

Monthly Current Affairs

May - 2020

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POLITY

1. 'Darbar Move' burdens exchequer, says J&K HC

Context:

- The Jammu and Kashmir High Court has asked the Centre and the Union Territory (UT) administration to take a final call on the continuation of the 148-year-old practice of shifting capitals annually between Srinagar and Jammu, which burdens the exchequer.

Details:

- The court observed that the Darbar Move results in wastage of tremendous amount of time, efforts and energy on inefficient and unnecessary activity.
 - * Over 10,000 employees shift capital annually.
 - * Hundreds of trucks are usually plied to carry furniture, office files, computers, and other records to the capital.
- Evaluating the cost incurred by the Darbar Move on the exchequer, the court noted that if the practice was rationalised, the amount of money, resources and time which could be saved, could be utilised towards the development of the Union Territory, which has otherwise witnessed much turmoil.
- Over the years, there have been voices raised against the century-old practice which involves heavy funding towards ensuring the smooth conduct of the move.
- However, the regional parties advocate the continuation of the practice to help in the emotional integration between two diverse regions of J&K.

Darbar Move:

- It is a bi-annual movement of the 'darbar' between Jammu and Srinagar.
- It is the name given to the bi-annual shift of the secretariat and all other government offices of Jammu and Kashmir from one capital city to another.
- From May to October, governmental offices are housed in the state's summer capital, Srinagar, and the other six months in its winter capital, Jammu.
- The practice was introduced in 1872 by a Dogra monarch to escape the harsh winters of the Kashmir Valley.

2. Press Freedom

- World Press Freedom Day is popularly known as World Press Day
- It is one of the events planned, organised and promoted by the United Nations, observed annually on May 3 since 1993.

- The day is celebrated to raise awareness regarding the importance of freedom of the press.
- It is a day of support for media which are targets for the restraint, or abolition, of press freedom. It is also a day of remembrance for those journalists who lost their lives in the pursuit of a story.

World Press Freedom Day 2020: Theme

- The theme of World Press Freedom Day 2020, "Journalism without Fear or Favour"

The Sub-themes for this year are:

- Safety of Women and Men Journalists and Media Workers
- Independent and Professional Journalism free from Political and Commercial Influence
- Gender Equality in All Aspect of the Media

World Press Freedom Conference 2020

- The Global conference provides an opportunity to journalists, civil society representatives, national authorities, academics and the broader public to discuss emerging challenges to press freedom and journalists' safety and to work together on identifying solutions.

Quotes

- "We have to uphold a free press and freedom of speech- because, in the end, lies and misinformation are no match for the truth." -Barack Obama
- "The press should do what it can to minimise the abuse of power (self-scrutiny can help and so can competition), but we should also try to understand with clarity why and how press freedom can enrich human lives, enhance public justice, and even help to promote economic and social development." -Amartya Sen.

Reporters Without Borders/Reporters sans frontières (RSF)

- It is a leading international non-profit and non-governmental organization that safeguards the right to freedom of information.
- Its mandate is to promote free, independent and pluralistic journalism and to defend media workers
- Its advocacy is founded on the belief that everyone requires access to the news and information, inspired by Article 19 of the UN Declaration of Human Rights that recognises the right to receive and share information regardless of frontiers, along with other international rights charters

World Press Freedom Index

- The Press Freedom Index is an annual ranking of countries compiled and published by reporters Without Borders based upon the organization's own assessment of the countries' press freedom records in the previous year.
- It evaluates the situation for journalists each year in 180 countries and territories,

2020 Report

It suggests that the next ten years will be pivotal for press freedom because of converging crises affecting the future of journalism:

- a geopolitical crisis (due to the aggressiveness of authoritarian regimes);
- a democratic crisis (due to polarisation and repressive policies);
- a crisis of trust (due to suspicion and even hatred of the media); and
- an economic crisis (impoverishing quality journalism).

India's Ranking

- India now ranks at 142 out of 180 countries (2020).
 - * In 2017, it was at 136.
 - * 2018 and 2019 it slipped two ranks, to be at 138 and 140 respectively.
- The slip in the ranking was due to communications blackout in Indian-administered Kashmir.
 - * In o The blackout has made increasingly difficult for journalists to report on what is happening in the region and this played a significant role in that shift.
- The survey has placed India's neighbouring countries, including Bhutan, Nepal, and Sri Lanka, above India.

Global Ranking

- Norway is ranked first in the Index for the fourth year running.
- China at 177, is just three places above North Korea, which is at 180.

3. Off course: On Cauvery water issue

Background

- In February 2018, the Supreme Court had directed the Union Water Resources Ministry which now renamed as Jal Shakti Ministry to form the Cauvery Water Management Authority (CWMA)
- Acting on the Supreme Court's direction, the Centre in June 2018 constituted Cauvery Water Management Authority (CWMA) to address the dispute over sharing of river water among Tamil Nadu, Karnataka, Kerala and Puducherry.

CWMA

- The CWMA will be headed by the Chairman

- The Authority will have two whole-time members and six part-time members, including one each nominated from the riparian States.

Context

- The Central Govt had issued a notification on April 24 for bringing the Cauvery Water Management Authority (CWMA) under the administrative control of the Union Ministry of Jal Shakti.

Concerns with respect to the notification

- Several political parties, especially the Opposition, and some farmers' associations were upset with the notification on the ground that the move has reduced the Authority to a "puppet" of the Centre.
- The authority was formed in 2018 and it was under Union ministry of water resources as an independent body.
- The authority was supposed to be an independent body, but now it has been brought under the administrative control of the Central government
 - * The Centre's move will erode autonomy and dilute the powers of the authority
 - * The whole idea of being an independent body is sidelined if it is brought under the ministry

This argument falls flat

- Even in the case of its predecessor, the Cauvery River Authority (1998-2013) with the Prime Minister as the Chairman and Chief Ministers of the basin States as Members, the Union Ministry of Water Resources had administrative control.
- Besides, there are eight inter-State river water boards under the Jal Shakti Ministry.
- Along with the CWMA, four other bodies, including the Krishna and the Godavari Water Management Boards — which have been in existence since 2014 following the re-organisation of Andhra Pradesh — were designated to be under the Ministry.

Notification addresses administrative issues

- The formalisation of the CWMA's status corrects an apparent lapse on the Ministry's part and addresses administrative issues.
- Apart from meeting the procedural requirement, the notification does not, in any way, alter the character, functions or powers of the CWMA that form part of a scheme drawn up a few years ago, and which was approved by the Supreme Court.

If there is anything the Centre can be blamed for, it is the way the CWMA functions.

- Even two years after its formation, the Authority does not have a full-fledged chairman.
- Successive governments at the Centre have been wary of acting decisively, other than under the orders of the Supreme Court for fear of alienating voters in one of the States involved.

Way forward

- The latest episode should convince political parties that relentless politicisation of each and every matter concerning water resources does not benefit the stakeholders.
- The Centre would do well to act, at least now, in making the CWMA fully operational, when the southwest monsoon is about to set in.

4. The need for a second chamber**Context**

- The article authored by the Vice President of India analyzes the origin of the Rajya Sabha as the second house of the Indian legislature.

History of legislature in India:

- The central legislature that came into being under the Government of India Act, 1919, was bicameral with a Council of States comprising 60 members and a Legislative Assembly comprising 145 members. The membership and voting norms for the Council of States were very restrictive.
- The Government of India Act, 1935 proposed an elaborate and improved version of the second chamber, but this never materialised.
- The Constituent Assembly, which was formed in 1947, after adoption of the Constitution, became the Provisional Parliament and made laws till 1952.
- The Rajya Sabha came into being in 1952.

Constituent Assembly debates:

- The proposal for the Rajya Sabha as a second chamber was subjected to serious argumentation in the Constituent Assembly.

Arguments against Rajya Sabha:

- Upper House was not essential and it was just a creation of imperialism in India.
- The second house could stall the parliamentary process of law making and prove to be a "clog in the wheel of progress" of the nation.
- There was opposition to parity of powers in law-making for the Upper House which had only indirectly elected members as against the lower house which had representatives directly elected by the people based on universal adult suffrage.

Arguments in favour of Rajya Sabha:

- The second house would help check hasty legislation by allowing for a second thought on important issues.
- It would lend voice to the constituent units in the legislative scheme of things.
- It would allow intellectuals and experienced people to enter the legislature who would otherwise not be able to handle the hustle and bustle of direct elections.

Significance of Rajya Sabha:**Bicameralism:**

- Bicameralism is a principle that requires the consent of two differently constituted chambers of Parliament for making or changing laws.
- The principle of bicameralism came into operation in 1787 with the adoption of the U.S. Constitution and its appeal has grown in strength over time. At present, 79 parliaments of the world (41% of the total number) are bicameral.

Checks parliamentary tyranny:

- The second chamber enables a second and reflective expression of representative opinion besides helping impede any instances of parliamentary tyranny.
- Parliament is not only a legislative body but also a deliberative one which enables the members to debate major issues of public importance and the second house has an important role as a deliberative body.
- The lower house elected directly by the people is susceptible to passions of the moment and electoral considerations. The second chamber, whose members are expected to be sober, wise and well-informed with domain knowledge, can check parliamentary tyranny.

Federalism:

- Federalism has been in vogue since ancient times when some states got together to confer the power of law-making on a central authority. But modern federalism is entirely different given the complexity of geographical, regional, social and economic diversities marking the constituent units of a federation or a union.
- India has a huge degree of diversity with each unit having its own set of unique features.
- The federal character of a nation comprising constituent units can be reflected in, and secured by a bicameral legislature.

Conclusion:

- As can be gleaned from the Constituent Assembly debates and the experiences of other Parliaments, the mandate of the Rajya Sabha is to revise or delay legislation without becoming a clog in the wheel of progress; to represent the interests of the States as a federal chamber; and be a deliberative body holding high-quality debates on important issues.

5. Do numbers matter in Rajya Sabha?**Background:**

- The Rajya Sabha (RS), the Upper House of the Parliament of India, had its first sitting on May 13, 1952.

Details:

- The Indian Constitution provides for parity of powers between the Lok Sabha (LS) and the Rajya Sabha in law, making an exception in some cases.
- The Money Bill or Finance Bills can be introduced only in the Lok Sabha, which only can approve the Demands for Grants.
- On the other hand, the Rajya Sabha has some special powers:
 - * To adopt a resolution allowing Parliament to legislate on subjects in the State List.
 - * Creating All India Services.
 - * Approving proclamations of Emergency and President's Rule when the Lok Sabha is dissolved.

Has the Rajya Sabha been obstructionist?

- An analysis undertaken by the Rajya Sabha Secretariat recently revealed that during the past 68 years since the first general elections in 1952, the government of the day had a majority in the Rajya Sabha only for 29 years and was in a minority for 39 years, including an unbroken stretch for the past 31 years.
- This pronounced divergence in numbers in the two Houses of Parliament does not indicate any adverse impact on the broader course of legislation except in a few cases.
- There are, however, a few discordant notes during this long journey of legislation. But there is no case for terming Rajya Sabha as obstructionist.
- So far, Parliament held only three Joint Sitzings to resolve differences between both the Houses.
 - * The first instance was in 1961 when the then Nehru government enjoyed a majority in the Rajya Sabha but the Dowry Prohibition Bill, 1959 suffered a defeat.
 - * In 1978, the Banking Services Commission (Repeal) Bill, 1977 was rejected by the Rajya Sabha.
 - * In 2002, the Prevention of Terrorism Bill, 2002 could not pass the Rajya Sabha scrutiny.
- There were occasions when the Rajya Sabha sat over Bills passed by the Lok Sabha for a long time including the Prevention of Corruption Bill, 1987 and the Dock Worker (Safety, Health and Welfare) Bill, 1986.
- If this was checking hasty legislation, the Rajya Sabha had passed five Constituent Amendment Bills in one day on August 25, 1994 when the government of the day did not have the numbers. The Rajya Sabha has also made amendments to several Bills passed by the Lok Sabha and these were accepted in several cases by the other House.

- Though the present government too, does not have the required numbers in the Rajya Sabha, members of different parties rose to the occasion in passing landmark legislation relating to the GST, Insolvency & Bankruptcy Code, Triple Talaq, Unlawful Activities, Reorganisation of Jammu & Kashmir, Citizenship Amendment and so on.
- This goes to prove that numbers in the Rajya Sabha is not an issue as far as law-making is concerned. It is a different concern which applies broadly to the legislatures of the country.

Spirit of cordiality between RS and LS:

- Renowned British philosopher and political economist John Stuart Mill, as early as in 1861, said in his great treatise 'Considerations on Representative Government' that management of free institutions requires conciliation; a readiness to compromise; a willingness to concede something to opponents and mutual give and take.
- The required spirit of cordiality between the two Houses suffered a dent on some occasions.
 - * First, when Rajya Sabha members were not included in the Public Accounts Committee in 1952.
 - * When the Income Tax (Amendment) Bill, 1953, was introduced in the Rajya Sabha, some members questioned its certification as a Money Bill by the Lok Sabha Speaker. When the controversy was thickening, Prime Minister Nehru intervened, asserting that "For those who are interested in the success of the great experiment in nation building that we have embarked upon, it is a paramount duty to bring about this close cooperation and respect for each other (House)."
 - * Rajya Sabha members objected when the Lok Sabha Speaker referred the Major Port Trust Bill, 1963 to its Select Committee without involving Rajya Sabha members and this Bill was later referred to its own Select Committee again.

Need for a second chamber:

- Continuing with some reservations voiced in the Constituent Assembly about having a second chamber, some members of the Lok Sabha moved resolutions as early as in 1954 and again later in 1971, 1972 and 1975 for the dissolution of the Rajya Sabha. But such efforts were thwarted.
- As per the constitutional provisions, the Rajya Sabha at best could hold a Money Bill for 14 days during when, it has to return such Bills without or with amendments for the consideration of the Lok Sabha.

Increasing disruptions:

- An analysis by the Secretariat revealed that the productivity of the Rajya Sabha till 1997 has been 100% and above and the past 23 years have thrown up a disturbing trend of rising disruptions. Productivity fell to 87% during 1998-2004, 76% during 2005-14 and 61% during 2015-19.
- While the time spent by the Rajya Sabha on legislation since 1978 remained the same, a concern emerges in respect of the 'Oversight' function of the House.
- Legislatures ensure accountability of the executive through Questions, Calling Attention Notices, etc. Time share of this important Oversight function of the Council of States in the total functional time of the House during 1978-2004 was 39.50%. This fell to 21.99% during 2005-14 and to 12.34% since 2015.
- This decline is primarily on account of disruptions forcing cancellation of Question Hour frequently. Disruptions also dent the quality of law-making as seen in passing of Bills without discussion sometimes.
- However, the Rajya Sabha is proving to be more and more a 'deliberative' body with increasingly more time being spent on this function. The time share on deliberations under instruments like Short Duration Discussions, Zero Hour, Special Mentions, Discussion on Budgets and working of ministries, Motion of Thanks to President, etc. was 33.54% during 1978-2004. It rose to 41.42 % during 2005-2014 and to a high of 46.59% during 2015-19.

Conclusion:

- After the initial frictions, Rajya Sabha and Lok Sabha have proved to be constructive partners in steering the socio-economic transformation of the country since 1952, co-scripting pioneering laws.
- This partnership has been guided by the required spirit of cooperation and camaraderie despite divergence in the composition of both the Houses for most part of this journey.
- What needs to be addressed by all the stakeholders is that while enabling Rajya Sabha to retain its independence, it should not be seen as disruptive as evidenced over the past two decades.

6. Failing to perform as a constitutional court**Context:**

- COVID-19 pandemic and the migrant crisis.

Background:

- India apart from the public health crisis caused by COVID-19 also faces the unique challenge of migrant labourers' issue.
- These migrant labourers have no work, no source of income, no access to basic necessities, and no testing facilities, no protective gear, and no means to reach home.

Details:

- The author of the article, a former Chief Justice of Delhi and Madras High Courts argues that the institutions meant to look out for the interests of the vulnerable sections like the migrant labourers have failed.
- The author alleges that the Supreme Court has failed to satisfactorily acknowledge that the fundamental rights of migrant labourers have been violated, and ignored the plight of this section when they most needed protection.

Judiciary's duty:

- The duty performed by the arms of the state, even during an emergency, must always be bound by constitutional propriety, and respect fundamental rights and the judiciary acts as a watchdog in such situations.
- Despite overwhelming evidence pointing to the violation of the fundamental rights of citizens, especially those of vulnerable populations like migrant labourers, the SC has been refusing to admit petitions or has been adjourning the petitions asking the SC to intervene.
- By effectively not granting any relief, the Court is denying citizens of the most fundamental right of access to justice, ensured under the Constitution.
- The author alleges that the SC has failed to adequately perform as a constitutional court.

Incorrect arguments from the judiciary:**Policy matter and non-judicial interference:**

- The SC has opined that the condition of migrant labourers is a matter of policy and thus, does not behove judicial interference. The Court has held that the government is the best judge of the situation.
- However, there are numerous judgments where SC has laid out matters of policy. In these cases, the Court formulated policies and asked the States to implement them.
 - * The Vishaka guidelines on sexual harassment in the workplace
 - * The right to food
 - * Environmental protection policies.

Court ability to monitor the situation:

- The court's argument that it cannot act on mere news reports to issue directives to the states does not hold ground as nothing prevents the Court from monitoring the situation itself directly, by directing bureaucrats to collect empirical data on the ground, as it has done before.

