAG):

1. Among the duties performed by CAG is the audit of all expenditures from the Consolidated Fund of India, contingency funds and Public Accounts.

2. The salary, allowances and other terms of service of the Comptroller and Auditor General of India are determined by the Parliament.

3. He/she is appointed by the President.

Which of the given statement/s is/are correct?

A. 2 and 3 only

B. 2 only

C. 1 and 2 only

D. 1, 2 and 3

47. Consider the following statements with respect to "Ranking of States on Support to Startup Ecosystems":

1. Gujarat has been consistently categorised as the best performer in two consecutive editions of startup ranking of states.

2. The ranking is released by NITI Aayog.

3. The ranking is based on seven broad reform areas consisting of thirty action points.

Which of the given statement/s is/are incorrect?

A. 1 only

B. 1 and 2 only

C. 2 only

D. 3 only

48. Which of the following is/are the categories considered under the Climate Smart Cities Assessment Framework (CSCAF):

1. Energy and Green Buildings

2. Urban Planning, Green Cover & Biodiversity

3. Mobility and Air Quality

4. Affordable Housing

5. Water Management

6. Waste Management

7. Self-financing capability

Choose the correct options:

A. 1, 2, 3, 5 and 6 only

B. 1, 2, 5 and 6 only

C. 1, 2, 3, 4 and 7 only

D. 1, 2 and 3 only

49. Which of the following statement/s is/are correct?

1. Ramjet and Scramjet engines do not have a compressor unlike the traditional jet engines.

2. Ramjet engines have subsonic velocity of the gases in the combustion chamber while the Scramjet engines have supersonic velocity in the combustion chamber.

3. Ramjet engines unlike Scramjet engines are most efficient at hypersonic speeds.

Options:

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2 and 3 only

D. 1 only

50. Which of the following pair/s is/are correctly matched?

1. Logistics Exchange Memorandum of Understanding (LEMOA): U.S.

2. Mutual Logistics Support Agreement (MLSA): Australia

3. Reciprocal Provision of Supplies and Services: Japan

4. Reciprocal Logistics Support (ARLS): Russia

Options:

A. 1 only

B. 1, 2 and 4 only

C. 3 and 4 only

D. 1,2,3 and 4

51. Which of the following statement/s is/are correct?

1.   India officially became a full time member of the Shanghai Cooperation Organisation at the Astana summit of the SCO in 2017.

2.   Shanghai Cooperation Organisation has two permanent bodies — the SCO Secretariat based in Beijing and the Executive Committee of the Regional Anti-Terrorist Structure (RATS) based in Tashkent.

Options:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

52. Which of the following gharana is not associated with the Dhrupad style?

A. Dagari

B. Kirana

C. Bettiah

D. Darbhanga

53. Consider the following statements regarding the National Program for Prevention and Control of Cancer, Diabetes, CVD and Stroke (NPCDCS):

1.   The program is being implemented under the National Health Mission.

2.   The NPCDCS program has two components one dealing with cancer and the other dealing with diabetes, CVD and stroke

3.   India is committed to achieving a one-third reduction in Non-Communicable Disease-related deaths by 2030 as part of the Sustainable Development Goals.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

54. Consider the following statements with respect to notifiable diseases:

1.   A notifiable disease is any disease that is required by law to be reported to government authorities.

2.   The Centre has notified several diseases such as cholera, diphtheria, tuberculosis, AIDS.

3.   Failure to report a notifiable disease is a criminal offence.

Which of the given statement/s is/are INCORRECT?

A. 3 only

B. 1 and 2 only

C. 2 and 3 only

D. None of the above

55. Which of these countries have a coastline on the Mediterranean Sea?

1.   Albania

2.   Turkey

3.   Syria

4.   France

5.   Serbia

6.   Israel

Choose the correct option:

A. 1, 2, 3 and 6 only

B. 2, 4 and 5 only

C. 1, 2, 3, 4 and 6 only

D. 3, 4 and 6 only

56. Consider the following statements with respect to the Joint Session of the Parliament:

1.   A joint session is presided over by the Chairman of Rajya Sabha or the Speaker.

2.   The joint sitting of the Parliament is called by the Rajya Sabha Chairman.

3.   In case of a disagreement between both the houses with respect to Constitution Amendment Bills, there is no provision for a joint session of Parliament.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 1 and 2 only

C. 1, 2 and 3 only

D. 2 only

57. Consider the following statements with respect to T-cells:

1.   T cells are a part of the lymphatic system.

2.   T cells originate in the bone marrow and mature in the thymus.

3.   They are responsible for removing the pathogens from the body.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

58. Consider the following statements with respect to Venus:

1. It is the only planet that has no natural satellites.

2. It's sense of rotation is opposite to that of Earth.

3. The atmosphere of Venus contains traces of phosphine gas.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. None of the above