Public Interest Litigations:

- Public Interest Litigations (PILs) are a specific instrument designed to ensure the protection of

the rights of the poor, downtrodden and vulnerable, and anyone can seek appropriate directions on their behalf. The concept of a PIL is to be non-adversarial, but the Court's treating of the PILs as adversarial matters against the government is worrisome.

Role of High Courts:

- High Courts role has been praised in this regard. At least four High Courts (Karnataka, Madras, Andhra Pradesh and Gujarat) have started questioning the states on the plight of the migrant labourers.

Conclusion:

- Therefore the apex court should intervene and monitor the situation to help alleviate the plight of the migrant labourers.

7. A violation of right found, but no remedy given

Context

- The Supreme Court refrained from passing any orders on the restoration of 4G internet services in Jammu and Kashmir.
- The court instead has asked the Centre to constitute a 'special committee' to examine the contentions raised by the petitioners.
 - * The special committee would be headed by the Union Home Secretary and comprising the Secretary of Department of Communications, Government of India and the Chief Secretary of the Union Territory (UT) of Jammu and Kashmir (J&K) to examine the prevailing circumstances in the UT and determine whether the restrictions on internet services should continue.
- The Court said it has to "ensure national security and human rights are balanced".

Foundation for Media Professionals v. Union Territory of J&K

- The current petition was filed by Foundation for Media Professionals, a not for profit comprising journalists to uphold media freedom and promote quality journalism.
- In its petition, the Foundation prayed for the restoration of 4G services in J&K with immediate effect. Apart from raising the challenge on the ground of right to freedom of speech and expression [Article 19(1) (a) of the Constitution], the petition also contended a violation of Articles 19(1)(g), 21 and 21A of the Constitution.

Arguments put forward by petitioners

- According to the petitioners, the restriction on 4G internet in the times of COVID-19 restricts the right to business, education, health, and speech and expression of the people of J&K.
- The restriction makes it impossible for individuals in J&K to access information, government advisories, and orders relating to COVID-19.

- * It makes it impossible for doctors to have video consultations and prevents the doctors in the UT from gaining access to the latest studies and treatments of COVID-19.

- * This violates the right to healthcare of the people and is a violation of Article 21.

- The right to access to justice of the people in J&K is also restricted (since most courts are only functioning through video conferencing and filing is also taking place online), thereby violating Article 21.
- These restrictions also prevent a large number of people in J&K from complying with work from home orders of the government and violates the right to trade under Article 19(1) (g) and right to livelihood under Article 21.
- A significant argument of the petitioner was also that given the situation arising due to the spread of COVID-19 and the unprecedented times we are in, the restriction on 4G services is disproportionate since it applies to the entire J&K.

Views of the Government

- The government, on the other hand, argued that because of the prevailing security situation in J&K and the use of the internet by insurgents and terrorists to spread violence, it is not possible to provide 4G services in the region.
- It also contended that there is no restriction over broadband and fixed line internet, and that the government is taking alternate measures to provide information relating to COVID-19 and for the education of students in the region.

Issues with the ruling

- The court has relegated the decision-making to a newly formed committee comprising officials from the executive. In doing so, it effectively reversed the age-old principle that no person shall act as a judge in his own cause.
 - * The executive will decide whether the executive violated fundamental rights.
- Its decision to send the question of restoring 4G connectivity in Jammu and Kashmir for a review to the very authorities who imposed the restriction in the first place, is a clear abdication of responsibility. The mandate that the Court enjoys under Article 32 of the Constitution — to enforce fundamental rights — cannot be transferred to the executive.
- The Court acknowledges that it might be better and convenient to have better Internet facilities during a global pandemic and a national lockdown. It also notes that the entire Union Territory has been put under curbs that allow only 2G speed.
 - * However, it takes into account two claims by the government:

- * 1. One, that there ought to be limits on data speed to prevent terrorists misusing it to disturb peace and tranquility;
- * 2. Two, that there has been a spike in incidents of terrorism — 108 incidents.
- * The Court has not even pursued the attempt it made in the Anuradha Bhasin case, to lay down a set of rules by which authorities seeking to impose restrictions on fundamental rights must adhere to; the doctrine of proportionality.

Anuradha Bhasin and Guidelines for Internet Shutdown

- In Anuradha Bhasin case, the Court laid down various guidelines/safeguards which the government needs to follow before ordering an internet shutdown.
- It held that the shutdown order should specify the exact duration of a shutdown and it cannot be indefinite. It directed the Review Committee formed under the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017, to review the shutdown orders every seven days.
- Additionally, the Court stated that these orders must pass the test of proportionality. It held that the government must identify the exact stage of public emergency before shutting down the internet, since that will assist the committee in determining the proportionality of the measure.
- However, despite laying down all the principles, the Court did not decide the validity of the shutdown orders and passed on this job to the review committee.

Conclusion

In our country where we are witnessing frequent internet shutdowns, these incremental steps by the highest court of the country may not be enough.

- The Court should have found the current J&K Order for restricting 4G services illegal and struck it down for not complying with the guidelines under the Telecom Suspension Rules and Safeguards laid down in the Bhasin case.
- To balance it with the security concerns in J&K – the Court could have additionally provided the J&K administration a few days to come up with a new order (if they so desired), which complies with the guidelines.
- This SC judgment unfortunately leaves the Indian population in the hands of the bureaucrats – who may not be the best suited to make these decisions on proportionality.

8. Riding roughshod over State governments

Context:

- The central government issuing guidelines to the state governments over the management of the COVID-19 pandemic.

Background:

Federalism:

- Federalism signifies the independence of the Union and State governments of a country, in their own spheres.

7th schedule:

- Under the Indian scheme of federalism, there is division of powers between the central and state governments. The 7th Schedule of the Indian Constitution contains three lists – Union list, State list and Concurrent list.
- Parliament can legislate on matters under the Union List, State legislatures can legislate on matters under the State List and both Parliament and State legislatures can legislate on matters under the Concurrent List.
- The residuary power to legislate on matters that are not mentioned in either of the lists rests with Parliament.
- As per Articles 73 and 162, the executive power of the Centre and the States is co-extensive with their respective legislative powers, which means that the Central and State governments can only take executive actions in matters where Parliament and State legislatures, respectively, have powers to legislate.

Principle of Harmonious Construction:

- The principle of harmonious construction was laid down by the Supreme Court in a number of judgments, including in *Godfrey Phillips v. State of U.P. & Ors* (2005).
- The judgment notes that the entries in the legislative lists must be interpreted harmoniously, and in the event of any overlap between two or more entries, the specific subject matter contained in a particular entry must be deemed to have been excluded from another entry which may deal with a more general subject matter.

Details:

- The Central government has been issuing guidelines to the state governments. The guidelines contain varying restrictions on public activity and commerce which the States are expected to enforce.
- The Centre has been issuing guidelines under the Disaster Management Act of 2005.
 - * The Disaster Management Act allows the Centre to issue guidelines, directions or orders to the States for mitigating the effects of any disaster.
- The Centre has directed the State governments to strictly enforce the set of guidelines, with the States only being allowed to increase and not dilute the restrictions.

Concerns:

- The current approach seems to be counterproductive, putting the federal structure of India under strain, and seems to be an overreach of powers by the Central government.

Top down approach:

- The Central government has so far followed a mostly top-down approach in tackling the COVID-19 pandemic. There seems to be very limited consultation with the states with respect to policy formulation.

Counterproductive:

- Though a national level coordination and collaborative effort is necessary, the one size fits all approach seems to be having counterproductive results.
 - * The Central government, in its latest guidelines, has classified all districts in the country as red, orange or green zones in a bid to lift lockdown restrictions in an area-specific manner. Some States/Union Territories objected to this classification. The states have argued that such a classification would lead to restrictions of economic activity in the entire district area even when cases had been reported only from a small portion of that district. They have called for micro zonation of hotspots beyond the district levels.
 - * Kerala has performed relatively well in containing the pandemic and is in a position to relax the existing guidelines. However, the Central government has asked Kerala to refrain from relaxing restrictions in the State. This move seems to be questioning the wisdom and judgment of the State government which has a better understanding of the ground conditions.

Division of powers:

- The Supreme Court has held time and again that federalism is a basic feature of the Constitution and stated that although the Union enjoys many more powers than States, the States are still sovereign.
- Reasonable and effective division of powers is the bedrock of a federal structure. This aspect seems to be under threat due to the government's recent moves.

Disaster Management Act:

- Disaster management does not find mention in either State list or Concurrent list, nor does any particular entry in Union list specifically deal with this. Thus, the Disaster Management Act could only have been enacted by Parliament in exercise of its residuary powers of legislation.
- 'Public health and sanitation' is a specific field of legislation under the State list. This would imply that States have the exclusive right to legislate and act on matters concerning public health.

- The author argues that the Disaster Management Act cannot be applied to pandemics in view of the fact that the power to legislate on public health is vested specifically and exclusively with the States.
- The author argues that the Centre's guidelines and directions to the States for dealing with the pandemic entrench upon the state's power to legislate and take executive action in the field of public health and hence terms it unconstitutional.

Prevention of inter-State spread of contagious and infectious diseases:

- Disaster Management Act is concerned with disasters in general and not pandemics in particular.
- 'Prevention of inter-State spread of contagious and infectious diseases' falls under the Concurrent list, wherein both Parliament and State legislatures are competent to legislate on related matters.
- 'Prevention of inter-State spread of contagious and infectious diseases' being a specific legislative head provided in the Concurrent list, the same must be deemed to have been excluded from Parliament's residuary legislative powers.
- Therefore, the Disaster Management Act, which has been enacted under Parliament's residuary legislative powers, cannot be applied to the prevention of inter-State spread of contagious and infectious diseases based on the principle of harmonious construction.

Neglecting existing laws:

- The Epidemic Diseases Act, 1897, has the specific objective of preventing the spread of dangerous epidemic diseases.
 - * Under this Act, the State governments have the prerogative to take appropriate measures for arresting the outbreak or spread of a contagious or infectious disease in their respective States. The Central government's powers are limited to taking measures for inspecting and detaining persons travelling out of or into the country.
 - * Under this Act, the Central Government is not empowered to issue directions to the States to contain the pandemic within the State, but it can only deal with inter-State spread of the disease.
- The Central Government's resorting to the Disaster Management Act instead of the Epidemic Diseases Act has enabled the central government to ride roughshod over State governments.

Reaffirm cooperative federalism**Context:**

- The article examines the strain on the principle of federalism due to the current circumstances in India.

Background:

Cooperative federalism:

- In a traditional sense, federalism signifies the independence of the Union and State governments of a country, in their own spheres.
- However, while framing the Indian Constitution, the Constituent Assembly carefully studied the constitutions of other federations like the U.S., Canada, Australia and Switzerland and adopted a 'pick and choose' policy to formulate a system suited uniquely to India's need.
- As a result, India's Constituent Assembly became the first-ever constituent body in the world to embrace what has been referred to as 'cooperative federalism'.
 - * Cooperative federalism essentially is defined as the administrative cooperation between the Centre and the States, and a partial dependence of the States upon payments from the Centre.
 - * Despite a strong Centre, cooperative federalism doesn't necessarily result in weaker States.

Concerns:

- The current circumstances under the pandemic crisis have severely strained the principle of federalism in India.

Fissures in cooperation:

- The central government's zone classifications into 'red' and 'orange' zones have evoked sharp criticisms from several States. The States have demanded more autonomy in making such classifications.

Lack of consultation:

- Despite State consultation being a legislative mandate cast upon the Centre under the Disaster Management Act of 2005, there has been minimal consultation with the states and the guidelines issued so far have been mostly based on a top down approach.
 - * The Disaster Management Act of 2005 envisages the creation of a 'National Plan' as well as issuance of binding guidelines by the Centre to States in furtherance of the 'National Plan'. The Act mandates State consultations before formulating a 'National Plan', so that the binding guidelines issued under it, also represent the views of the States.
- The Centre has not formulated a 'National Plan', and has chosen instead to respond to COVID-19 through ad hoc binding guidelines issued to States, thereby circumventing the legislative mandate of State consultations.

Centralized decision making:

- The Centre has directed the State governments to strictly enforce the set of guidelines, prohibiting the States from lowering the Centre's classifications. The selective application of the Act serves to concentrate all decision-making powers with the Centre.

Lack of funds:

- The states are facing a huge financial burden:
 - * Corporations donating to PM-CARES can avail CSR exemptions, whereas such provisions are not available for the Chief Minister's Relief Fund. This disincentivizes donations to the Chief Minister's Relief Fund and diverts crores in potential State revenues to PM-CARES and thus, makes the States largely dependent upon the Centre.
 - * The revenue streams of several States have dried up because of the liquor sale ban, negligible sale of petrol/diesel, temporary halt of land dealings and registration of agreements.
 - * States' GST collections have been severely affected with their dues still not disbursed by the Centre.
- This is a major concern given the fact that States act as the first responders to the pandemic, and supplying them with adequate funds is essential for effectively tackling the crisis.

Conclusion:

- The progress of the Indian Republic rests upon active cooperation between the states and the centre. Similarly, India's success in defeating COVID-19 actively rests upon Centre-State collaboration.
- The Centre needs to view the States as equals, and strengthen their capabilities, instead of increasing their dependence upon itself.

9. SC relief for firms unable to pay full wages during lockdown

Context:

- Supreme Court's observation of the Home Ministry orders.

Background:

- The Ministry of Home Affairs (MHA) had issued an order mandating the industry, shops and commercial establishments, to pay their workers without any deductions in the name of COVID-19. The order directed the payment of full wages.

Petitions against the MHA order:

- This order was challenged by several companies.
 - * They challenged the constitutional validity of the order arguing that the blanket directive to pay full salaries against no work was arbitrary and violative of Article 14 (Right to Equality) of the Constitution.
 - * They argued that there is an obligation to pay when work is actually done and there is no obligation if no work is done and that the employer has a right to not pay if no work is done.

SC observation:

- The Supreme Court has asked the government not to resort to any coercive action against any private companies who had not paid their workers full wages during the lockdown in accordance with the previous government order.
- The court has opined that the payment of full wages, as directed by the Ministry of Home Affairs (MHA) order may not be viable for small and private enterprises, which are tottering on the brink of insolvency due to the lockdown.

10. Labour Law Changes**Context:**

- With the need for revival of business and economic activity after weeks of forced closure, interests of labourers and workers are being sacrificed.
- Several States across India are ignoring the welfare laws for workers in the name of boosting economic activity.

Madhya Pradesh

- It has embarked on a plan to give a boost to business and industry by allowing units to be operated without many of the requirements of the Factories Act — working hours may extend to 12 hours, instead of eight, and weekly duty up to 72 hours.
- It appears the State has used Section 5 of the Act, which permits exemption from its provisions for three months, in the hope that the Centre would approve such suspension for at least a thousand days.
- However, this exemption can be given only during a 'public emergency', defined in a limited way as a threat to security due to war or external aggression.

Uttar Pradesh

- It has approved an ordinance suspending for three years all labour laws, except a few relating to the abolition of child and bonded labour, women employees, construction workers and payment of wages, besides compensation to workmen for accidents while on duty.

Legality of changes made

An analysis of the process employed by the state governments to amend the concerned labour laws indicates that the changes made are legal.

- The states have used provisions enlisted in already existing laws.
- As per the Constitution, the legislature has the authority to make laws. Such laws could delegate powers to the government which are in the nature of detailing some requirements.

- The Constitution permits Central and State governments to make laws through the issuance of an ordinance when the legislature is not in session. Such a law needs to be ratified by the legislature within six weeks of the beginning of the next session.

Background:**1. Freedom movement:**

- Rights of labour were a predominant theme of the freedom struggle and the labour movements have contributed to the successful freedom struggle.
- The 1931 Karachi Declaration and Bill of Rights, often considered a fore-runner to the Constitution, place labour rights on a par with ordinary civil rights such as the freedom of speech and expression. It noted that political freedom must also include real economic freedom for the people.

2. Constitutional history:

- The normal understanding of the purpose of constitutions has been to limit state power, in order to preserve the freedom of the individual.
- However, the Constituent Assembly of India in general, and B.R. Ambedkar in particular, argued against such a narrow understanding of freedom.
- Given the role of private parties — individuals and corporations — over the economic and social life of a nation, B.R. Ambedkar argued that fundamental rights must also consider and eliminate the possibility of the more powerful having the power to impose arbitrary restraints on the less powerful in terms of economic life of the people.

3. Judicial stand:

- In 1983, a petition was filed in the Supreme Court seeking its intervention to address the exploitation of migrant and contract labourers, who had been put to work in constructing the Asian Games Village in New Delhi.
- The Supreme Court in the PUDR vs. Union of India case made some important observations:
 - * SC noted that often, migrant and contract labourers, under the compulsion of economic circumstance, had no real choice but to accept any work that came their way, even if the remuneration offered was less than the minimum wage.
 - * The Court held that the compulsion of economic circumstance compelling a person to provide labour or service was no less a form of forced labour than any other.
- The Court held that the right against forced labour included the right to a minimum wage and insisted on a constitutional guarantee of minimum wages.

Constitutional provisions:

The strong ideals and principles of the freedom movement eventually found their way into the Indian Constitution in the form of Directive Principles of State Policy and Fundamental Rights

- Article 23 of the Indian Constitution provides for the right against forced labour.
- The State shall endeavour to provide the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement, within the limits of economic capacity as per Article 41.
- Article 43 says workers should have the right to a living wage and “conditions of work ensuring a decent standard of life”.
- The State shall take steps to promote their participation in management of industrial undertakings as per Article 43A.

Concerns:

- Reports suggest that several States are following these examples in the name of boosting economic activity.
 - * This would lead to a situation where the economic power exercised by capital will be left unchecked. This could lead to increase in hours of work, removal of minimum wages and reduction of wages.
- The country watches with horror the continuance of the collective misery of migrant workers. The attitude of the ruling class towards labour remains one of utter apathy, bordering on contempt.
- India's inability to protect the most vulnerable sections and its vast underclass of labourers from the impacts of lockdown shows the flaws in the country's response to the pandemic.
- The emphasis in the initial phase was on dealing with the health crisis, even when the consequence was the creation of an economic crisis.

1. Lack of consultation and scrutiny

- While the changes made are lawful, the lack of consultation and scrutiny by the legislature before making such far-reaching changes in labour law provisions is a concern.
- Usually, any change in an Act must follow a rigorous process of public consultation, scrutiny by committees of Parliament, and debates in the House before being approved.
- The legitimacy of state action in a parliamentary democracy comes from the fact that there is constant oversight and check by elected representatives.

2. Market Economy

- In a market economy, there is a marked inequality between capital and labour, more so in a country like India with pre-existing inequalities in the society.
- The inequality results in a lower bargaining power for the labourer class and enables the factory owners to “make the rules” for the labourers. The author refers to this as a form of “private government”, wherein there is unilateral term-setting in the workplace.
- The recent rise of the platform or gig economy has led to the rise of casualization and precarious employment which further limits labour unionism and deepens the inequality of power.
- There have been rapid changes in the nature of work which are rendering old concepts of jobs and employments obsolete.

Counter arguments

- The COVID-19 pandemic has led to an economic shock which, if not attended to, would severely impact the economy both in the short as well as long term. Given the severity of the crisis, there is a need for drastic measures to revive the economy.
- Given the emergency, the government has to take quick action and change the response as the situation evolves. Given the urgency for changes, there has been no scope for a rigorous consultation process. However, since most of the changes have a three-month time limit, any extension would need to be approved by the legislature. Also, the issued ordinances will have to be ratified by the legislatures after they convene.
- The exemptions would be applicable only for a specified period and are not permanent changes.
- The exemptions are not complete and critical provisions like safety and security of workers, provisions related to employing women and children, payment of wages on time and above prescribed minimum wages, retrenchment and layoffs would still be regulated.

Way forward:

- It is amoral and perverse on the part of the States to address the need of revival of business and economic activity by granting sweeping exemptions from legal provisions aimed at protecting labourers and employees in factories, industries and other establishments.
- Changes in the manner in which labour laws operate in a State may require the Centre's assent.
- The factories must in no case be relieved of elementary duties such as providing drinking water, first aid boxes and protective equipment (or) ensuring requirements such as cleanliness, ventilation, lighting, canteens, restrooms and crèches.

- The Centre, which is pursuing a labour reform agenda through consolidated codes for wages, industrial relations and occupational safety, health and working conditions, must not readily agree to wholesale exemptions from legal safeguards and protections that the law now offers to workers.

Conclusion

- There is a need for a nuanced debate on the future of labour rights guided by B.R. Ambedkar's insights, the constitutional guarantee against forced labour, and an understanding of force and freedom that takes into account differences in power.

How can inter-State workers be protected?

Context:

- Inter-state migrant labour issue.

Background:

Labour law reforms:

- The current administration with the intention to consolidate and reform labour law, has introduced the Occupational Safety, Health and Working Conditions Code, 2019.
- The proposed code seeks to merge 13 labour laws into a single piece of legislation. The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, is one of them.

The Inter-State Migrant Workmen act, 1979:

- The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 regulates the employment, conditions of service and working conditions of inter-State migrants.

Applicability:

- It is applicable to every establishment that employs five or more migrant workmen from other States; or if it had employed five or more such workmen on any day in the preceding 12 months.
- It is also applicable to contractors who employed a similar number of inter-State workmen.

Provisions:

- The act envisages a system of registration wherein the principal employer is prohibited from employing inter-State workmen without a certificate of registration from the relevant authority.
- Every contractor who recruits workmen from one State for deployment in another State should obtain a licence.

Significance:

The 1979 act has been an important step towards ensuring labour welfare for migrant labourers.

- The provision for registration creates a system of accountability on the part of employers. It also helps the government keep track of the number of workers employed and provides a legal basis for regulating their conditions of service.
- As part of the licensing process, contractors are bound by certain conditions. These include remuneration payable, hours of work, fixation of wages and other essential amenities in respect of the inter-State migrant workmen.
- As per the act the wage rates, holidays, hours of work and other conditions of service of an inter-State migrant workman shall be the same as those extended to other workmen in the same establishment, if the nature of their work is similar. In no case, shall the wages be lower than what is prescribed under the Minimum Wages Act.

Concerns:

Lack of implementation of 1979 act:

- The lack of serious implementation of the 1979 act has led to the rights of migrant labourers being ignored and they being exploited.

Concerns regarding consolidation of labour laws:

- The attempt to consolidate laws relating to occupational safety, health and working conditions may lead to the repealing of many separate laws concerning various kinds of workers and labourers.
 - * The proposed law seeks to repeal 13 Acts such as the Factories Act, Mines Act, Dock Workers' Act, the Inter-State Migrant Workmen Act, and other enactments relating to those working in plantations, construction, cinema, beedi and cigarette manufacture, motor transport, and the media.
- There are concerns that specific safeguards given to migrant workers may be lost as a result of this consolidation.

Provisions with respect to migrant workers:

- Though the Code contains provisions similar to the 1979 Act regarding registration of establishments, licensing of contractors and the inclusion of terms and conditions on hours of work, wages and amenities and like the 1979 Act envisages the payment of a displacement allowance and a journey allowance to inter-State migrant workers, there are still some concerns.
- Under the proposed occupational safety, health and working conditions code bill, inter-State migrant workers have been included under the definition of 'contract labour'.

- The Parliamentary Standing Committee recommendations to have a separate chapter for migrant workers and have special provisions for them to ensure their safety and health have not been included.

Way forward:

- The unprecedented distress and misery faced by migrant workers due to the current lockdown indicate the vulnerability of this section and it would be better to have a separate enactment dedicated to the welfare of migrant labourers.

ECONOMY

1. Central Warehouse Corporation (CWC)

- CWC is a Schedule 'A'-Mini Ratna, Category – 1 Central Public Sector Enterprise (CPSE).
- It is a statutory body which was established under 'The Warehousing Corporations Act, 1962'.
- It is a public warehouse operator offering logistics services to diverse group of clients.
- Its aim is to provide reliable, cost-effective, value-added, integrated warehousing and logistics solution in a socially responsible and environment friendly manner.

Context

- CWC achieved highest ever turnover of about Rs.1710 Crore during 2019-20.

2. CHAMPIONS Portal

Context

- Ministry of MSME launches CHAMPIONS Portal www.Champions.gov.in.

Details:

- The Champions portal is a technology-driven control room-cum-management information system.
- The system, utilising modern ICT tools, is aimed at assisting Indian MSMEs march into the big league as National and Global CHAMPIONS.
- CHAMPIONS stands for 'Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength'.
- The portal is basically for making the smaller units big by solving their grievances, encouraging, supporting, helping and handholding.
- It is a real one-stop-shop solution of the MSME Ministry.
- In addition to ICT tools including telephone, internet and video conference, the system is enabled by Artificial Intelligence, Data Analytics and Machine Learning.
- It is also fully integrated on a real time basis with GOI's main grievances portal CPGRAMS and the MSME Ministry's own other web based mechanisms.
- The entire ICT architecture is created in house with the help of the National Informatics Centre (NIC) at no cost.

Objectives of the Champions Portal:

- Help the MSMEs in difficult situation in terms of finance, raw materials, labour, permissions, etc.
- Help them capture new opportunities like manufacturing of medical accessories and products like PPEs, masks, etc.

- Identify the sparks, i.e., the bright MSMEs who can not only withstand but can also become national and international champions

Hub & Spoke Model

- The Hub is situated in New Delhi in the MSME Secretary's office.
- The spokes will be in the States in various offices and institutions of the Ministry.
- As of now, 66 state level control rooms are created as part of the system.

3. Consol Bond

Context

- With the Government of India looking at avenues to raise money to deal with the COVID-19 pandemic, the editorial throws light upon the issue of Consol Bond as a compelling solution for the government with the pandemic's shadow over the economy.

Issues:

- As India's ominous COVID-19 curve stretches further, urgent attention needs to be paid to an economy that is teetering on the edge.
- In the Budget before the pandemic, India projected a deficit of ₹7.96-lakh crore.
- The financial deficit number is set to grow by a wide margin due to revenue shrinkage that will most certainly be accompanied by a lack of appetite for disinvestment.
- In addition to the expenditure that was planned, the government has to spend anywhere between ₹5-lakh crore and ₹6-lakh crore as stimulus.
- All the RBI's schemes are contingent on the availability of risk capital, the market for which has completely collapsed.
- It has been tried several times, to nudge banks into lending to below investment grade micro, small and medium enterprises, but in vain.
- While the 60% increase in ways and means limits for States is a welcome move, many States have already asked for double the limit due to the shortages in indirect taxation collections from Goods and Services Tax, fuel and liquor.

Details:

- The government and the central bank need to understand that half measures will do more harm than good.
- It is believed that India must most definitely go beyond current revenue receipts to fund the complete stimulus.

- In a war like situation, while waging a united war against this virus, it would be interesting to look at war-time methods of raising finances. One such method that has been used as early as the First World War is the Consol Bond.

Consol Bond:

- A perpetual bond, also known as a "consol bond" or "prep," is a fixed income security with no maturity date.
- This type of bond is often considered a type of equity, rather than debt.
- The major benefit of them is that they pay a steady stream of interest payments forever.

Use of consol bond by British

- The British government had used this at the in 1917 as the government sought to raise more money to finance the ongoing cost of the First World War.
- Citizens were asked to invest with the advertising messaging: "If you cannot fight, you can help your country by investing all you can in 5 per cent Exchequer Bonds. Unlike the soldier, the investor runs no risk."

Advantages of a Consol Bond:

The traditional option of monetising the deficit by having the central bank buy government bonds is one worth pursuing, but issuing Consol Bonds is considered a better option, given the current scenario, for the following reasons:

- Consol Bonds ensure citizens' active participation.
- Proceeds of the bonds could be used for everything — from Personal Protective Equipment for doctors, to a stimulus for small and medium-sized enterprises.
- With the fall of real estate and given the lack of safe havens outside of gold, the bond would offer a dual benefit as a risk free investment for retail investors.

Conclusion:

- When instrumented, Consol Bonds would be issued by the central government on a perpetual basis with a right to call it back when it seems fit.
- An attractive coupon rate for the bond or tax rebates could also be an incentive for investors.
- The government can consider a phased redemption of these bonds after the economy is put back on a path of high growth.

4. Food Corporation of India- A grain stockist with a role still relevant

Context:

- Food Corporation of India's critical role in countering the challenges posed by COVID-19

Background:

- The Food Corporation of India (FCI) has been set up under the Food Corporations Act 1964.

- In the initial decades of its inception, the FCI was praised for being at the forefront of India's quest for self-sufficiency in rice and wheat following the Green Revolution, managing procurement and stocking grains that supported a vast Public Distribution System (PDS).

However, in recent times, there have been many concerns over the organisation.

- FCI's operations are regarded as expensive and inefficient. There are long-term concerns regarding the costs of food subsidy.
- The FCI has witnessed mounting debts which currently stands at an estimated ₹55 lakh crore in March 2020, in the form of National Small Saving Funds Loan.
- FCI faces serious storage problems and is plagued by the issue of shortage of modern storage facilities. In the 1970s and 1980s, poor storage conditions meant a lot of grain was lost to pests, mainly rats.
- There have been reports of widespread diversion of grains and high leakage losses.
- FCI has lacked a "pro-active liquidation policy" for excess stocks which leads to market distortion in some instances. The distribution of subsidised grains is sometimes blamed for depressing food prices and affecting farmers.
- Some experts have argued that given the increasing role of the market economy, the FCI seems to have long outlived its purpose.

FCI role in the pandemic crisis:

- Notwithstanding its dubious reputation, the FCI has consistently maintained the PDS, a lifeline for vulnerable millions across the country.
- Currently, in the middle of the COVID-19 pandemic, FCI with its buffer stocks holds the key to warding off a looming crisis of hunger and starvation, especially in regions where lakhs of migrant workers have returned home with little money or food.
 - * The FCI has already moved 3 million tonnes (post-lockdown) to States, including Uttar Pradesh, Bihar, West Bengal and Karnataka and those in the Northeast, where demand outstrips State procurement and/or stocks.
 - * The FCI has also enabled purchases by States and non-governmental organisations directly from FCI depots, doing away with e-auctions typically conducted for the Open Market Sale Scheme (OMSS).
 - * Given the extended lockdown, the FCI is uniquely positioned to move grains across State borders where private sector players continue to face formidable challenges.

Way forward:

Improving transport logistics:

- The FCI has been traditionally reliant on rail transport. In 2019-2020 (until February) only 24% of the grains moved was by road.

- Given the fact that road movement is often better suited for emergencies and for remote areas, the FCI can consider increased road transport of the food stocks.
- The FCI is also well advised to promote containerised movement of grains which is more cost-effective and efficient. It is imperative to move grains quickly and with the least cost and effort, to areas where the need is the greatest.

Positioning strategy:

- The coming months will see increased demand of staples from food insecure hotspots.
- In such a scenario, FCI can adopt “pre-positioning” strategy for regions that are chronically underserved by markets or where markets have been severely disrupted. This strategy involves storing of grains closer to demand hotspots.
- The FCI already has a decentralised network of godowns. In the current context, it would be useful for the State governments and the FCI to maintain stocks at block headquarters or panchayats in food insecure or remote areas, in small hermetic silos or containers.
- Such a move, apart from ensuring a sense of assurance and psychological comfort, would allow State governments to respond rapidly to demands.
 - * This would provide flexibility to local governments to access grains for contextually appropriate interventions at short notice, including feeding programmes, free distribution to vulnerable and marginalised sections, those who are excluded from the PDS, etc.
 - * It can also allow freedom to panchayats, to sell grain locally at pre-specified prices until supply is restored.

Higher allocations:

- The central government should look beyond the PDS and the Pradhan Mantri Garib Kalyan Yojana and release stocks over and above existing allocations.
- This should preferably be done at the centre’s expense rather than by transferring the fiscal burden to States.

Collaboration:

- The FCI can consider working in collaboration with the vibrant network of self-help groups formed under the National Rural Livelihoods Mission (NRLM). These SHGs can be tasked with the last mile distribution of food aid other than the PDS.

Change in existing guidelines:

- The current FCI guidelines prescribe a first in, first out principle (FIFO), that mandates that grain that has been procured earlier needs to be distributed first to ensure that older stocks are liquidated, both across years and even within a particular year.
- The FCI must suspend this strategy, to enable the adoption of a strategy that costs the least time, money and effort.

Enhanced role:

- There has been an increasing trend of farmers growing for markets (like horticultural crops), seeking to reach out to consumers directly. The farmer producer organisations (FPOs) have been at the forefront of this development. The current lockdown and restrictions on movement have broken such supply chains.
- The FCI, along with the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED), is well placed to rope in expertise to manage the logistics to revive and support direct sales.
- The FCI can consider expanding its role to support FPOs and farmer groups, to move a wider range of commodities including agricultural inputs such as seeds and fertilizers, packing materials and so on.

Conclusion:

- The often questioned relevance of an organisation such as the FCI or of public stockholding has been strongly established by the role of FCI in the current crisis situation.
- The Shanta Kumar report in 2015 recommended repurposing FCI as an “agency for innovations in Food Management System” and advocated shedding its dominant role in the procurement and distribution of grain.
- The FCI needs to overhaul its operations and modernise its storage.

5. Global Nutrition Report 2020

- In 2012, the World Health Assembly identified six nutrition targets for maternal, infant and young child nutrition to be met by 2025. These require governments to:
 - * 1. Reduce stunting by 40% in children under five
 - * 2. Reduce prevalence of anaemia by 50% among women in the age group of 19-49
 - * 3. Ensure 30% reduction in low-birth weight
 - * 4. Ensure no increase in childhood overweight
 - * 5. Increase the rate of exclusive breastfeeding in the first six months up to at least 50%
 - * 6. Reduce and maintain childhood wasting to less than 5%.
- The Global Nutrition Report was conceived following the first Nutrition for Growth Initiative Summit (N4G) in 2013. The first report was published in 2014.
- This report is produced by the Independent Expert Group of the Global Nutrition Report, supported by the Global Nutrition Report Stakeholder Group.
- The Report acts as a report card on the world’s nutrition—globally, regionally, and country by country—and on efforts to improve it.
- It assesses progress in meeting Global Nutrition Targets established by the World Health Assembly.
- The World Health Organization (WHO) is a Global Nutrition Report Partner.

Issue:

- According to the Global Nutrition Report 2020, India is among 88 countries that are likely to miss global nutrition targets by 2025.
- It states that India will miss targets for all four nutritional indicators for which there are data available — stunting among under-five children, anaemia among women of reproductive age, childhood overweight and exclusive breastfeeding.