59. Consider the following statements with respect to Enemy Property in India:

1. Movable property is not included under 'enemy properties'.

2. The law of succession does not apply to enemy property.

3. Among the properties left behind by Pakistani nationals, the highest properties are located in the Union Territory of Jammu and Kashmir.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. 1 and 3 only

D. 3 only

60. Consider the following statements with respect to Supplementary Grants:

1. The additional grants required to meet the required expenditure of the government is called Supplementary Grants.

2. Supplementary grants are defined in the Constitution of India.

3. Supplementary grants are presented and passed by the Parliament at the beginning of the financial year following the year in which the expenditure has been incurred.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1 and 3 only

61. Consider the following statements with respect to planet Venus:

1. Venus is the hottest planet in the Solar System.

2. It possesses a dense atmosphere of carbon dioxide.

3. Sulphuric acid is present in the atmosphere of Venus.

Which of the given statement/s is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2 and 3

D. 2 only

62. Consider the following statements with respect to Department Related Standing Committees (DRSCs):

1. The DRSCs were created for the first time in 1993.

2. The members are nominated by the Speaker and the Rajya Sabha Chairman for a term of 1 year.

3. Ministers cannot be nominated as the members of the committee

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 1 and 3 only

C. 1 and 2 only

D. None of the above

63. Consider the following statements:

1. An Interest Rate Derivative (IRD) is a contract whose value is derived from one or more interest rates or interest rate indices.

2. An interest rate swap is a forward contract in which one stream of future interest payments is exchanged for another based on a specified principal amount.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

64. "Akatsuki", recently in news is:

A. A United Arab Emirates' satellite on a mission to orbit the planet Mars.

B. A Japanese space probe tasked to study the atmosphere of Venus.

C. China's latest mission to study the atmosphere of Mars.

D. The mission of NASA to map the entire surface of Venus.

65. Consider the following statements with respect to the Defence Technology and Trade Initiative (DTTI):

1. It is a mechanism between Russia and India, established to strengthen the opportunities in the field of defence.

2. Its aim is to bring sustained leadership focus to the bilateral defence trade relationship and create opportunities for co-production and co-development of defence equipment.

3. DTTI was launched in 2020.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 and 3 only

C. 3 only

D. 1 and 3 only

66. Which of the following committees/commissions dealt with the 'reorganization of states'?

1. JVP Committee

2. Fazl Ali Commission

3. Dhar Commission

4. Kothari Commission

Options:

A. 1, 2 and 3 only

B. 2 only

C. 2 and 3 only

D. 2, 3 and 4 only

67. Consider the following statements with respect to the DISHA Scheme:

1. It is an early intervention and school readiness scheme for children in the age group of 0-14 years.

2. It covers children with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities.

3. The scheme also provides housing and care services throughout the life of the person with disability.

Which of the given statement/s is/are INCORRECT?

A. 3 only

B. 1 and 3 only

C. 2 and 3 only

D. None of the above

68. Consider the following statements with respect to Institution or Institute of National Importance (INI):

1. INI is a status conferred by an act of the Parliament, on a public institution of higher education in India.

2. Institute of Teaching and Research in Ayurveda (ITRA) will be the first institution to be granted the INI status in the AYUSH sector.

3. INI is defined as an institution that serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 3 only

C. 1, 2 and 3

D. None of the above

69. Consider the following statements:

1. Ramsar Convention was established by UNESCO.

2. Chilika Lake and Keoladeo National Park were the first ones to be recognized as Ramsar Sites of India.

3. Rajasthan has two Ramsar sites.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. 1 and 3 only

D. None of the above

70. Consider the following statements with respect to Gwadar Port:

1. It is a warm water, deep sea port.

2. The port is located in Pakistan's Balochistan province.

3. The China Pakistan Economic Corridor will connect Gwadar Port with China's Xinjiang province.

Which of the given statement/s is/are INCORRECT?

A. 2 only

B. 1 and 2 only

C. 2 and 3 only

D. None of the above

71. Consider the following statements with respect to Plasma:

1. In the blood, apart from RBC, WBC and platelets, all the other fluid content is known as Plasma.

2. Plasma contains antibodies.

3. It makes up more than 55% of blood in the human body.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 1, 2 and 3

C. 1 and 2 only

D. 2 only

72. Consider the following statements with respect to the National Human Right Commission:

1. It is a constitutional body.

2. President appoints the Chairman and members of NHRC on the recommendation of a high-powered committee headed by the Prime Minister.

3. It has the power to intervene in any judicial proceedings involving any allegation of violation of human rights pending before a court with the approval of such court.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 3 only

C. 2 and 3 only

D. 2 only

73. Consider the following statements with respect to Members of Parliament Local Area Development Scheme (MPLADS):

1. It is a centrally-sponsored scheme.

2. Under the scheme, funds are released in the form of grants in-aid directly to the district authorities.

3. The funds released under the scheme are non-lapsable.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 2 and 3 only

C. 1, 2 and 3

D. 1 and 2 only

74. Consider the following statements with respect to Nandankanan Zoological Park:

1. It is located in Madhya Pradesh.

2. It hosts India's only pangolin conservation breeding centre.

3. It is the only zoological park in India to become an institutional member of World Association of Zoos and Aquarium (WAZA).

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 and 3 only

C. 1 and 2 only

D. None of the above

75. What is the classification of Sloth Bears in the IUCN Red List:

A. Vulnerable

B. Least Concerned

C. Near Threatened

D. Endangered

76. Consider the following statements with respect to National Bamboo Mission:

1. It is a sub-scheme under Mission for Integrated Development of Horticulture (MIDH).

2. National Bamboo Mission is a Central Sector scheme.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

77. Which of the following existing laws are going to be subsumed under the proposed Social Security Code Bill?

1. Provident Fund Act, 1952

2. Maternity Benefit Act, 1961

3. Unorganised Workers' Social Security Act, 2008

4. Contract Labour Act, 1970

5. Inter-State Migrant Workers Act, 1979

Which of the given statement/s is/are correct?

A. 1, 2 and 3 only

B. 1, 2, 3 and 4 only

C. 1, 2, 3, 4 and 5

D. 1 and 3 only

78. Which of the following could be considered as possible benefits of the proposed Vehicle scrappage policy?

1. Will help reduce Current account deficit.

2. Will help improve Capital account inflows in India.

3. Will help improve Balance of payments position of India.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

79. Which of the following statement/s is/are correct?

1. CRISPRs are specialized stretches of DNA.

2. The protein Cas9 is an enzyme that acts like a pair of molecular scissors, capable of cutting strands of DNA.

3.   CRISPR technology is a powerful tool for editing genomes.

Which of the given statement/s is/are correct?

A. 1 and 2 only

B. 3 only

C. 1, 2 and 3

D. 2 and 3 only

80. Which of the following statement/s is/are correct?

1.   Scrub typhus is a disease caused by a virus called Orientia tsutsugamushi.

2.   Scrub typhus does not spread from person to person.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

81. Consider the following statements with respect to the Kakatiyas:

1.   They were initially the feudatories of the Western Chalukyas of Kalyana.

2.   Prataparudra I established the first sovereign dynasty of Kakatiyas.

3.   Ganapathi Deva and Rudramadevi are the notable rulers of the Kakatiya dynasty.

Which of the given statement/s is/are correct?

A. 3 only

B. 2 and 3 only

C. 1, 2 and 3

D. None of the above

82. Consider the following statements with respect to the Integrated Disease Surveillance Programme (IDSP):

1.   It was started by the Ministry of Health and Family Affairs with the assistance of the World Health Organisation.

2.   It was launched in the backdrop of the COVID-19 pandemic in 2020 to strengthen the decentralized laboratory based IT enabled disease surveillance system.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

83. "Tulung La" is located in:

A. Arunachal Pradesh

B. Sikkim

C. Ladakh

D. Himachal Pradesh

84. Which of the given pairs are correctly matched?

1.   Chendamangalam Dhoties – Kerala

2.   Muga Silk – Assam

3.   Arani Silk – Tamil Nadu

4.   Kandangi Saree – Karnataka

Choose the correct option:

A. 2 and 3 only

B. 1, 2 and 3 only

C. 3 and 4 only

D. 1, 2, 3 and 4

85. Consider the following statements with respect to Cyanobacteria:

1.   Cyanobacteria are a group of photosynthetic bacteria.

2.   They contain phycocyanin which they use to capture light for photosynthesis.

3.   They contain 'chlorophyll a', the photosynthetic pigment that plants use.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1, 2 and 3

D. 1 and 3 only

86. West Bank is bordered by:

1.   Mediterranean Sea

2.   Dead Sea

3.   Israel

4.   Jordan

5.   Lebanon

Choose the correct option:

A. 2, 3 and 4 only

B. 2, 3 and 5 only

C. 1, 3 and 4 only

D. 1, 3, 4 and 5 only

87. Consider the following statements:

1. Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09.

2. Basel III regulations are designed to enhance the quality and quantity of capital held by banks.

3. The Secretariat of the Basel Committee on Banking Supervision is located at the Bank for International Settlements (BIS).

Which of the given statement/s is/are INCORRECT?

A. 3 only

B. 1 and 2 only

C. 1 only

D. None of the above

88. Consider the following statements with respect to Neutrinos:

1. Neutrinos occur in five different flavours and carry positive electrical charge.

2. They interact with gravity.

3. They are extremely difficult to detect because they have very little interaction with matter.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. 2 and 3 only

D. None of the above.

89. Which of the following is/are the function/s of Environment Pollution Control Authority (EPCA):

1. To protect and improve the quality of the environment and prevent and control environmental pollution in the National Capital Region.