Details:

- Between 2000 and 2016, underweight rates have decreased from 66.0% to 58.1% for boys and 54.2% to 50.1% in girls. However, this is still high compared with the average of 35.6% for boys and 31.8% for girls in Asia.
- 37.9% of children under five are stunted and 20.8% are wasted, compared with the Asia average of 22.7% and 9.4% respectively.
- India is identified as among the three worst countries, along with Nigeria and Indonesia, for steep within-country disparities on stunting, where the levels varied four-fold across communities.
- Stunting level in Uttar Pradesh is over 40% and the rate among individuals in the lowest income group is more than double those in the highest income group at 22.0% and 50.7%, respectively.
- In addition, stunting prevalence is 10.1% higher in rural areas compared with urban areas.
- One in two women of reproductive age is anaemic, while at the same time, the rate of overweight and obesity continues to rise, affecting almost a fifth of the adults, at 21.6% of women and 17.8% of men

6. Kangra Tea

- Kangra tea is a tea from the Kangra district in Himachal Pradesh.
- Both black tea and green tea have been produced in the Kangra Valley since the mid-19th century.
- Kangra tea was given the Geographical Indication status in 2005.
- Being one of India's smallest tea regions makes the Kangra green and black tea all the more exclusive.

International Tea Day:

- International Tea Day is observed annually on May 21, according to the United Nations.
- The International Tea Day aims to raise awareness of the long history and the deep cultural and economic significance of tea around the world.
- The goal of the day is to promote and foster collective actions to implement activities in favour of the sustainable production and consumption of tea and raise awareness of its importance in fighting hunger and poverty.

7. Kashmir saffron gets GI tag

- Kashmir saffron, which is cultivated and harvested in the Karewa (highlands) of Jammu and Kashmir, has been given the Geographical Indication (GI) tag by the Geographical Indications Registry.
- The unique characteristics of Kashmir saffron are its longer and thicker stigmas, natural deep-red colour, high aroma, bitter flavour, chemical-free processing, and high quantity of crocin (colouring strength), safranal (flavour) and picrocrocin (bitterness).
 - * It is the only saffron in the world grown at an altitude of 1,600 m to 1,800 m AMSL (above mean sea level).
 - * The saffron available in Kashmir is of three types — 'Lachha Saffron' 'Mongra Saffron' and 'Guchhi Saffron'.
- Iran is the largest producer of saffron. With the GI tag, Kashmir saffron would gain more prominence in the export market.
- Kashmir saffron rejuvenates health and is used in cosmetics and for medicinal purposes. It has been associated with traditional Kashmiri cuisine.

8. Kisan Sabha App**Context:**

- It has been launched by the Council of Scientific and Industrial Research (CSIR) to Connect Farmers to Supply Chain and Freight Transportation Management System.

Details

- Kisan Sabha aims to provide the most economical and timely logistics support to the farmers and increase their profit margins by minimizing the interference of middlemen and directly connecting with the institutional buyers.
 - * Kisan Sabha has 6 major modules taking care of Farmers, Mandi Dealers, Transporters, Mandi Board Members, Service Providers and Consumers
- It will also help in providing the best market rates of crops by comparing nearest mandis, booking of freight vehicle at the cheapest cost thereby giving maximum benefit to the farmers.
- The portal connects the farmers, transporters, Service providers (like pesticides/ fertilizer/ dealers, cold store and warehouse owner), mandi dealers, customers (like big retail outlets, online stores, institutional buyers) and other related entities for a timely and effective solution.

9. **Moody's warns of downgrade**

Context:

- Rating agency Moody has projected a negative economic outlook of India.

Negative outlook of Indian economy:

- It reflects that the economic growth will remain significantly lower than in the past.
- Major factors for the negative outlook include:
 - * The COVID-19 outbreak has triggered a deep economic shock both on the demand as well as supply sides.
 - * Government policies and actions have not been effective in addressing long-standing economic and institutional weaknesses of the Indian economy.
 - * There has been a gradual rise in the debt burden from the already high levels.

Ratings for India:

- The negative outlook indicates that a rating upgrade is unlikely in the near term.
- A prolonged or deep slowdown in growth would lead to a weakening of the fiscal metrics.
- Moody has cautioned that there would also be a rating downgrade of India if fiscal metrics deteriorate further.

Way forward:

- Given the fact that economic slowdown is inevitable under the current circumstances, the government's measures to support the economy should help reduce the depth and duration of India's growth slowdown.
- Major interventions are required to address the underlying structural challenges. The government should be able to restore stronger output through economic and institutional reforms.
 - * Government should address the issue of prolonged financial stress among rural households, weak job creation and credit crunch among non-bank financial institutions (NBFIs).
- The government should ensure that the important fiscal metrics like fiscal deficit, Debt to GDP ratio stabilize and strengthen over time.

10. **Rht14 and Rht18**

Background

- In India, close to twenty-three million tonnes of leftover rice residues are annually burnt by farmers to get rid of the straw and prepare their fields for sowing wheat, which is the next crop, resulting in air pollution.
 - * Also, dry environments pose a challenge for the germination of wheat varieties with short coleoptile.
 - * The burning of leftover rice crop residue has serious implications for the environment, soil, and human health.

- The presently available semi-dwarf wheat varieties, which were explored during the Green Revolution, carry conventional Rht1 dwarfing alleles (variant form of a given gene) and produce optimum yields under high-fertility irrigated conditions.

- * However, they are not well adapted for deeper sowing conditions in dry environments due to shorter coleoptiles, and low early vigor often results into reduced seedling emergence.
- * Moreover, crop stands of Rht1 wheat also remain poor where previous crop residues pose a barrier for seedling emergence due to the short coleoptiles.

Context:

- overcome these problems, Scientists at Pune based Agharkar Research Institute (ARI), an autonomous institute of the Department of Science and Technology, have mapped two alternative dwarfing genes Rht14 and Rht18 in wheat.
- These genes are associated with better seedling vigour and longer coleoptiles (sheath protecting the young shoot tip).

Alternative Dwarfing Genes

- ARI has mapped the dwarfing genes on chromosome 6A in durum wheat, and DNA-based markers were developed for a better selection of these genes in wheat breeding lines.
- The DNA-based markers will help wheat breeders to precisely select wheat lines carrying these alternative dwarfing genes from a massive pool of wheat breeding lines.
 - * Breeding lines are a group of genetically identical homozygous individuals that, when intercrossed, produce only offspring that are identical to their parents.
- These DNA based markers are being used at ARI for marker-assisted transfer of these genes in Indian wheat varieties, so as to make them suitable for sowing under rice stubble-retained conditions and dry environments.

Significance

- The improved wheat lines which are being developed at ARI will help reducing stubble burning incidences under the rice-wheat cropping system.
- These lines will also allow deeper sowing of wheat seeds to avail advantage of residual moisture in the soil, therefore, saving valuable water resources and reduce the cost of cultivation to farmers.

11. **Saras Collection**

Context:

- The Union Agriculture Minister launched "The Saras Collection" on the Government e-Marketplace (GeM) portal.

Details:

- The Saras Collection is an initiative of the GeM, the DAY-NRLM and the Ministry of Rural Development.
- The Saras Collection showcases daily utility products made by rural Self-Help Groups (SHGs) and aims to provide SHGs in rural areas with market access to Central and State Government buyers.
- Under this initiative, the SHG sellers will be able to list their products in 5 product categories, namely (i) handicrafts, (ii) handloom and textiles, (iii) office accessories, (iv) grocery and pantry, and (v) personal care and hygiene.
- More than 900 SHGs from 11 states have already been on-boarded on this initiative.
- GeM will provide dashboards for functionaries at the national, state, district and block level to provide them real time information about the number of products uploaded by SHGs, and value and volume of orders received and fulfilled.
- In addition, Government buyers shall be sensitized through system generated messages/alerts in the Marketplace about availability of SHG products on the portal.
- Potential buyers shall be able to search, view, cart and procure such products through the stipulated modes of procurement.
- Sellers are being assisted with product catalogue management, order fulfilment and bid participation.
- GeM shall also collaborate with State functionaries to address the capacity building and training needs of SHGs, and build up their competencies required for order packaging, catalogue management and logistics.
- By providing SHGs with direct access to Government buyers, the Saras Collection will do away with intermediaries in the supply chain, thus ensuring better prices for SHGs and spurring employment opportunities at the local level.

12. Scheme for formalisation of Micro Food Processing**Enterprises (FME)****Context:**

- The Union Cabinet, has given its approval to a new Centrally Sponsored Scheme - "Scheme for Formalisation of Micro food processing Enterprises (FME)" for the Unorganized Sector on All India basis with an outlay of Rs.10,000 crore.

What was the need?

- There are about 25 lakh unregistered food processing enterprises which constitute 98% of the sector and are unorganized and informal. Nearly 66 % of these units are located in rural areas and about 80% of them are family-based enterprises.

- This sector faces a number of challenges including the inability to access credit, high cost of institutional credit, lack of access to modern technology, inability to integrate with the food supply chain and compliance with the health & safety standards.
- Strengthening this segment will lead to reduction in wastage, creation of off-farm job opportunities and aid in achieving the overarching Government objective of doubling farmers' income.

Objectives

- Increase in access to finance by micro food processing units.
- Increase in revenues of target enterprises.
- Enhanced compliance with food quality and safety standards.
- Strengthening capacities of support systems.
- Transition from the unorganized sector to the formal sector.
- Special focus on women entrepreneurs and Aspirational districts.
- Encourage Waste to Wealth activities.
- Focus on minor forest produce in Tribal Districts.

Salient Features

- Cluster approach.
- Focus on perishables.

Funding

- The expenditure will be shared by GOI and the States in ratio of 60:40.
- Scheme will be implemented over a 5 year period from 2020-21 to 2024-25.

Administrative and Implementation Mechanisms

- The Scheme would be monitored at Centre by an Inter-Ministerial Empowered Committee (IMEC) under the Chairmanship of Minister, FPI.
- A State/ UT Level Committee (SLC) chaired by the Chief Secretary will monitor and sanction/ recommend proposals for expansion of micro units and setting up of new units by the SHGs/ FPOs/ Cooperatives.
- The States/ UTs will prepare Annual Action Plans covering various activities for implementation of the scheme, which will be approved by Government of India.
- A third party evaluation and mid-term review mechanism would be built in the programme.

Significance

- Nearly eight lakh micro- enterprises will benefit through access to information, better exposure and formalization.
- Credit linked subsidy support and hand-holding will be extended to 2,00,000 micro enterprises for expansion and upgradation.
- It will enable them to formalize, grow and become competitive.

- The project is likely to generate nine lakh skilled and semi-skilled jobs.
- Scheme envisages increased access to credit by existing micro food processing entrepreneurs, women entrepreneurs and entrepreneurs in the Aspirational Districts.
- Better integration with organized markets.
- Increased access to common services like sorting, grading, processing, packaging, storage etc.

13. **Shahi Litchi and Zardalu Mango**

- The Shahi Litchi variety grown in Muzaffarpur has high pulp and is juicier compared to the litchi grown in other parts of the country.
- In Muzaffarpur, Darbhanga and nearby areas, the conditions are ideal for litchi cultivation, because of humid conditions and alluvial soil.
- Litchi cultivation in India was initially introduced in Bengal after which it spread to other regions including Bihar, Uttar Pradesh and Punjab.
- India is the second-largest producer of litchi in the world and Bihar is the leading state for litchi production in the country.
- Shahi Litchi has got a Geographical Indication (GI) tag.

Zardalu/Jardalu Mango:

- Zardalu mango is light yellow in colour and is known for its sweet fragrance.
- They are chiefly grown in Bhagalpur in Bihar.
- They also received the GI tags.

Context

- Bihar Postal Circle (Department of Posts) to deliver "Shahi Lichi" and "Zardalu Mango" at doorsteps of people.

14. **Kovilpatti kadalai mittai gets GI tag**

- It is manufactured in Kovilpatti and adjacent towns and villages in Thoothukudi district in Tamilnadu
- Kovilpatti kadalai mittai is a candy made of peanuts held together with glistening syrup, and topped with wisps of grated coconut dyed pink, green and yellow. In Kovilpatti, it is sold as single rectangular chunks, or rather cuboids, sealed in packets.
- It is made using all natural ingredients such as the traditional and special 'vellam' (jaggery) and groundnuts and water from the river Thamirabarani is used in the production, which enhances the taste naturally.
- Kovilpatti kadalai mittai is produced by using both groundnuts and jaggery (organic jaggery), in carefully selected quantities from selected specific locations in Tamil Nadu.
- The groundnuts are grown in the native black soil in and around Kovilpatti. After sourcing, the groundnuts are shelled and roasted

15. **Direct Seeding of Rice (DSR)**

Paddy Transplanting

- In transplanting, farmers prepare nurseries where the paddy seeds are first sown and raised into young plants.
- These seedlings are then uprooted and replanted 25-35 days later in the main field.
- The nursery seed bed is 5-10% of the area to be transplanted.

DSR

- In DSR, there is no nursery preparation or transplantation.
- The seeds are instead directly drilled into the field by a tractor-powered machine.

What is the main advantage with DSR?

- The most obvious one is water savings. It helps in saving irrigation water
- Less labor required
- Planting cost is saved
- It will save energy (power)
- there's lesser weed problem, besides
- there is reduced incidence of nutrient deficiency, especially iron, owing to lesser leaching of nutrients and deeper root development
- The DSR offers avenue for groundwater recharge as well as it prevents the development of hard pan just beneath the plough layer.

Drawbacks

- Seeds are exposed to rat and bird attacks
- Seeds are carried or washed away during heavy rains resulting in poor seedling stand.

Context

- As the labour shortage is imminent owing to exodus of migrant labourers amid the ongoing lockdown, farmers in Punjab seem all set to go for Direct Seeding of Rice (DSR)

16. **Notes on a digital currency plan, made in China**

Context:

- People's Bank of China (PBoC), China's central bank has initiated the Central Bank Digital Currency (CBDC).
- It is christened as Digital Currency Electronic Payment (DCEP) which is available via a mobile wallet app.

What is DCEP?

- DCEP is designed to function as "cash," or just as the base money supply, M0 (M0 is currency in circulation).
- DCEP is built with blockchain and cryptography, which presumably ensure superb security, it is run on a centralized database.

- * DCEP uses a DLT architecture (with central controls) which preserves the primacy of the monetary authority, unlike private cryptocurrencies such as Bitcoin that are truly decentralised.
- The plan is part of the response to President Xi Jinping's push to "seize the opportunity" of blockchain technology.
- The digital yuan is structured on a two-tier monetary system:
 - * A central bank-issued CBDC for commercial banks and
 - * A commercial bank-issued CBDC focused on the public.
- This is the first such serious initiative in the whole world.

Pilot Cities

- It includes Shenzhen, Suzhou, Xiong'an and Chengdu, and people with an account in major banks such as the Agricultural Bank of China (ABC).
- Account holders can open a digital DCEP wallet on their ABC app, top up its balance and use it to pay for service provided by local businesses including Starbucks, McDonald's and participating grocery stores and restaurants.
- It will also involve transferring salaries to government workers in the form of the new Digital Currency.

Why China developed it?

- Chinese investors were always enamored of cryptocurrencies. Bitcoin became increasingly popular as an alternative asset class in China. China has emerged as the capital of the crypto ecosystem, accounting for nearly 90% of trading volumes and hosting two-thirds of bitcoin mining operations.
- The PBoC tried hard to curtail this exuberance but achieved limited success. This move to introduce the CBDC in China is a logical outcome of the efforts to curb and tackle its runaway cryptomarket practices. Or, the philosophy of the PBoC could simply have been, if you cannot beat them, join them.

Advantages

Compared to physical money, DCEP has its distinctive pros.

- For the government, a digital yuan could eliminate money printing costs and high handling charges.
 - * It is a powerful antidote for tax evasion, money laundering and terror financing.
 - * It can materially boost tax revenues while also improving financial compliance and national security.
 - * As a tool of financial inclusion, particularly in emergencies, Direct Benefit Transfers can be instantly delivered by state authorities deep into rural areas, directly into the mobile wallets of citizens who need them.

- * It will provide central banks an uncluttered view and powerful insights into purchasing patterns at the citizen scale.
- * For commercial banks, DCEP could facilitate more money transactions with lower costs, increase business innovation while minimizing the risks.
- * For the public, DCEP could save them from indirect transaction fees for interbank transfers. Domestic and cross-border payments will also involve less friction.

Disadvantages

- This would give rise to a surveillance state and the concomitant erosion in citizen privacy and anonymity.
- CBDCs be used to spy on every movement of people's money.

Monetary authorities previously have objected to idea of cryptocurrencies

It is due to the following reasons:

- Wild fluctuations in the value of cryptocurrencies
- The implied challenge to the monopoly of central banks in issuing fiat currencies
- The looming possibility of software bugs
- The tainted shadow of the dark web

Signals from the move

- First, on the world economic stage, it may want DCEP to challenge the hegemony of the U.S. dollar as the default global reserve currency.
- Second, in its war with American BigTech, it may want to showcase DCEP as its weapon of choice to counter Facebook's Libra, which is planning to offer a common cryptocurrency to 2 billion-plus FB users across the world.
- Third, and still in the realm of speculation, it may wish to use the DCEP to clip the wings of Alipay and WeChatPay, gigantic fintech duopolies that control 90% of China's domestic digital payments, and whose ambitions may one day pose a threat to the aura and authority of the central bank.