2. To enforce the Graded Response Action Plan (GRAP) in NCR.

3. Effective and expeditious disposal of cases relating to environmental protection in NCR.

4. Provision of relief and compensation to the victims of pollution and other environmental damage in the NCR.

Choose the correct option:

A. 1 and 2 only

B. 1, 3 and 4 only

C. 1 and 4 only

D. 1, 2, 3 and 4

90. Consider the following statements:

1. The Central Government can issue both treasury bills and bonds.

2. The State Governments issue only bonds.

3. The purpose of issuing State Development Loans is to meet the budgetary needs of state governments.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 only

C. 1 and 3 only

D. None of the above

91. Which of the following is/are incorrect about the Air Quality Index (AQI)?

1. There are five AQI categories.

2. AQI is an index for reporting daily air quality.

3. AQI is calculated for eight major air pollutants.

Options:

A. 2 and 3 only

B. 2 only

C. 1 only

D. 3 only

92. Consider the following statements with respect to the National Investigation Agency (NIA):

1. It acts as the Central Counter-Terrorism Law Enforcement Agency.

2. As per the NIA Act, Central Government can order NIA to take over the investigation of any scheduled offense anywhere in India.

3. Officers of the NIA are drawn from the Indian Police Service and Indian Revenue Service.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. 1, 2 and 3

D. 1 and 3 only

93. Consider the following statements with respect to the Consolidated Fund of India:

1. It includes all revenues received by the government by way of direct taxes and indirect taxes.

2. The money borrowed and receipts from loans given by the government are a part of the Consolidated Fund of India.

3. Revenue generated from asset sale, earnings from state-run companies, disinvestment receipts go into the Consolidated Fund of India.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 and 3 only

C. 3 only

D. None of the above

94. **Which of the given pair/s is/are NOT correctly matched?**

1. Farakka Barrage – West Bengal

2. Prakasam Barrage – Telangana

3. Jobra Barrage – Maharashtra

4. Hathnikund Barrage – Haryana

Options:

A. 1, 2 and 4 only

B. 2 and 3 only

C. 2, 3 and 4 only

D. 2 only

95. **Consider the following statements with respect to Adjournment Sine Die:**

1. It is the termination of a session of the House by an order made by the President.

2. It means terminating a sitting of Parliament for an indefinite period.

3. It ends the very life of the existing House, and a new House is constituted after general elections are held.

4. The presiding officer of a House can call a sitting of the House at any time after the House has been adjourned sine die.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 2 and 4 only

C. 2 only

D. 1 and 2 only

96. **India is a signatory to which of the following convention/s?**

1. U.N. Convention on Narcotic Drugs – 1961

2. U.N. Convention on Psychotropic Substances – 1972

3. U.N. Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances – 1988

4. UN Convention against Transnational Organised Crime- 2000

Choose the correct option:

A. 3 only

B. 1 and 4 only

C. 1, 2, 3 and 4

D. 3 and 4 only

97. **Consider the following statements with respect to the Innovate in India (I3) program:**

1. It was launched under the National Health Mission.

2. It has received financial assistance from the World Health Organisation.

3. It has been launched to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the biopharma sector.

Which of the given statement/s is/are correct?

A. 3 only

B. 2 and 3 only

C. 1, 2 and 3

D. None of the above

98. **Consider the following statements with respect to the Conference on Interaction and Confidence-Building Measures in Asia (CICA):**

1. It is headquartered in China.

2. India is a member of CICA since its inception.

3. For becoming a member of CICA, a state must have at least a part of its territory in Asia.

Which of the given statement/s is/are INCORRECT?

A. 1 and 3 only

B. 1 only

C. 1, 2 and 3

D. None of the above

99. **Consider the following statements with respect to Lok Adalats:**

1. National Legal Services Authority (NALSA), along with other Legal Services Institutions, conducts Lok Adalats.

2. Lok Adalats have been given statutory status.

3. The jurisdiction of the Permanent Lok Adalats is up to Rs. One Lakh.

4. The award of the Permanent Lok Adalat is final and binding on all the parties.

Which of the given statement/s is/are INCORRECT?

A. 1 and 2 only

B. 2 and 4 only

C. 3 only

D. 3 and 4 only

100. **Consider the following statements with respect to the Deen Dayal Upadhyaya Grameen Kaushalya Yojana:**

1.   It is a part of the National Rural Livelihood Mission (NRLM).

2.   It is a placement linked skill development program.

3.   It is an initiative of the Ministry of Skill Development and Entrepreneurship.

Which of the given statement/s is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1, 2 and 3

D. 1 and 3 only

101.   Consider the following statements:

1.   Speaker is empowered to place a member of the Lok Sabha under suspension.

2.   The Speaker alone has the authority for revocation of the suspension order issued against a Lok Sabha member.

3.   The Rajya Sabha Chairman has the power to suspend a member of the house.

Which of the given statement/s is/are INCORRECT?

A. 2 only

B. 1 and 3 only

C. 2 and 3 only

D. None of the above

102.   Consider the following statements with respect to Asian Infrastructure Investment Bank (AIIB):

1.   Pakistan and Singapore are among the founding members of the AIIB.

2.   It is headquartered in Manila, Philippines.

3.   China, India and Germany are the members with the three largest share of voting power in AIIB.

Which of the given statement/s is/are correct?

A. 3 only

B. 1, 2 and 3 only

C. 1 and 3 only

D. 1 only

103.   Consider the following statements with respect to the Gulf of Mannar:

1.   The Gulf of Mannar region is one of the four major coral reef areas in India.

2.   Gulf of Mannar between Rameswaram and Tuticorin is declared as a Marine National Park and Biosphere Reserve.

3.   It a significant habitat for the dugong.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 only

D. 1, 2 and 3

104.   Consider the following statements with respect to "JIMEX":

1.   It is a trilateral maritime exercise between India, Japan and the U.S.

2.   It is conducted biannually.

3.   JIMEX series of exercises commenced in 2012 with a special focus on maritime security cooperation.

Which of the given statement/s is/are correct?

A. 2 and 3 only

B. 3 only

C. 1, 2 and 3

D. None of the above

105.   Which of the following are recognised as Classical languages in India?

1.   Tamil

2.   Odia

3.   Urdu

4.   Hindi

5.   Malayalam

6.   Maithili

Choose the correct option:

A. 1, 2, 3, 4, 5 and 6

B. 1, 2, and 5 only

C. 3, 4, 5 and 6 only

D. 1 and 5 only

106.   Consider the following statements with respect to the Wakhan Corridor:

1.   It is a narrow strip in North-eastern Afghanistan.

2.   It separates Tajikistan from China.

Which of the given statement is/are INCORRECT?

Options:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

107.   Consider the following statements with respect to Copernicus Programme:

1.   It is an Earth observation programme.

2.   The programme is co-ordinated and managed by National Aeronautics and Space Administration (NASA).

3.   It was previously known as Global Monitoring for Environment and Security programme (GMES).

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 3 only

C. 1, 2 and 3 only

D. 1 and 2 only

108.   Sajjangarh wildlife sanctuary, recently in news, is situated in:

A. Gujarat

B. Madhya Pradesh

C. Rajasthan

D. Uttar Pradesh

109.   Which of the following are Kharif crops?

1.   Wheat

2.   Rice

3.   Cotton

4.   Mustard

5.   Groundnut

Choose the correct option:

A. 1, 2, 3 and 5 only

B. 2, 3 and 5 only

C. 2, 3, 4 and 5 only

D. 2 and 3 only

110.   Nagorno-Karabakh region is a subject of dispute between:

A. Armenia and Azerbaijan

B. Bhutan and China

C. Tajikistan and Uzbekistan

D. Israel and Palestine

111.   Naujawan Bharat Sabha was founded by:

A. Bhagat Singh

B. Chandra Shekar Azad

C. Prafulla Chandra Chaki

D. Khudiram Bose

112.   Which of the following pairs are correctly matched?

1.   World Economic Outlook: Organisation for Economic Co-operation and Development

2.   Global Competitiveness Report: World Economic Forum

3.   Ease of Doing Business Report: World Trade Organisation

4.   Global Economic Prospects Report: World Bank

Choose the correct option:

A. 1, 2 and 3 only

B. 2 and 4 only

C. 1, 2, 3 and 4

D. 2, 3 and 4 only

113.   Consider the following statements with respect to the Monetary Policy Committee (MPC):

1.   The RBI Governor chairs the committee and enjoys a veto power.

2.   Members of the MPC will be appointed for a period of four years and shall not be eligible for reappointment.

3.   No government official will be nominated to the MPC.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 2 and 3 only

C. 1 and 3 only

D. None of the above

114.   Consider the following statements with respect to the Marginal Standing Facility (MSF):

1.   It is the rate at which banks can borrow overnight funds from RBI against the approved government securities.

2.   The MSF rate is always lesser than the repo rate.

3.   An increase in the cap for MSF will decrease liquidity with banks.

Which of the given statement/s is/are correct?

A. 2 only

B. 1 and 2 only

C. 1 only

D. 1, 2 and 3

115.   Which of these countries border the Caspian Sea?

1.   Iran

2.   Russia

3.   Armenia

4.   Azerbaijan

5.   Turkmenistan

Options:

A. 1, 2, 3 and 5 only

B. 2, 3 and 5 only

C. 1, 2, 4 and 5 only

D. 1, 2, 3, 4, 5 and 6

116.   Consider the following statements with respect to the Liquidity Coverage Ratio (LCR):

1.   It indicates the proportion of highly liquid assets held by banks to ensure their ability to meet short-term obligations.