Conclusion

- From gold to silver to paper to digital, the march of currencies goes on.
- China has rolled the dice on central bank digital currencies, challenging other nations to follow.

17. RBI cuts repo rate again, down to 4%

Context

- The Reserve Bank of India (RBI) has reduced the key interest rate or the Repo Rate (the interest rate that the RBI charges for funds given to banks) by 40 bps to stabilize the financial system.
- Cumulatively, since the imposition of the national lockdown in March 2020, the MPC has cut rates by 115 basis points. The repo rate now stands at 4 per cent.

Why did the RBI cut interest rates?

- The Monetary Policy Committee (MPC), was of the view that the macroeconomic impact of the pandemic is turning out to be more severe than initially anticipated, and various sectors of the economy are experiencing acute stress.
- The impact of the shock has been compounded by the interaction of supply disruptions and demand compression. Beyond the destruction of economic and financial activity, livelihood and health are severely affected.
- Even as various measures initiated by the government and the Reserve Bank work to mitigate the adverse impact of the pandemic on the economy, this accommodative step is a necessity to revive growth and mitigate the impact of COVID-19 on the economy
- The decision was also considered keeping inflation within the target.

Other measures taken by the RBI

- The central bank has extended the Loan Repayment Moratorium for another three months till August 31, 2020.
 - * The extension of the moratorium on repayment of term loans by borrowers means that they would not have to pay the loan EMIs during the moratorium period.
- In addition, Interest Payment Deferment for working capital loans has also been extended by another six months.
- RBI has also decided to increase the Group Exposure Limit of banks from 25% to 30% of its capital base.
 - * Group exposure limit determines the maximum amount a bank can lend to one business house.
- All other conditions for the facility remain unchanged — a loan will not be classified by the lender as non-performing and there will not be any impact on individual credit scores.
- A liquidity facility for Exim Bank of India was also opened as it has been decided to extend a ₹15,000 crore line of credit for a period of 90 days to enable it to avail a U.S. dollar swap facility to meet its foreign exchange requirements.
- Also to alleviate difficulties being faced by exporters in their production and realisation cycles, it has been decided to increase the maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks from the existing one year to 15 months, for disbursements made up to July 31, 2020.

Significance

- It will make funds cheaper for banks thus aiding them to bring down lending rates.
 - * EMIs on home, auto, personal and term loan rates are expected to come down in the coming days.
- It will reduce the Cost of Capital and ease the financial burden on businesses due to the extended lockdown.

- The extension of the Repayment Moratorium on loans is a welcome measure.
 - * The extension will provide relief to many individuals, especially the self-employed, as they would have found it difficult to service their loans such as car loans, home loans etc. due to loss of income during the lockdown period.
 - * Missing an EMI payment would mean risking adverse action by banks which can adversely impact one's credit score.
- In another significant measure, the RBI has allowed borrowers and banks to convert the interest charges during the moratorium period (from March 1 to August 31) into a term loan which can be repaid by March 2021.
 - * This is expected to reduce the burden on borrowers who have gone for a moratorium.
- The increase in Group Exposure Limit will help large corporate borrowers who may find themselves handicapped in raising funds from the markets now.

Concerns

- The extended period given may however still not be enough as it will offer borrowers only about seven months from the end of the moratorium period during which they will have to crank up their businesses and service their loans.
 - * The RBI could have put off accumulated interest repayment by one year.
- There was some disappointment in the markets that the RBI did not relax norms for loan restructuring by lenders.
- Will monetary easing help?
 - * Demand for credit is likely to remain low as, with continuing economic and health uncertainty, firms and households will postpone their decisions.
 - * Moreover, risk averse banks are likely to hold back even if there are borrowers.
- Higher-rated borrowers are likely to continue to get easy funding, while lower-rated borrowers will struggle.

Conclusion

- Monetary measures may have been taken to ease economic stress. But there are limitations to what it can achieve. It cannot do the heavy lifting alone. Fiscal support is needed.

18. Rating agencies can bypass curing period**Context:**

- Taking into account the practical issues faced by companies due to the COVID-19 pandemic, the Securities and Exchange Board of India (SEBI) has allowed Credit Rating Agencies (CRAs) to bypass the 90-day curing period to revise ratings from default to non-investment grade.

Issue:

- While current norms bar CRAs from revising the ratings before 90 days, few companies were able to meet their payment obligations a few days after the due date due to COVID-19-related delays.
- The rating agencies were, however, not able to revise the ratings due to the regulatory framework.
- The rating could not be upgraded and continued to be under sub-investment grade due to the extant provisions on post-default curing period of:
 - * 90 days for the rating to move from default to speculative grade.
 - * Generally, 365 days for default to investment grade.

SEBI has said that CRAs can deviate from the said period of 90 days on a case-to-case basis, subject to the agencies framing a detailed policy in this regard.

Credit Rating:

- Credit Rating is an assessment of the borrower (be it an individual, group or company) that determines whether the borrower will be able to pay the loan back on time, as per the loan agreement.
- A good credit rating depicts a good history of paying loans on time in the past.
- This credit rating influences the bank's decision of approving an applicant's loan application at a considerate rate of interest.

How does credit rating work?

- Every credit rating agency has their algorithm to evaluate the credit rating.
- Major factors considered are credit history, credit type and duration, credit utilization, credit exposure, etc. Every month, these credit rating agencies collect credit information from partner banks and other financial institutions.
- Once the request for credit rating has been made, these agencies dig out the information and prepare a report based on such factors. Based on that report, they grade every individual or company and give them a credit rating.

Credit Rating Agencies in India:

- CRISIL: Credit Rating Information Services of India Limited is the first credit rating agency of the country which was established in 1987.
- It offers 8 types of credit rating which are as follows:
 - * AAA, AA, A – Good Credit Rating
 - * BBB, BB – Average Credit Rating
 - * B, C, D – Low Credit Rating
- ICRA: Investment Information and Credit Rating Agency of India was formed in 1991. It offers comprehensive ratings to corporates via a transparent rating system.

- CARE: Credit Analysis and Research Limited (CARE) offers a range of credit rating services in areas like debt, bank loan, corporate governance, recovery, financial sector and more. Its rating scale includes two categories – long term debt instruments and short term debt ratings.
- ONICRA: Onida Individual Credit Rating Agency of India, established in 1993, offers credit assessment and credit scoring services to both individuals and businesses.
- SMERA: Small Medium Enterprises Rating Agency of India Limited has two divisions – SME Ratings and Bond Ratings. It was established in 2011 and is a hub of financial professionals.

19. Atmanirbhar Bharat Abhiyan**Context**

- Prime Minister Narendra Modi announced an economic package totaling Rs 20 lakh crore to tide over the Covid-19 crisis under 'Atmanirbhar Bharat Abhiyan'.

What is it?

- It is the vision of the Prime Minister of India Narendra Modi of making India a self-reliant nation
- India's self-reliance will be based on five pillars — economy, infrastructure, technology driven system, vibrant demography and demand.
- As part of self-reliance the Govt announced the special economic package worth Rs 20 lakh crore, which is around 10% of India's GDP
- The package includes the ongoing Pradhan Mantri Garib Kalyan Yojana (PMGKY), meant to support the poorest and most vulnerable communities during the pandemic, as well as several measures taken by the Reserve Bank of India to improve liquidity.

How India can become truly self-reliant**Indian Scenario:**

- Self-reliance in state-run heavy industries and strategic sectors in the decades following independence had placed India ahead of most developing countries.
- In the 1970s and 80s, however, India did not modernise these industries to climb higher up the technological ladder.
 - * The private sector stayed content with near-monopoly conditions in non-core sectors in a protected market.
 - * Little effort was made to modernise light industries or develop contemporary consumer products.
- The concept of self-reliance was neglected when India embarked on liberalisation, privatisation and globalisation in 1991 as it was believed that advanced technologies could be bought from anywhere at lower costs.

Concerns:**Lagging behind:**

- India's industrial ecosystem has been characterised by low productivity, poor quality and low technology, and has been globally uncompetitive.
- India completely missed out on the 'third industrial revolution' comprising electronic goods, micro-processors, personal computers, mobile phones and decentralised manufacturing and global value chains.
 - * India still imports large volumes of smartphones, solar photovoltaic cells and modules despite the huge domestic demand conditions.
- The lack of focus on indigenous R&D may have resulted in India lagging behind the U.S., Europe and China in many of the modern technologies.

Neglect of PSUs:

- The Public Sector Undertakings (PSUs) have been inefficient and sluggish for the competitive globalised scenario.
- No efforts have been made to either grant real autonomy to the PSUs or help them transition to new technological directions.

Research and Development:

- Nascent research and development (R&D) efforts (in photovoltaics, semiconductors and advanced materials) have been undermined or abandoned.
- Presently, most R&D in India is conducted by PSUs, and much of the smaller but rising proportion of private sector R&D is by foreign corporations in information technology and biotechnology/pharma.

Private sector:

- The private sector has displayed little interest in heavy industries and has shown no appetite for technology upgradation.
 - * With entry of foreign corporations, most Indian private companies retreated into technology imports or collaborations.

Fallacy of FDI:

- It is generally believed that inviting Foreign Direct Investment and manufacturing by foreign majors would bring new technologies into India's industrial ecosystem, avoiding the need for indigenous efforts towards self-reliance.
- However, mere setting up of manufacturing facilities in India is no guarantee of absorption of technologies (the ability to independently take them to higher levels).
- The foreign companies have guarded commercially significant or strategic technologies in off-shore manufacturing bases.

COVID-19 crisis:

- The absence of domestic production of Personal Protective Equipment (PPE) when COVID-19 struck highlighted the drawbacks in India's approach.

International experience:

The experience and achievements in other countries in Asia could act as a guide to India's actions.

1. The achievers:

- Countries like Japan, South Korea, Taiwan, Singapore and Hong Kong took huge technological and industrial strides in the 1970s and 80s.
 - * South Korea has climbed up the technology ladder and value chains in electronic goods, consumer durables, automobiles, micro-processors, personal computers and heavy machinery. It has emerged as a global powerhouse in manufacturing and also indigenously developed technologies.
 - * Taiwan developed technologies and manufacturing capacities in robotics and micro-processors, while Singapore and Hong Kong adapted advanced technologies in niche areas.
 - * China has advanced from low-end mass manufacturing to a dominant role in global supply chains. It is now shifting to advanced manufacturing and has set itself a target of becoming a world leader by 2035 in 5G, supercomputing, Internet of Things, Artificial Intelligence (AI), autonomous vehicles, biotech/pharma and other technologies of the 'fourth industrial revolution'.
- The self-reliant capabilities were enabled, by planned state investments in R&D including basic research (3-5% of GDP), technology and policy support to private corporations, infrastructure and, importantly, education and skill development (4-6% of GDP).

2. Laggards:

- Countries like Thailand, Malaysia, Indonesia and Vietnam have focused on off-shore manufacturing lower down the value chain and without the thrust on self-reliance.

Way forward:

- There needs to be improvement in quality and domestic supply chains going forward for which India will have to make major course changes in development strategies.
- Indian self-reliance in science and technology (S&T) and industry in a globalised world is the way forward.

Domestic efforts:

- The key ingredient for self-reliance is the need for resolute indigenous endeavour in R&D, moving away from the reliance on foreign technology induction through FDIs.
- There would be the need for large-scale concerted endeavours across various domains.

- Though India lags behind many countries in niche technologies, yet self-reliant capabilities in electric and fuel cell vehicles, electricity storage systems, solar cells and modules, aircraft including UAVs, AI, robotics and automation, biotech/pharma and others are well within reach.

Role of government:

- Given the disinclination of most of the private sector towards R&D, significant government reinvestment in PSUs and R&D is essential for self-reliance.
- There needs to be significant government reinvestment in public sector undertakings and R&D.
 - * State-funded R&D, including in basic research, by PSUs and research institutions and universities needs to be scaled-up significantly, well above the current level of 1% of GDP.

Role for private sector:

- Though PSUs would be given their distinctive place in the revamped R&D ecosystem, private sector delivery-oriented R&D could also be supported, linked to meaningful participation in manufacturing at appropriate levels of the supply chain.

Focus on education:

- Given the fact that self-reliance without mass quality public education is not possible, India's meagre public expenditure on education needs to be substantially ramped up, including in skill development.

20. First tranche- MSME Sector

Criteria for 'medium' units to be revised

Context:

- The government has decided to further revise the criteria for medium-sized units after changing the definition of MSMEs.

Background:

- Unveiling the contours of the ₹20-lakh-crore stimulus package, the Finance Minister had announced a change in the definition of micro, small and medium enterprises (MSMEs).
- After the revision, the investment limit has been revised upwards and an additional criterion of turnover has been introduced.
- As per the revised definition:
 - * MICRO: Any firm with an investment of up to ₹1 crore and turnover under ₹5 crore will be classified as 'micro'.
 - * SMALL: A company with an investment of up to ₹10 crore and a turnover of up to ₹50 crore will be classified as 'small'.
 - * MEDIUM: A firm with an investment of up to ₹20 crore and a turnover under ₹100 crore will be classified as 'medium'.

EXISTING MSME CLASSIFICATION			
CRITERIA: INVESTMENT IN PLANT & MACHINERY EQUIPMENT			
Classification	Micro	Small	Medium
Manufacturing Enterprises	Investment < ₹25 lakh	Investment < ₹5 crore	Investment < ₹10 crore
Service Enterprise	Investment < ₹10 lakh	Investment < ₹2 crore	Investment < ₹5 crore

REVISED MSME CLASSIFICATION			
COMPOSITE CRITERIA: INVESTMENT & ANNUAL TURNOVER			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment < ₹1 crore & Turnover < ₹5 crore	Investment < ₹10 crore & Turnover < ₹50 crore	Investment < ₹20 crore & Turnover < ₹100 crore

Details:

- The government has now decided to further revise the criteria for 'Medium sized units' by enhancing the investment and turnover limits to up to ₹50 crore and ₹200 crore respectively.
- The government plans to raise MSMEs' contribution to India's exports to 60% from the 48% at present, and also boost the sector's contribution to the country's GDP from 29% currently to 50%.
- It is also intended to create five crore new jobs.
- The government plans to take advantage of the 'blessing in disguise' posed by the global 'hatred against China'.

Significance:

- Upward revision in their investment limit will help in the seamless expansion of small and medium businesses in the country. A robust MSME sector is key to improving the economic strength and resilience of the country and making it highly self-reliant and globally competitive.
- There are around 6.3 crore MSME units in the country, with over 99 per cent categorised as small units.
- The old definition that had a lower threshold prevented the companies to grow, thus, translating into losing out on benefits.

- The new higher limits in investment and turnover may help companies grow.
- It will help bring an increased number of MSME units access to institutional working capital.
- This change matters for enterprises because there are benefits linked to it. These benefits range from loans under the priority sector lending scheme, a 25 per cent share in procurement by government and government-owned companies, promoters being allowed to bid for stressed assets under insolvency law as well as relief from the government and regulators from time to time.

Liquidity lifeline

Context:

- Union Finance Minister has announced a slew of measures to help businesses including Micro, Small and Medium Enterprises (MSMEs) recover from the economic impact of the coronavirus pandemic. This is a part of the Rs 20 lakh crore stimulus package announced by the Prime Minister to spur growth and help build a self-reliant India.

Details:

- The 16 specific announcements announced in the first tranche cut across sectors that range from MSME and NBFCs to real estate and power distribution and the salaried.
- The overarching theme was that of infusing liquidity, engineering a pass-through effect that ultimately puts more disposable funds in the hands of both entrepreneurs and employees.

For employees/ tax payers:

- For salaried workers and taxpayers, relief has been provided in the form of an extended deadline for income tax returns for the financial year 2019-20.
 - * The due date has been pushed to November 30, 2020.
- The rates of Tax Deduction at Source (TDS) and Tax Collection at Source (TCS) have been cut by 25% for the next year.
- Employee Provident Fund (EPF) support, provided to low-income organised workers in small units under the PMGKY is being extended for another three months.
 - * It is expected to provide liquidity relief of ₹2,500 crore.
- Statutory Provident Fund (PF) payments have been reduced from 12% to 10% for both employers and employees for the next three months.

For MSMEs:

- The Ministry of Micro, Small and Medium Enterprises (MSMEs) will get the bulk of the funding.
- The ₹3 lakh crore emergency credit line announced will ensure that 45 lakh units will have access to working capital to resume business activity and safeguard jobs.
- For two lakh MSMEs which are stressed or considered non-performing assets, the Centre will facilitate provision of ₹20,000 crore as subordinate debt.

Finance Minister Nirmala Sitharaman announced the features for the first part of the Atmanirbhar Bharat Abhiyan

For small businesses

- ₹3,00,000 crore emergency credit for Micro, Small and Medium Enterprises (MSMEs)
- Only domestic firms can bid for govt. procurements up to ₹200 crore

For employees/ tax payers

- EPF deductions slashed for 3 months to 20% from 24% of salary; IT returns deadline extended
- This will enhance take-home pay if employers pass it on, but dent retirement savings

For infrastructure sector

- Power PSUs to lend ₹90,000 crore to stressed State distribution

companies

- Deadlines for realty projects and public infrastructure contracts extended

For financial sector

- Fresh ₹45,000 crore partial credit guarantees for non-banking finance companies (NBFCs)
- ₹30,000 crore special liquidity for microfinance/ housing finance firms and NBFCs



- A ₹50,000 crore equity infusion is also planned, through an MSME fund of funds with a corpus of ₹10,000 crore.
- The definition of an MSME is being expanded to allow for higher investment limits and the introduction of turnover-based criteria.
- In a bid to fulfil the Prime Minister's vision of a self-reliant or "atmanirbhar" India, global tenders will not be allowed for government procurement up to ₹200 crore.
- The government and central public sector enterprises will release all funds due to MSMEs within 45 days.