2.   The LCR is calculated by dividing a bank's high-quality liquid assets by its total net cash flows, over a 30-day stress period.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

117.   Consider the following statements with respect to Mizoram:

1.   Mizoram shares an international border with Myanmar only.

2.   It has the highest proportion of tribal population among all the states in India.

3.   Tripura, Manipur, Assam and Nagaland border the state.

Which of the given statement/s is/are correct?

A. 1 and 3 only

B. 1, 2 and 3

C. 2 and 3 only

D. 2 only

118.   Consider the following statements with respect to Cat Que virus:

1.   It infects both humans and livestock species.

2.   It is an arbovirus.

3.   Pigs are its primary mammalian hosts.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 and 3 only

C. 1, 2 and 3

D. None of the above

119.   Consider the following statements with respect to RBI guidelines on Priority Sector Lending (PSL):

1.   All scheduled commercial banks and foreign banks with a sizable presence in India must set aside 40% of their Adjusted Net Bank Credit (ANDC) for PSL.

2.   Regional rural banks, co-operative banks and small finance banks have to allocate 75% of Adjusted Net Bank Credit (ANDC) to PSL.

3.   Bank finance to start-ups up to Rs. 50 crore shall be considered as PSL.

Which of the given statement/s is/are INCORRECT?

A. 1 only

B. 1 and 2 only

C. 3 only

D. None of the above

120.   Consider the following statements with respect to the Malabar Exercise:

1.   It is a bi-annual Trilateral Maritime Exercise conducted between the navies of India, the United States and Japan.

2.   It started off as a bilateral exercise between India and Japan in 1992.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

ANSWER KEYS

1	A		21	C
2	C		22	D
3	C		23	B
4	B		24	B
5	C		25	C
6	A		26	D
7	D		27	C
8	A		28	A
9	B		29	C
10	D		30	D
11	C		31	D
12	A		32	C
13	B		33	A
14	C		34	C
15	D		35	A
16	B		36	C
17	C		37	A
18	C		38	B
19	D		39	C
20	C		40	B

41	C
42	D
43	A
44	C
45	B
46	D
47	C
48	A
49	A
50	D
51	C
52	B
53	D
54	D
55	C
56	B
57	D
58	A
59	C
60	B

61	C
62	D
63	D
64	B
65	D
66	A
67	B
68	C
69	D
70	D
71	B
72	C
73	C
74	A
75	A
76	B
77	A
78	D
79	C
80	B

81	C		101	C
82	C		102	D
83	A		103	D
84	B		104	B
85	C		105	B
86	A		106	B
87	D		107	B
88	A		108	C
89	A		109	B
90	D		110	A
91	C		111	A
92	C		112	B
93	D		113	A
94	B		114	C
95	B		115	C
96	C		116	C
97	A		117	D
98	B		118	C
99	C		119	D
100	A		120	D

MAINS PRACTICE QUESTIONS

History

1.   Discuss the history of the formation of linguistic states in post-independent India. Examine the significance and concerns associated with the formation of these linguistic states. (15 marks, 250 words)

Social Issues

1.   Increasing the minimum age of marriage for women to 21 years may not really benefit women. Comment. (10 marks, 150 words)

2.   The processes followed before; during and after evictions of slums often result in the violation of the human rights of slum dwellers. Examine the impact of city beautification projects on slums. (15 Marks 250 Words)

3.   Discuss the major provisions of the Rights of Persons with Disabilities Act, 2016 and recommend further measures for the true empowerment of persons with disabilities. (10 marks, 150 words)

4.   The discrimination and lack of understanding of the special needs of the disabled and their rights have serious consequences for both the disabled as well as the larger society. Comment. (10 marks, 150 words)

5.   The examples of women leadership garnering appreciation for effective handling of the pandemic presents a case for India to ponder over the low representation of women in the legislatures. Comment. (15 Marks, 250 Words).

6.   During a disaster, whether man-made or natural, poor and oppressed classes are exposed to greater adversity against the backdrop of intergenerational social disadvantage and lack of social security. Analyse the statement in the light of the ongoing COVID-19 pandemic and suggest measures. (15 Marks, 250 Words).

7.   Examine the impact the 'one child policy' has had in China and suggest what insights India can draw from China's experience in handling its population problem. (15 marks, 250 words)

GS Paper 2

Polity and Governance

1.   Discuss the need for data sharing as propounded by the Gopalakrishnan Committee on Non-Personal Data Governance Framework and its importance in building a strong and fair digital economy. (15 marks, 250 words)

2.   Analyze the need for the openness of government-owned data sets and enumerate the existing measures and policies to promote data openness. Also discuss the concerns with respect to their implementation. (15 marks, 250 words)

3.   The gross under-investment in the youth of India would have critical consequences for India. Comment. Also suggest measures needed to overcome the current concerns. (15 marks, 250 words)

4.   Despite the previous attempts made at the decentralization of power in India, strong local governance remains the unfinished agenda to make India's democracy stronger and deeper. Comment. (10 marks, 150 words)

5.   What is meant by Blockchain technology? Evaluate its potential in enabling a remote voting system in India. (10 marks, 150 words)

6.   The time is ripe for the adoption and popularization of virtual courts in India. Critically comment. (15 marks, 250 Words)

7.   Discuss the major provisions of the Foreign Contribution (Regulation) Act (FCRA) and the need for such legislation. (10 marks, 150 words)

8.   As long as there is no effort to obstruct the course of justice, criticism, whether fair or unfair, does not warrant initiation of contempt proceedings. Comment. (15 Marks, 250 Words).