For NBFCs:

- The government announced Rs 30,000 crore of a special liquidity scheme, under which investment will be made in investment grade debt papers of these institutions.
 - * If a government entity directly buys debt papers of these entities, then it would provide major relief.
 - * The contours of this scheme are yet to be announced.
- The government has also extended the partial credit guarantee scheme — under which it guarantees 20 per cent of the first loss to the lenders — NBFCs, HFCs and MFIs with low credit rating.
- This scheme is estimated to result in liquidity injection of Rs 45,000 crore in debt papers that are rated AA or lower and even unrated securities issued by such entities, including the Micro Finance Institutions (MFIs).
- It is believed that it will improve confidence in the financial system and help institutions raise funds in the debt market, and reduce risk aversion of banks.

For DISCOMs:

- ₹90,000 Cr. Liquidity Injection has been announced for DISCOMs.
- The ₹90,000 crore reform-linked injection will help in clearing the outstanding dues of DISCOMs.
 - * The dues of DISCOMs to power generation and transmission firms are to the tune of ₹94,000 crore.
 - * State-owned Power Finance Corp. (PFC) and Rural Electrification Corp. (REC) will infuse the liquidity by raising ₹90,000 crore from the markets against the receivables of DISCOMs.
 - * These funds will be then given to DISCOMs against state government guarantees for the sole purpose of discharging their liabilities.
 - * The idea is to clear the payment backlog with concessional loans guaranteed by the respective state governments.

For Real Estate:

- The Union Housing and Urban Affairs Ministry will advise States and Union Territories and their regulatory authorities to extend the registration and completion date of real estate projects by six months.
- Six-month extension and treatment of the COVID-19 pandemic as an event of force majeure, like a natural calamity, under the Real Estate (Regulation and Development) Act would de-stress the sector and ensure completion of projects.

Criticisms:

- Concerns have been expressed that risk-averse bankers may not extend the loan benefits to all MSMEs despite the government's 100% credit guarantee.
- Criticisms have been raised with respect to the economic package not including measures for market development to encourage public spending, employment generation or development of health infrastructure to combat the post COVID situation.
- It is argued that the government must spend more and should not be unduly bothered about running up a high fiscal deficit. Suggestions have been made that the government could monetise part of the deficit if it reached a worrying level.

Conclusion:

- While the package is unlikely to create much stress for the fiscal exchequer as most of the measures are focused on off-balance sheet support through credit guarantees and tax deferment, the success of the scheme rests on these measures working as a multiplier to improve the risk appetite of lenders and catalyse fresh funding of distressed smaller firms.
- The announcements break the confidence logjam in the credit market and give the assurance to lenders and borrowers that the government is willing to backstop their commitments.
- It is believed that, taken as a whole, the measures announced will go a long way in lifting the spirits of the two key and troubled sectors of MSMEs and NBFCs.

How will the COVID-19 relief for MSMEs help?

Financial crisis in MSMEs:

- The MSMEs are facing a financial liquidity crunch due to the closures on account of the national lockdown.
- Banks, though flush with funds, have been unwilling to lend to this category of borrowers as they fear that the money will not be repaid.
- The small businesses having pledged all their assets already for other loans do not have any more assets to pledge.

Measures taken:

- The government has proposed to offer collateral-free loans to MSMEs which will be fully guaranteed by the Centre.

- There will be a principal repayment moratorium for 12 months and the interest rate will be capped and there will be no guarantee fee.
- A total of 3-lakh crore rupees have been allocated for this.

Significance:

- The loan amount will act as initial seed money for the small enterprises hit by zero cash flow due to the national lockdown.
- The loan amount will help them buy raw materials, pay initial bills and daily wages to employees. In short, this will be like working capital for cranking up their businesses again.
- About 45 lakh MSMEs are expected to gain from this proposal.

Access to funding:

Concerns:

- About two lakh stressed MSMEs are facing the issue of Non-Performing Assets (NPAs).

Measures taken:

Credit guarantee fund:

- A partial credit guarantee scheme has been extended to enable promoters of MSMEs to increase their equity.
- A total of 20,000 crore rupees will be funneled through the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) whereby banks will lend money to promoters which can be infused as equity in their businesses. The CGTMSE will offer a partial credit guarantee to banks.

Fund of funds system:

- There is a proposal to infuse equity into MSMEs through a Fund of funds system where the government will provide 10,000 crore rupees as initial corpus of the Fund. This will be leveraged to raise 50,000 crore rupees in total. This fund will be used to support MSMEs in desperate need of equity.

Significance:

- The increased access to funding will allow the MSMEs to expand their size and capacity and help them get listed on the stock exchanges.

Definition of MSMEs:

Concerns:

- MSMEs in order to ensure that they continue to receive the benefits available to MSMEs, either run their operations at a reduced level or incorporate multiple units so that turnover is distributed in a way that they remain within the threshold that will give them the benefits. This was limiting the growth potential of the MSMEs.

Measures taken:

- Henceforth MSMEs will be defined not based on their investment alone but also on their turnover. The definition has been tweaked and the existing distinction between manufacturing and services units has been eliminated.
- Henceforth, a unit with up to 1 crore rupees investment and 5 crore rupees turnover will qualify as a micro unit, investment up to 10 crore rupees and turnover up to 50 crore rupees will qualify as a small unit, and investment up to 20 crore rupee and turnover up to 100 crore rupees will qualify as a medium enterprise.

Significance:

- The decision to add turnover criteria to investment would ensure that the units that leverage a small capital to post large revenues do not receive the benefits that are meant for MSMEs.

Proposals for Non-Banking Financial Companies (NBFCs):

Concerns:

- NBFCs, housing finance companies and micro finance institutions are finding it difficult to raise debt capital due to a confidence crisis in the debt markets.

Measures taken:

- The government has announced a special liquidity scheme of 30,000 crore rupees to buy investment grade debt paper from both primary and secondary markets. Such paper will be fully guaranteed by the government.
- Partial credit guarantee scheme has been extended to cover primary market debt paper wherein the first 20% loss will be borne by the government. A total of 45,000 crore has been set aside for this Partial Credit Guarantee Scheme 2.0.

Significance:

- The special liquidity scheme is expected to break the low confidence cycle in the market for lending to the NBFCs, housing finance companies and microfinance institutions.
- It will help these low rated finance companies to raise debt.

Electricity Distribution Companies (DisComs):

Concerns:

- Discoms are in a huge liquidity crisis and unable to pay their dues to electricity generation companies. Their cash flow and revenues have been hit due to low demand from industrial consumers for power during the lockdown.
- The various State discoms together owe about 94,000 crore rupees to their suppliers, the generation and transmission companies.

Measures taken:

- The government, through Power Finance Corporation-Rural Electrification Corporation, will infuse liquidity of 90,000 crore rupees to discoms which will be securitised against their receivables from consumers.
- The loans will be against a guarantee from the respective State related to the discom.

Significance:

- The emergency liquidity infusion will avert a crisis where generation and transmission companies stop supplies to discoms that are in default.

Measures for the common man:

- Under the Pradhan Mantri Garib Kalyan Yojana, the government offered to pay the 24% provident fund contribution (employer+employee) for those earning up to 15,000 rupees a month as salary and working in units that employ less than 100 workers for three months. This has now been extended for another three months up to August 2020.
- The statutory PF contribution for those employed in the private sector and not in the category of establishments as above has been reduced to 10% (from 12% now) for the next three months in order to increase liquidity in their hands.
- The rate of tax deducted at source (TDS) and tax collected at source (TCS) has been reduced by 25% for a range of receipts. In the cases where TDS/TCS has been reduced, the tax liability is not reduced. It will be payable while filing a return or while paying advance tax.

Significance:

- The PF proposal is expected to benefit 4.3 crore people and 6.5 lakh establishments and release a total of 6,750 crore rupees liquidity.
- The reduction in TDS and TCS will offer immediate cash relief to people.

21. Second tranche

As a part of the second tranche, nine main measures to aid migrant workers, street vendors, small farmers, self-employed people were announced.

Migrants

- Free food-grain supply to all migrants for the next 2 months. Non-Cardholder Migrants, shall be given 5 KG rice/wheat & 1 KG Chana per family for 2 months.
- National portability of ration card with 'one Nation one ration card' will be implemented by August 2020. 67 crore beneficiaries will gain in 23 states, using this ration card in any corner of the nation in the next three months.
- Affordable rental accommodation for migrant labour and urban poor. A rental housing scheme will be incentivised to build affordable housing and converting government housing into rental housing under PM Awas Yojana.

Shishu loans under MUDRA

- 2% interest reduction for Shishu loans under MUDRA-
 - * While loan moratorium has already been granted by the SBI, a 1500 crore interest subvention for MUDRA has been announced. The Centre will provide interest subvention of 2% for prompt payees for a period of employees.

Street vendors

- Rs. 5000 crore special credit facility for street vendors which will benefit 50 lakh street vendors.
- They will receive an initial working capital up to Rs 10000, within a month.

Housing

- Extension of CLSS till March 2021
 - * 70,000 crore boost to housing sector & middle income group through the extension of Credit Linked Subsidy Scheme (CLSS) by extending the scheme till March 2021. As of date, 3.3 lakh middle income families have benefited.

Tribals

- Employment for tribals via Rs 6000 crores using Compensatory Afforestation Management & Planning Authority (CAMPA) Funds. This will create Job opportunities in Urban, Semi urban & rural areas for Afforestation & plantation works.

Farmers

- 30,000 crore additional emergency working capital funding for farmers via NABARD. While 90,000 crore has already been sanctioned by NABARD, additional Rs 30,000 crore will be pushed into this.
- Farmers holding Kisan Credit Cards will be provided concessional Credit boost amounting to Rs 2 lakh crore.
 - * Fishermen & Animal husbandary farmers will also be included in this and 2.5 crore farmers will benefit from this.

Apart from these measures, the government also announced reforming labour laws in the near future. The current 44 labour laws are being reduced to just 4 labour codes. The bill is currently in the parliamentary standing committee and will soon be introduced in parliament.

22. Third Tranche- Agriculture**Context:**

- Mandi closures and supply chain disruptions caused havoc in agricultural marketing during the national lockdown.
- The third tranche of the Atmanirbhar Bharat Abhiyan has listed measures to deal with critical infrastructure gaps and long-pending governance issues that plague the farm sector.
- This includes
 - * Contract farming

- * Amendments to Essential Commodities Act of 1955
- * 1. The Centre will deregulate the sale of six types of agricultural produce, including cereals, edible oils, oilseeds, pulses, onions and potatoes
- * A central law facilitating farmers to sell their produce anywhere in the country rather than to licensed buyers at designated mandis.
- * 1. To enact a central law to permit barrier-free inter-State trade of farm commodities
- * Infrastructure Development

Problems faced by the farmers

- In industrial products and consumer-based goods, prices are decided by the manufacturers and producers, but in the agricultural sector, the farmers have no say in it. The intermediaries and market forces decide.
 - * Both farmers and consumers are the sufferers of the exploitative procurement and marketing of farm produce.
 - * Despite increasing public investments in irrigation and other infrastructure, the steadily rising institutional credit given to farmers, and minimum support price due to the efforts of various governments over the years, farmers are shackled when it comes to selling their produce.
- This exploitation has its roots in the Bengal famine of 1943, World War II, and the droughts and food shortages of the 1960s.
 - * The Essential Commodities Act, 1955, and the Agricultural Produce Market Committee (APMC) Acts of the States are the principle sources of violation of the rights of farmers to sell their produce at a price of their choice.
 - * These two laws severely restrict the options of farmers to sell their produce. Farmers continue to be the victims of a buyers' market.
- Farmers also face significant issues like high transportation cost, lack of knowledge about prices prevailing in the regulated market, lack of storage facilities in the market, delay in auction, delay in payment, and we are still far from ensuring efficient value chains.

Given the economic disparities in the country, the interests of consumers need to be protected. But should that be at the cost of the producers? Thus, a balance in this regard is the key. _____

Steps taken by the Govt.

- Approximately ₹4 lakh crore support package was sanctioned for the farming and allied sectors.
 - * It was aimed at improving infrastructure and enhancing credit support.
- The most welcome feature of this include

1. Contract Farming

- Contract farming can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products.

Concerns:

- Contract farming seems to promote the interests of the large corporate player at the expense of safeguarding the small farmer.

Measures taken:

- There are plans to ensure a facilitative legal framework to oversee contract farming.

Significance:

- Contract farming would provide farmers with assured sale prices and quantities even before the crop is sown and also allow private players to invest in inputs and technology in the agricultural sector.

2. Essential Commodities Act, 1955

- The Essential Commodities Act, 1955 allows the government to control price rise and inflation by imposing stock limits and movement restrictions on commodities, giving States the power to regulate dealer licensing, confiscate stock and even jail traders who fail to comply with restrictions.
- The Essential Commodities Act, 1955 came into being at a time of food scarcity and famine.

Concerns:

- Traders have complained of harassment under the Act on the suspicion of hoarding, black marketing and speculation.
- Food processors and exporters have argued that they may need to stock commodities for longer periods of time as against the provisions of the act making them prone to harassment under the act.
- The Act has dis-incentivized construction of storage capacity and hindered farm exports.
- The need to amend or repeal the Act has been going on for almost two decades.

Measures taken:

- The Act would be amended to deregulate six categories of agricultural foodstuffs: cereals, pulses, edible oils, oilseeds, potato and onion.
- Stock limits on these commodities will not be imposed except in times of a national calamity or a famine.
- The stock restrictions will not be imposed at all on food processors or value chain participants, which/ who will be allowed to store as much as allowed by their installed capacity.
- Exporters will also be exempted from stock limitations.

Significance:

- The amendment will bring more private investment into warehouses and post-harvest agricultural infrastructure, including processors, mills and cold chain storage.
- The amendment is likely to give a boost to farm exports.
- The farmers would be able to realize better prices for their produce.

3. Promoting Inter-State Trade

Model APMC Amendment Act and concerns:

- The Central government has been trying to coax State governments into adopting its Model APMC Amendment Act which aims at developing unified State-level markets by offering a State-wide licence and single point levy of market fees while also allowing private markets, direct marketing, ad hoc wholesale buying and e-trading.
- However, only a few large States have amended their Acts accordingly.

Measures taken:

- The Centre plans to bring in a new federal law to break the nearly half-century long monopoly of the Agricultural Produce Market Committee (APMC) mandis. The federal law aims to abolish inter-State trade barriers.

Significance:

- A National market will bring in more options for the farmer, offering more competitive prices for the farmers.

4. Infrastructural investments:

Concerns:

- Reforming governance structures is of no use unless there is adequate infrastructure available for the farmers to back the reforms in the governance structures.
- There are critical infrastructure gaps in the agricultural sector.

Measures taken:

- A 1-lakh crore rupee agriculture infrastructure fund run by the National Bank for Agriculture and Rural Development will help create affordable and financially viable post-harvest management infrastructure at the farm gate and aggregation points.

Significance:

- This move would help bring better infrastructure and logistics support to fish workers, dairy and other livestock farmers, beekeepers and vegetable and medicinal plant growers.
- The new scheme also offers support to lakhs of small informal food processors, mostly women, who need technical upgradation and marketing support in order to compete in a changing marketplace.

Conclusion:

- A section of farmers and activists have argued that in the light of the COVID-19 crisis, immediate support and relief in the form of cash transfers, loan waivers, and compensation for unsold produce should have come before long-term reforms.
- The government's rationale for the structural reforms was that improving farmers' income needs long-term investments and changes, rather than a focus on short-term crop loans.
- Taking the opportunity of a crisis situation, the government has pushed through reforms that the Centre has been trying to implement for years.

Farm gate in focus

Context:

- Farm sector reforms announced under the Atmanirbhar Bharat package.
- The Centre's moves for farm sector reforms have received both positive and negative feedback from the stakeholders.

Positive steps:

Agricultural infrastructure:

- Given the lack of adequate cold-storage facilities which was causing large post-harvest losses, especially in perishables, the 1-lakh crore rupees fund to finance agriculture infrastructure projects at the farm gate and produce aggregation points is a laudable step.
- The government's proposal to channel the funds to agricultural cooperatives, farmer producer organisations, rural entrepreneurs and start-ups is encouraging as it lays the onus of creating the appropriate infrastructure or logistics solution largely on the principal beneficiaries, the farmers themselves. This would ensure greater effectiveness and accountability.

Promoting food processing units

- The 10,000 crore rupees scheme to promote the formalisation of micro food enterprises is a significant step forward.
- A cluster approach focused on different regions on signature produce would assist unorganised enterprises in scaling up food safety standards to earn the products certification and build brand value.

Concerns:

Essential Commodities Act:

- Though the reforms are well-intended, the move to amend the Essential Commodities Act is fraught with risks.
 - * The Essential Commodities Act has been a vital tool in the government's armory for protecting consumers from irrational volatility in the prices of essentials by tamping down on black marketers and hoarders.

- * Despite the chances of harassment of even honest traders and exporters under the old act, the total deregulation for foodgrains is fraught with the risk of future inflationary food price spikes.