9.   One of the few positive outcomes of COVID-19 is the creation of new alliances and coalitions among social sector organisations. Would the amendments to the Foreign Contribution (Regulation) Act (FCRA) adversely affect India's NGOs? Critically analyse. (15 Marks, 250 Words)

10.   While the Standing Committees have improved the Parliament's ability to examine policies better, there are several challenges that need further attention. Comment. (15 Marks, 250 Words)

Education

1.   Has the NEET exam been successful in ensuring equity in admission to higher educational institutions? Critically examine and suggest the best way forward. (15 Marks, 250 Words)

Health

1.   Discuss the concerns associated with the proposed National Digital Health Mission. (10 marks, 150 words)

2.   In light of the increasing cancer burden in India, enumerate the steps taken by the government and also suggest necessary measures to help tackle this emerging challenge. (15 marks, 250 words)

3.   Discuss the reasons behind health care deficits in India and comment on the importance of health workers' safety and well-being in ensuring patient safety. (10 Marks, 150 Words)

International Relations

1.   Explain how the Indian government's decision to ban Chinese apps upset China's ambitious goal of becoming a digital superpower. (10 Marks, 150 Words)

2.   What is the 13th amendment to the Sri Lankan constitution? Discuss the significance of the 13th amendment and what are some of the concerns associated with it? (15 marks, 250 words)

3.   Given the historically dynamic nature of international relations, evaluate the need for India to abandon its non-alignment policy and consider aligning more closely with the U.S. to meet the immediate threat posed by an assertive China. Are there any challenges or concerns associated with such an approach? (15 marks, 250 words)

4.   The Quadrilateral Security Dialogue (Quad) has regained strength in the face of an aggressive China. Analyse India's dilemma with respect to closer coordination with the Quad. (15 Marks, 250 Words).

5.   Analyse India's role in Afghan peace process and examine how the developments in Afghanistan are closely related to strategic security of India. (15 Marks, 250 Words).

6.   The way the international system is structured poses enormous obstacles to peace. In light of the statement, examine the role of permanent members of the UN Security Council in the ongoing wars. (15 Marks, 250 Words).

7.   Israeli foray into the Gulf has the potential to disrupt the existing politico-economic architecture India has carefully built with the Gulf Cooperation Council (GCC) states. Analyse. (15 Marks, 250 Words)

8.   Discuss the impact of the ongoing border clashes between India and China on India-Russia ties. (15 Marks, 250 Words)

9.   Reforms are needed in the United Nations to strengthen its legitimacy, representativeness and relevance in order to address the realities of the present. Discuss. (15 Marks, 250 Words).

10.   The retreat from multilateralism would undermine the UN's capacity to face diverse challenges. Discuss. (10 Marks, 150 Words)

11.   What do you understand by "Global commons"? Discuss how governing the global commons is the defining challenge for current and future generations. (15 Marks, 250 Words)

GS Paper 3

Economy

1.   The current design and implementation of the GST system have failed to deliver on the promise of enhanced economic growth and tax buoyancy. Analyze. Also, suggest suitable changes in the GST system to attain these goals. (15 marks, 250 words)

2.   In light of the recent estimates of quarterly growth rates for India, there are concerns that the economic contraction may not be just a transient phenomenon and there is the possibility of an extended slowdown and a very slow turnaround. Comment. (10 marks, 150 words)

3.   Given the concerns of an extended economic slowdown, discuss possible interventions to revive the economic growth in India. (15 marks, 250 words)

4.   What do you understand by Force Majeure? Discuss when it can be invoked and its implications. (10 Marks, 150 Words)

5.   The move to produce automobile components domestically and reducing the dependence on imports is a significant step forward. Comment. Enumerate the government policies and schemes to incentivize and promote domestic production. (15 marks, 250 words)

6.   Analyze the reasons for several of the power distribution companies (Discoms) in Indian states being financially stressed and suggest suitable remedies to address this situation. (10 marks, 150 words)

7.   The risk of weakening demand and shrinking supply, along with poor investment sentiments and government's fiscal constraints spell a difficult phase for the Indian economy. Analyze. (10 marks, 150 words)

8.   What are the significance and concerns with respect to GM crops in the Indian context? (10 marks, 150 words)

9.   As against the existing views being expressed of the agricultural sector leading India's economic revival, there is an underlying distress in the agricultural sector that needs to be addressed to avoid the occurrence of a vicious economic cycle in India. Comment. (15 marks, 250 words)

10. The decision to ban Chinese apps in India is not only a geopolitical move but can also have a significant positive economic impact for India. Comment. (15 marks, 250 words)

11. Given the high likelihood of the steep economic contraction leading to an intense unemployment problem in India, suggest what measures are required to ensure the livelihoods of workers both in urban and rural areas. (15 marks, 250 words)

12. The World Bank's 'Doing Business' index encourages countries to slash down vital regulations. However sidestepping societal costs of deregulating pollution, worker safety, and health risks could have a detrimental impact in the long run. Comment. (10 marks, 150 words)

13. The fact that the unorganized sector accounts for a significant part of the Indian economy does not augur well for the economic and social development process in India. Comment. (10 marks, 150 words)

14. What are the concerns raised by the farmers and the states on the reform measures announced by the government to deal with the issues in the agricultural marketing? (15 Marks, 250 Words).

15. The move to amalgamate the existing large number of state and central labour laws into four labour codes should, apart from helping improve ease of compliance, must also help uphold labour welfare. Comment. (15 marks, 250 words)

16. Examine the concerns associated with the three codes introduced by the government as part of the Labour law Reforms. (15 Marks, 250 Words).

17. What is Cess? Analyze how increasing share of cess in the Union government's tax receipts has a direct impact on fiscal devolution. Suggest suitable measures to overcome this concern. (10 Marks, 150 Words).

18. What are the major concerns with respect to recent agriculture market reforms introduced by the Government? Also discuss the government's rationale for the recent reforms. (15 Marks, 250 Words).

19. India's commitment to international treaties and the rule of law is instrumental in attracting and retaining foreign investment in India. Elucidate. (15 Marks, 250 Words)

20. At a time when the COVID-19 pandemic has exposed the lack of basic safety nets for large sections of the labour force, the introduction of the Labour Codes is a step in the right direction to bring about a transformational impact on labour empowerment in the country. Critically comment. (15 Marks, 250 Words)

21. Investor-State Dispute Settlement (ISDS) plays an important role in fostering international rule of law. Critically examine. Also analyse the impact that multiple international arbitrations could have on India's reputation as an investment destination. (15 Marks, 250 Words)

Environment and Ecology

1. In the light of India's poor performance in the Environment Performance Index, 2020, discuss the major concerns with respect to environmental conservation efforts in India. (10 marks, 150 words)

2. What are the concerns associated with the current conservation-prioritized Forest Policy structure in India? Discuss the need to have a forest policy envisaging equal importance to restoration, conservation and production. (15 marks, 250 words)

3. Should India consider not making new investments in coal after 2020 in order to allay the risk of being seen as an unreliable climate saviour? What are the consequences if it does so? (15 Marks, 250 Words).

Internal Security

1. Discuss the mandate of the National Investigation Agency (NIA). Analyse the impediments in its effective functioning. (10 Marks, 150 Words).

Science and Technology

1. The Mastering of the air-breathing scramjet technology and the successful testing of the hypersonic technology demonstrator vehicle (HSTDV) hold immense significance for India. Comment. (10 marks, 150 words)

2. What is meant by cloud computing? Discuss its significance. (10 marks, 150 words)

INTERVIEW TRANSCRIPT

Candidate Details:

- Name: Anubhav Singh
- AIR: 8 (CSE 2017)
- Optional: Mathematics

Personal Details:

- Education: B.Tech, IIT Roorkee
- Home town: Allahabad
- Hobbies: International Cinema and Literature

Work-experience

- IRS IT

Chairman of the Interview Board: Ms Smita Nagaraj

Questions asked by the interview board

On Education

- How would you improve the quality of education?
- Issues with Higher Education in India and what would be the suggestions to improve?
- Are private universities good according to you? What are the concerns associated with them?
- What is innovation? Suggest an innovative idea to improve higher education in India.

On Security

- What is AFSPA? Should it be repealed?

On International Relations Issue?

- Could we have used 93,000 Pakistani Prisoners of War (POWs) to solve the Kashmir issue?

On Economy

- What do you think about loan waivers?
- What are the benefits and challenges of moving from BS 4 to BS 6 emission norms?

Questions based on Optional

- Difference between real number natural number and imaginary number.

- When is National Mathematics Day celebrated and why?

- Contributions of Srinivasa Ramanujan

- What is game theory?

Previous Employment

- You are already in the IRS. Are you satisfied?

- What would you like better raids or tax policy formulation?

General Questions

- Who is the most remarkable person you have met? (His friend who was in the dairy business.)

    * What is the benefit of Desi cow milk over Jersey cow?

    * What is more important, milk production increase or indigenous breeds' protection?

- What would be your priorities as District Collector?