Bypassing APMC Act and contract farming law:

- The centre seeks to bypass the APMC regime through a central law that would allow farmers the freedom to sell across State borders.
- There is also a proposal for a framework for farmers to enter into pre-sowing contracts with buyers.
- The proposed changes, once enacted, could privilege market forces without necessarily safeguarding food security.

23. Fourth Tranche-Govt. throws open defence production and coal sectors

Context:

- The fourth tranche of the Atma Nirbhar Bharat Abhiyan economic stimulus package.

Details:

1. Defence sector:

Indigenization efforts:

- In a move aimed at indigenising defence production and enhancing self-reliance in defence production, there are provisions for banning the import of some weapons and platforms. The list of such weapons and platforms would be widened every year as domestic capacities grew.
 - * While the state of the art weapons required by the Services would be met through imports, some that were produced in the country and meet the standards will be procured locally only.
 - * The negative list would be worked out in consultation with the Department of Military Affairs headed by the Chief of the Defence Staff.
- Indigenisation of imported spare parts would be given priority.
- There is a provision for a separate budget for domestic capital procurement. This would help reduce the defence import bill and encourage domestic production.

Increasing foreign investment:

- The Foreign Direct Investment (FDI) limit in defence manufacturing under automatic route will be raised from 49% to 74%.

Corporatization of ordnance factory:

- Ordnance Factory Boards (OFB) would be corporatized and listed on the stock market to improve autonomy, efficiency and accountability. However, they would not be privatised.
 - * The Kolkata-headquartered OFB, with 41 factories spread across the country, functions as a department under the Department of Defence Production.

2. Mineral sector:

- The Union Finance Minister has announced measures to liberalize the mineral sector.

Coal:

- The government monopoly on coal would be removed with the introduction of commercial mining on a revenue sharing basis.
 - * Any private player would be allowed to bid for a coal block and sell it in the open market as against the earlier system where only captive consumers with end-use ownership could bid for coal blocks.
 - * The private sector would be allowed to bid for 50 coal blocks. Private players would also be allowed to undertake exploration activities.
 - * The government also plans to auction Coal Bed Methane (CBM) blocks.

Other minerals:

- Composite exploration cum mining cum production regime for minerals will be announced under which 500 mining blocks would be auctioned.

3. Space sector:

- Measures to encourage private involvement in space projects have been announced.
 - * The government has promised to create a level playing field for private players in the space sector, allowing them to use ISRO facilities and participate in future projects on space travel and planetary exploration.
 - * The government has assured of a predictable policy and regulatory environment.
 - * The government will ease geo-spatial data policy to make remote-sensing data more widely available to tech entrepreneurs, with safeguards put in place.

4. Aviation sector:

- Six more airports are up for auction on private public partnership mode, while additional private investment will be invited at 12 airports.
- Measures to ease airspace restrictions have been announced which would make flying more efficient.
 - * Currently only 60% of the airspace is freely available.
- The MRO (maintenance, repair and operations) sector of aviation has received attention in the recent announcements. There has been the rationalising of the MRO tax structure with an aim to make India an MRO hub.

5. Power sector:

- Power departments/utilities and distribution companies in U.T.s would be privatized based on a new tariff policy to be announced.

- The government plans to introduce a tariff policy with reforms focused on consumer rights, promotion of industry and sustainability of the sector.

6. Atomic sector:

- Research reactor in PPP mode would be set up for production of medical isotopes.

Significance:

- Many sectors need policy simplification to decongest these sectors to realize their growth and employment generation potential. The recently announced measures would bring in the much needed structural reforms in the sector.
- With the current set of reforms these sectors would become more attractive for investments.

Defence sector:

- The stress laid on domestic manufacturing of defence equipment is very encouraging as India today is among the largest importers in the world of defence equipment. The list of non-importable items and corporatisation of OFB are some landmark steps and will boost the confidence of domestic manufacturers.
- The increase in FDI limit for the defence sector to 74% would attract foreign funds into this sector, along with technology infusion.

Mineral sector:

- The structural reform measures in the coal and mining sector are expected to give a boost to private investments in the sector enhancing supplies and reduce India's reliance on imports thus helping save precious foreign exchange.
- The reforms could help double the mineral sectors' contribution to the GDP.
- The elimination of distinction between captive mines and non-captive will ensure a level playing field for players in the integrated metals space.

Power sector:

- The Centre's decision to privatise power distribution companies in union territories would help improve government finances and bring much more efficiency to the sector.
- Private ownership should bring in greater efficiency and better governance and help address some of the deep seated problems of the power sector.
- The new tariff policy for the power sector can be expected to remove cross-subsidies that are adding to manufacturing costs and thus help make Indian goods more competitive in the global market.

Aviation sector:

- The move to invite PPP in more airports will provide AAI with the resources to develop smaller airports across the country and popularise the government's UDAN Scheme.

- Rationalising the MRO tax structure would help create a level-playing field for Indian entities and help attract foreign investment.

- * The plans to make India a global MRO hub will ensure savings of precious foreign exchange and enable Indian airlines to get their aircraft serviced locally.
- * The impetus given to the MRO sector would help create new jobs and a strong global value chain within India.

Concerns:

- There are concerns that the current set of announcements was more of industrial reforms than an economic stimulus.
- The sectors covered are of strategic importance and would involve a long time period. They would not be able to help revive the economy as it comes out of the lockdown.
 - * The only direct budgetary cost in the new announcement is the 8,100 crore rupees to be provided as a hiked 30% viability gap funding to boost private investment in social sector infrastructure.
- Some sections have alleged that the government has used the crisis time to utilise the ordinance route or other ways to fast-track industrial reforms, which would have faced resistance otherwise.
- Labour unions have expressed concerns with regard to the reform measures over concerns of privatization of important sectors.

Grasping the defence self-reliance nettle

Context:

- Finance Minister had recently announced a slew of reforms in the defence sector to address long-standing strategic and national security concerns.

Key Stats

- India, in the last one decade, had the dubious record of being the world's largest arms importer, accounting for about 12% of global arms imports.
- Saudi Arabia jumped to first place in 2018 and 2019, but India still takes over 9% of global imports.

Concerns

- This external dependence for weapons, spares and, in some cases, even ammunition creates vulnerabilities during military crises.
- There are a range of platforms and subsystems, developed in India and qualified in trials, some of which face hurdles to their induction by our armed forces because of foreign competition.
 - * These include missile systems such as Akash and Nag, the Light Combat Aircraft and the Light Combat Helicopter, artillery guns, radars, electronic warfare systems and armoured vehicles.

- COVID-19 has, once again, focused minds on the impact of supply chain disruptions on both civil and defence sectors.

To find a solution to this ageing problem, we have the new Draft Defence Procurement Procedures (DPP) 2020 and a Chief of Defence Staff (CDS) tasked with promoting indigenous equipment in the armed forces.

Draft Defence Procurement Procedure (DPP) 2020

- It aims at increasing indigenous manufacturing and reducing timelines for procurement of defence equipment by removing procedural bottlenecks.

Changes to be introduced

1. Indigenization

- In a bid to enhance self-reliance in defence production, the government would notify a list of weapons systems for sourcing entirely from Indian manufacturers.
- The list will be expanded and widened as and when the capabilities of Indian manufacturers enhance.
- There would be a separate Budget provision for domestic capital procurement.
- The government has promised a time-bound defence procurement process, overhauling trial and testing procedures and establishing a professional project management unit.

2. Indigenization of imported spare parts would also be given priority.

- It is also imperative that when we import weapons systems, we should plan for the ammunitions and spares for them to be eventually manufactured in India so that we are not driven to seek urgent replenishments from abroad during crises.
- The same goes for repair, maintenance and overhaul facilities and, at the next level, the upgrade of weapons platforms.

3. Corporatizing the Ordnance Factory Board.

- Ordnance factories have been the backbone of indigenous supplies to our armed forces.
 - * The principal products of the OFB include tanks and armoured vehicles, artillery guns, small arms and weapons of several types and ammunition.
 - * It also produces troop comfort equipment like uniforms, tents and boots.
- Their structure, work culture and product range now need to be responsive to technology and quality demands of modern armed forces. Corporatisation, including public listing of some units, ensures a more efficient interface of the manufacturer with the designer and end user.

4. FDI impact

- The FDI limit in defence manufacturing under automatic route will be raised from 49% to 74%.
- It would open the door to more joint ventures of foreign and Indian companies for defence manufacturing in India.

- It will also sustain a beehive of domestic industrial activity in the research, design and manufacture of systems and sub-systems.
- Indian companies, which have long been sub-contractors to prominent defence manufacturers abroad, would now get the opportunity to directly contribute to Indian defence manufacturing.

5. Coexistence

- The government has rightly clarified that self-reliance would not be sudden and hasty but gradual.
- The thrust for indigenous research and development will coexist with the import of cutting-edge military technologies to avoid near-term defence vulnerabilities.

Challenges

- The decision to corporatize the OFB would require managing numerous other issues, the most pressing of them being to assuage the anxiety of its workforce, including officers.
 - * The Board's overall financial management could also pose an immediate challenge which, in turn, could become tangled in legal wrangling.
- Further, an increase in the FDI cap to 74 per cent through the automatic route meets a longstanding demand by overseas companies and investors.
 - * But how attractive or financially remunerative would it be for them to invest in India's military-industrial complex would depend on the fine print and conditions predicated to this liberalisation.
- The decision to notify and continuously update the list of weapons/platforms whose import would be prohibited seems equally restrictive and limiting.
 - * In keeping with the procurement policy since 2016, there is no way the MoD can import material that is locally available or alternately can be indigenously manufactured.
 - * It is unclear what additional purpose would be served by banning the import of these items. If anything, it will make it procedurally more complex to import any such item, should its induction become operationally necessary.
- Other reforms announced by the Finance Minister include the establishment of a Project Management Unit (PMU) to ensure timely completion of the procurement process, facilitating quicker decision-making, formulation of realistic General Staff Qualitative Requirements (GSQRs) and overhauling the Trial and Testing procedures.
 - * It may be recalled that the former Defence Minister Manohar Parrikar had once publicly declared that some of the military's QRs appeared to be out of 'Marvel comic books', as the technologies and capabilities they specified were 'absurd and unrealistic'.

- * The April 2012 Defence Parliamentary Committee had also revealed that as many as 41 of the Indian Army's tenders were scrapped because of the restrictive QRs.

Way forward

- The armed forces should give industry a clear picture of future requirements, so that the industries can build a long-term integrated perspective plan.
- DPP 2020 should incorporate guidelines to promote forward-looking strategic partnerships between Indian and foreign companies, with a view to achieving indigenisation over a period of time for even sophisticated platforms.
- To give private industry a level playing field for developing defence technologies, conflicts of interest, created by the role of our Defence Research and Development Organisation (DRDO) as the government's sole adviser, developer and evaluator of technologies have to be addressed.

Conclusion

- Investment, Indian or foreign, will be viable only if the door to defence exports is opened, with a transparent policy.

A jolt to national energy security

Context:

- Finance Minister's proposal for reform of power tariff policy as part of the Atmanirbhar Bharat package.

Background:

- The DISCOMS have been under financial stress and there have been repeated attempts at improving their condition through various initiatives and schemes from the governments.

Rising costs for DISCOMs:

- The cost of power purchase has risen to 80% of the total costs of State DISCOMs.

Causes:

Two part tariff policy:

- The two-part tariff policy has been mandated by the Ministry of Power since the 1990s.
- As more private developers came forward to invest in generation, DISCOMs were required to sign long-term Power Purchase Agreements (PPA), committing to pay a fixed cost to the power generator, irrespective of whether the State draws the power or not, and a variable charge for fuel when it does.

Over optimistic projections:

- The PPAs signed by DISCOMs were based on over-optimistic projection of power demand estimated by the Central Electricity Authority (CEA).
- Due to this, DISCOMs locked into long-term contracts end up servicing perpetual fixed costs for power not drawn.

- Due to the CEA's overestimates, the all-India plant load factor of coal power plants is only 56%. This leads to underutilization of available capacity and increases the operating cost of the generation plants which invariably leads to higher costs for the electricity.

Renewable energy factor:

- From 2010, solar and wind power plants were declared as "must-run", requiring DISCOMs to absorb all renewable power, even in excess of mandatory renewable purchase obligations. The decrease in thermal generation to accommodate all available green power, entailed further idle fixed costs payable on account of two-part tariff PPAs.
- DISCOMs are having to integrate large volumes of solar and wind energy power at relatively high tariffs (5 Rs./kwh in Karnataka and 6 Rs./kwh in Tamil Nadu for solar power).
- In 2015 the Centre announced an ambitious target of 175 gigawatts of renewable power by 2022, offering a slew of concessions to renewable energy developers, and aggravating the burden of DISCOMs.

Details:

- The proposal for reform of power tariff is part of the recent comprehensive proposal to amend the Electricity Act, 2003.
- Significant changes have been proposed in the Electricity Act, 2020.
 - * There is a proposal for sub-franchisees under the DISCOM service areas.
 - * 1. This is an attempt to usher in markets in the sector which the government hopes will be more efficient and accountable.
 - * The amendment proposes greater concessions to renewable power developers.
 - * 1. This is in line with India's climate action initiatives and to increase India's energy security by making use of the renewable energy potential of India.
 - * There is a proposal to eliminate the cross-subsidies in retail power tariff, which means that each consumer category would be charged what it costs to service that category.
 - * 1. This would help reduce the steep cross-subsidies in electricity being borne by the industries which make their goods and services costly in the global market.
 - * 2. The elimination of cross subsidy would entail more efficient usage of electricity.
 - * 3. The provision for direct transfer of subsidies would reduce leakage losses.
 - * State regulators will henceforth be appointed by a central selection committee.
 - * 1. This is meant to ensure uniformity in appointment processes across states and also ensure the availability of a larger talent pool from across the country for appointments.

- * Establishment of a centralised Electricity Contract Enforcement Authority.
- * 1. This would help ensure faster resolution of disputes and entail lower pendency and associated costs.

Concerns:

Sub-franchising:

- The sub-franchisees would invariably be private players. Private sub-franchisees are likely to pick and choose the more profitable segments of the DISCOM's jurisdiction.
- The Electricity Bill 2020 does not clarify whether a private sub-franchisee would be required to buy the power from the DISCOM or procure cheaper power directly from power exchanges.
- DISCOMs will be saddled with costly power purchase from locked-in PPAs and fewer profitable areas from which to recover it, which would further deteriorate their financial health.

Renewable energy concessions:

- The increased concessions and limits of mandatory renewable energy purchase obligations will have a cascading impact on the DISCOM's idling fixed charges further impacting the viability of DISCOMs.

Elimination of cross-subsidies:

- The removal of cross subsidization would result in higher tariffs for rural consumers as the rural consumers require long lines and numerous step-down transformers resulting in higher servicing costs.
- The proposed amendment envisages State governments directly subsidising selected categories through direct benefit transfers. This would further burden State governments that are already struggling with direct power subsidies, and further deteriorate their financial position.

Increased centralization:

- The appointment of state regulators by a central selection committee jeopardises regulatory autonomy and independence and the concurrent status of the electricity sector.
- The establishment of a centralised Electricity Contract Enforcement Authority will transfer the power to adjudicate upon disputes relating to contracts away from State Electricity Regulatory Commissions.
- The implementation of the proposed reforms will weaken the control of States over an industry supplying a basic human necessity such as electricity and mark an increasing centralisation of control over the sector.

Energy security:

- The proposed changes could destabilize the functioning of the distribution utilities/companies (DISCOM) and have serious consequences for the country's energy security.

24. Fifth Tranche- Centre throws open all sectors to private players

Context:

- The fifth tranche of the Atmanirbhar Bharat Abhiyan stimulus package announced by the Finance Minister.

Details:

- The major provisions of the final tranche of the Atmanirbhar Bharat Abhiyan stimulus package include the following:
 - * There is an additional 40,000 crore rupees allocation for the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
 - * The new Public Sector Enterprise Policy promotes the entry of private companies into every sector of industry, while limiting public sector enterprises to only strategic sectors.
 - * 1. The new policy will notify specific strategic sectors in which at least one PSU will remain, although private companies will also be allowed.
 - * 2. Even in the strategic sectors, no more than four PSUs will be allowed, with the rest being privatised, merged or brought under holding companies.
 - * 3. PSUs in all other sectors will be privatised.
 - * Corporate enterprises have been offered relief via changes to the Insolvency and Bankruptcy Code (IBC) and the Companies Act.
 - * 1. Fresh insolvency proceedings would be suspended for a year.
 - * 2. COVID-19 related debt will not trigger defaults.
 - * 3. Firms will be allowed to list abroad directly.
 - * State governments have been given more fiscal room in the current crisis with the hiking of their borrowing limits from 3% to 5% of Gross State Domestic Product (GSDP). However, the hiked limits will be conditional on States implementing reforms related to ration portability, ease of doing business, power distribution, and urban local bodies.

Significance:

- The total package announced under the Atmanirbhar Bharat Abhiyan stimulus package amounts to 20.97 lakh crore rupees accounting to 9.8% of GDP.
- The decision to allocate 40,000 crore rupees to the MGNREGA scheme in addition to the 61,000 crore rupees allocated in the Budget was widely welcomed, as a measure that will support rural livelihoods at a time when returning migrants swell unemployment in the villages.
- The hike in borrowing limits of the state is important as GSDPs are likely to contract, further shrinking possible borrowing at a time when States are at the frontline of containment and relief operations. The increase in borrowing limits would make extra resources worth 4.28 lakh crore rupees available to States.

- For the health sector, there is the announcement for increased public expenditure including infectious disease hospital blocks in every district and public laboratories in every block. There are provisions for higher number of health and wellness hubs.

Concerns:

Inadequate expenditure:

- Out of the ₹20.97 lakh crore stimulus package, only ₹2.2 lakh crore can be traced as direct additional budgetary cost to the central exchequer, while another ₹1.55 lakh crore relates to already budgeted expenditures.

Heavy reliance on credit related measures:

- The remaining 85% of the stimulus package is heavy on credit-related measures and comes from the RBI's liquidity announcements (amounting to around 8 lakh crore rupees), credit guarantee schemes and insurance schemes, apart from the structural reforms which are not really stimulus or relief measures.

Double counting:

- Some analysts have pointed out double counting as the credit guarantee schemes to support small companies and non-banking finance companies would also tap into the RBI's measures.

Weak state's finances:

- Though the additional allocation to MGNREGA is welcome, given that States account for 40% of MGNREGA expenditure, including most upfront costs, they will also have to be willing to spend on the scheme.

Higher cost of borrowing for the states:

- The interest on the state bonds has shot up to 9% and States are having to pay a high cost for their market borrowings.
- Given that the Centre's cost is lower at about 6%, it would have been better for the Centre to borrow from the market and transfer to the States.

Public sector enterprise policy:

- There are concerns that privatising PSUs would find fewer buyers at a time of global recession.
- The process of privatization would lead to a scenario wherein the potential buyer would be spending money which could have otherwise gone into fresh investment or a financial transfer, thus effectively contracting demand in the economy.

25. Where is health in the stimulus package?

Context:

- Atmanirbhar Bharat Abhiyan stimulus package.

Details:

- The package of 20-lakh crore rupees announced by the Prime Minister focuses on reviving economic activities, restoring livelihoods, addressing concerns of hunger and starvation, stimulating small and medium enterprises, and enhancing farm incomes. The health sector has not received much attention.

Concerns:

Poor state of healthcare facilities:

- The healthcare delivery system in most States is extremely fragile given the poor state of primary healthcare facilities.
- The public provisioning of healthcare has been found to be insufficient, of poor quality and having limited reach.

Poor resource allotment to health sector:

- The public spending on health has been consistently low at around 1.15% of GDP for well over a decade.

Opportunity cost of COVID-19 pandemic:

- It is possible that resources allocated for other health programmes are being diverted to deal with the COVID-19 pandemic. The opportunity cost of such diversion of funds could be high.
- People's access to routine maternal and child health as well as family planning services in parts of the country has been negatively impacted. Progress made with respect to various diseases could witness setbacks.

Limitations of private sector:

- India's private sector in health is sizable.
 - * The private sector accounts for 93% of all hospitals, 64% of all hospital beds, and 80-85% of all doctors.
- Most private healthcare providers seem to be incapable of and unwilling to help even during a national crisis.
 - * Rapidly declining revenues and sharply eroding profits are leading to the closure of many private hospitals.
 - * Only a few private providers have come forward to extend support to the government.

Way forward:

Strengthening public health:

- The COVID-19 pandemic experience has brought out the critical importance of the public sector in health provisioning.
- There is a need to invest in Universal Health Coverage (UHC) by reversing the financial neglect of public healthcare. Nearly every country in the world that has achieved anything like UHC has done it through the public assurance of primary healthcare.

Increasing investments in health:

- There is a need to urgently and immediately step up investments in health.
- A new 'health investment plan' (as part of the stimulus package), at least 1% of the GDP, out of the stimulus package should be earmarked for improving the country's health infrastructure and strengthening public health service delivery.

Prioritizing primary healthcare:

- Up to 70% of the additional expenditures should be ring-fenced for primary healthcare and further strengthening health and wellness centres, primary health centres and community health centres. This would enable the State governments to be better prepared to face a second round of the pandemic.

Conclusion:

- Investing in health, apart from improving people's well-being, is also essential for accelerating and sustaining India's economic growth.

26. Coir Geo textiles

Context

- Coir Geo textiles, a permeable fabric, natural, strong, highly durable, resistant to rots, moulds and moisture, free from any microbial attack, has finally been accepted as a good material for rural road construction.
- It will be used for construction of rural roads under the Pradhan Mantri Gram Sadak Yojana (PMGSY) III

Coir

- It is a 100% natural fiber, from a renewable source – the coconut husk. Naturally resistant to rot, molds and moisture, it needs no chemical treatment.
- Hard and strong, it can be spun and woven into matting.
- They also have the right strength and durability to protect the slopes from erosion, while allowing vegetation to flourish.

Geotextiles

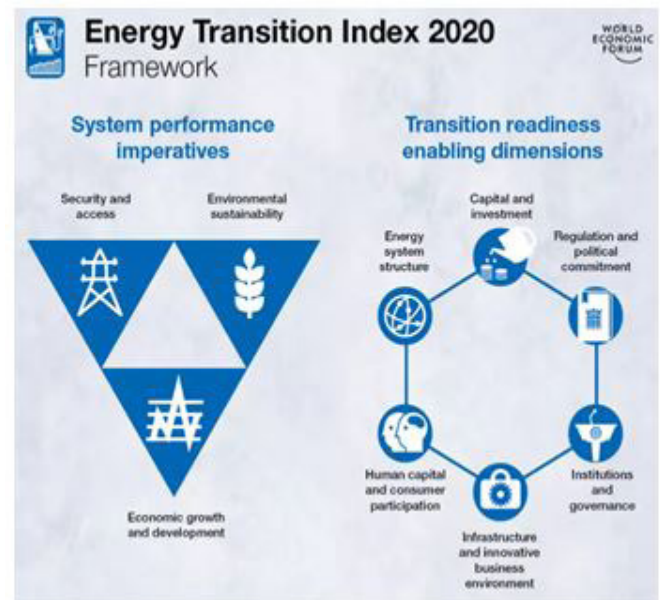
- They are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain.
- They are made from polypropylene or polyester.

Applications

- Geotextiles and related products have many applications and currently support many civil engineering applications including roads, airfields, railroads, embankments, retaining structures, reservoirs, canals, dams, bank protection, coastal engineering and construction site silt fences or geotube.
- Geotextiles are also used for sand dune armoring to protect upland coastal property from storm surge, wave action and flooding

27. Energy Transition Index Report

- The Energy Transition Index (ETI) is a fact-based ranking intended to enable policy-makers and businesses to plot the course for a successful energy transition.
- The benchmarking of energy systems is carried out annually across countries
- The Energy Transition Index, a composite score of 40 indicators, benchmarks 115 countries on the current performance of their energy system, and their readiness for transition to a secure, sustainable, affordable, and inclusive future energy system.
- Effective energy transition is timely, inclusive, sustainable, affordable and secure. It provides solutions to global energy-related challenges, while creating value for business and society, without compromising the balance of the energy triangle.



Context

- According to a report released by World Economic Forum (WEF) India has moved up two positions to rank 74th on a global 'Energy Transition Index' with improvements on all key parameters of economic growth, energy security and environmental sustainability

India's improved Ranking

- For India, gains have come from a government-mandated renewable energy expansion programme, now extended to 275 GW by 2027.
- India has also made significant strides in energy efficiency through bulk procurement of LED bulbs, smart meters, and programs for labelling of appliances.

- India's improvements have come across all three dimensions of the energy triangle -- economic development and growth, energy access and security, and environmental sustainability.

Global Ranking

- Sweden has topped the Energy Transition Index (ETI) for the third consecutive year and is followed by Switzerland and Finland in the top three.
- France (ranked 8th) and the UK (7th) are the only G20 countries in the top ten.
- The US ranks outside the top 25 per cent for the first time, primarily due to the uncertain regulatory outlook for energy transition.

28. Surya Nagri

Context

- Union Government has launched scheme for 100 per cent solarization of Konark Sun Temple and Konark town in Odisha.

Details

- The scheme is launched with an objective to develop the historical Sun Temple town of Konark as Surya Nagri.
- The scheme envisages setting up of 10 Mega Watt grid connected solar project and various solar off-grid applications like solar trees and solar drinking water kiosks.
- This will be done with a 100 per cent Central Financial Assistance (CFA) support of around Rs 25 crore from the Indian Government through the Ministry of New and Renewable Energy.
- Implementation of this project will be done by Odisha Renewable Energy Development Agency.
- The Scheme will meet all the energy requirements of Konark town with solar energy.

Significance

- The public will get a message of synergy between the modern use of solar energy and the ancient Sun Temple in Odisha along with the importance of promoting solar energy.

INTERNATIONAL RELATIONS

1. D 10

Context:

- The British government has approached the US with the prospect of creating a 5G club of 10 democracies, including India, amid growing security concerns related to Chinese telecom giant Huawei.

Details

- A so-called "D10" club of democratic partners, including G7 countries – UK, US, Italy, Germany, France, Japan and Canada – plus Australia, South Korea and India will aim to create alternative suppliers of 5G equipment and other technologies to avoid relying on China
- The move to speed up such a club comes as the UK launched an inquiry into Huawei's involvement in the country's mobile network upgrade in the wake of US sanctions against the company.

Background

- The US has increased its action against Huawei, China's first global tech brand and a maker of network equipment and smartphones, preventing it from doing business in the US, as it believes the company known for its technological advancement in 5G is being used by the Chinese leadership to serve their interest.

2. Gilgit-Baltistan polls

Context:

- The External Affairs Ministry issued a strong protest over an order by the Pakistan Supreme Court allowing the government to hold elections in the region of Gilgit-Baltistan of Pakistan-occupied Kashmir (PoK).

Details:

- Gilgit-Baltistan has functioned as a "provincial autonomous region" since 2009.
- India has issued a demarche to protest what it called Pakistan's attempt to make material changes to the disputed area, by bringing federal authority to Gilgit-Baltistan (G-B).
- India asserts that the Government of Pakistan or its judiciary has no locus standi on territories illegally and forcibly occupied by it.
- India's reaction is consistent with its previous objections against elections in G-B and in other parts of PoK.
- India maintains that Gilgit-Baltistan is a part of the former princely state of Jammu and Kashmir that is an integral part of India.

3. Iran to get a new currency

Context:

- The Iranian Parliament has authorised the replacement of the rial with another basic unit of currency called the toman.

Background:

- For many years, Iran's government debated changing the national currency, the rial, by slashing four zeros off its face value.
- It is an acknowledgement of how American sanctions and economic mismanagement have contributed to inflation in the country.
- Since 2018, when the Trump administration repudiated the nuclear agreement and reimposed sanctions on Iran, the value of Iran's currency has fallen by roughly 60%.
- The COVID-19 pandemic, that turned Iran into a regional epicentre of the disease, appears to have played a decisive role, contributing to a further devaluation of the rial since February 2020.

Details:

- Each toman will be worth 10,000 rials under the new system.
- This decision has been taken in a move to simplify the transactions.
 - * Slashing the extra zeros would vastly simplify financial calculations in Iran by eliminating the need for Iranian shoppers to carry loads of rials to make purchases.
- The change is the outcome of a draft bill presented in early 2019 by the Governor of Iran's central bank.
- It is worth noting that the currency has been devalued 3,500 times since 1971 and that Iran had no choice but to save the face of its national currency.



- The Guardian Council, a body of conservative clerics that supervises Parliament, is expected to ratify the law, and then the central bank will have two years to implement the change — removing rials from circulation and issuing toman instead.

Criticisms:

- Opponents argued that the plan was an added expense at a time when the government was already facing a budget deficit of between 30-50% for the coming fiscal year.
- The effect of the currency change, the critics opine, amounted to just cosmetic window dressing.
- Fereydoon Khavand, an Iranian economist in Paris, said governments typically arrived at changing the national currency as the last stage of an economic overhaul like European countries had done after the Second World War or Turkey in recent years.
 - * Iran has done the opposite, partly because of the crippling effect of U.S. sanctions, which have severely limited the country's ability to sell oil or to conduct international financial transactions.
 - * Under these circumstances, he said, other basic economic changes the Iranian government may want to undertake are difficult.
- It is opined that the Iranian government is in a financial bind with no prospect of financial aid coming from outside or from inside, so they are trying this.

4. Mission Sagar

- India launched Mission Sagar as part of the government's outreach initiative towards five Island nations in the Indian Ocean amidst the ongoing COVID-19
- Indian Naval Ship Kesari visited Maldives, Mauritius, Seychelles, Madagascar and Comoros, to provide food items, COVID-related medicines including HCQ tablets and special Ayurvedic medicines with medical assistance teams.

Maldives

- India and Maldives are close maritime neighbours with strong and cordial defence and diplomatic relations.
- As part of the mission, INS Kesari provided 600 tons of food provisions.
- A team of select medical personnel also helped Maldives to augment their preparedness to fight this crisis.

5. Vande Bharat Mission

- It is the massive repatriation operation planned by the Indian government to bring back stranded Indians in different parts of the world in the wake of the coronavirus crisis.
- Citizens in distress will be brought back on commercial aircraft and naval ships based on lists prepared by the India's embassies.

- It is seen as the largest exercise to bring back Indian citizens since the evacuation of 177,000 from the Gulf region in the early 1990s at the start of hostilities between Iraq and Kuwait during the first Gulf War.
- The "Vande Bharat" mission would however give priority to Indian citizens with "compelling reasons to return" – like those whose employments have been terminated, those whose visas have expired with no hope of them getting renewed under the present circumstances and those who have lost family members in recent times.

Operation "Samudra Setu"

- The Indian Navy has launched Operation Samudra Setu (Meaning: Sea Bridge) as a part of the national effort to repatriate Indian citizens from overseas.
- The ships have been suitably provisioned for the evacuation operation. The evacuated personnel would be provided the basic amenities and medical facilities during the sea-passage.
- This operation is being progressed in close coordination with the Ministries of Defence, External Affairs, Home Affairs, Health and various other agencies of the Government of India and State governments.

6. Pakistan as both terror perpetrator and victim

Context:

- The article analyses how Pakistan is both possibly the leading perpetrator of terrorism and also a victim of terrorism.

Terrorism as a policy:

- Many of the current terrorist groups were deliberately created by the Pakistani state to serve its purposes.
- The Pakistani state has involved itself in a deliberate policy of creating and fostering terrorist groups in order to engage in low intensity warfare with its neighbours.

Afghanistan:

- Pakistan first operationalized this strategy in Afghanistan following the overthrow of Zahir Shah by his cousin Daud Khan in 1973, and intensified it with the cooperation of the U.S. and Saudi Arabia after the Marxist coup of 1978.
- It continues to provide support to forces which are fighting against the democratically elected government in Afghanistan.

India:

- The Soviet withdrawal in 1989 left the Pakistani military with a large surplus of Islamist fighters that it had trained and armed. Pakistan, by pushing these Islamic fighters into Kashmir, has tried intensifying the insurgency in the Kashmir Valley.

Threat by terrorism to Pakistan

Radicalization:

- The Afghan episode radicalized a substantial segment of the Pakistani population, especially in the North-West Frontier Province and Punjab.

Deepened sectarian divisions:

- The Afghan episode also augmented sectarian divisions, not only between Sunnis and Shias, but also among various Sunni sects, especially between the puritanical Deobandis and the more syncretic and Sufi-oriented Barelvis.

Attacks within Pakistan:

- Terrorist organizations, like the Tehreek-e-Taliban Pakistan (TTP), which has ideological affinity with the Afghan Taliban, has fought pitched battles with the Pakistan Army in the Federally-Administered Tribal Areas and parts of the NWFP (now Khyber-Pakhtunkhwa).
- Jaish-e-Mohammed (JeM) given its ideological and sectarian inclinations has been engaged in launching terrorist attacks on targets within Pakistan as well, especially against the Shias and Sufi shrines.

Fallacy of categorizing terrorists:

- The Pakistani efforts to support organizations allied with the Pakistani establishment's interests, while curtailing other terrorist organizations seem to have backfired.
 - * Pakistani establishments' ability to control the various terrorist outfits is uneven and some of them have turned against the Pakistani establishment.
 - * The use of terrorist outfits for state objectives involves huge risks given the potential blowback and negative consequences for the stability of the Pakistani state itself.

India's concerns:

- A number of terrorist groups have emerged inside Pakistan, which the Pakistan Army has co-opted for its use in Kashmir and the rest of India.

Terrorist attacks on India:

- Apart from the Mumbai attack of 2008, the attack on the Indian Parliament and other high profile attacks on India, terrorist attacks continue unabated in Kashmir.

Continued support for terrorist organizations:

- The evidence in the Mumbai attack of 2008 clearly indicates terrorist organizations' operations are coordinated with the Inter-Services Intelligence that provides it with intelligence and logistical support in addition to identifying specific targets.
- The Lashkar-e-Taiba (LeT) and its front organisations responsible for various attacks in India have continued to receive the Pakistani military's patronage and support.

- Hafiz Saeed was, until recently, provided protection by the Pakistani state despite being designated an international terrorist by the UN and the U.S. putting a \$10 million bounty on his head.

Non sincere measures against terrorist organizations:

- The recent sentencing of Saeed to 11 years for terror financing activities seems to be a move to stave off the global anti-terror watchdog, Financial Action Task Force (FATF), blacklisting Pakistan as a terror financing state.

Terrorism as a global threat:

- The terrorist threat emanating from Pakistan poses risks not only for its immediate neighbourhood and the Pakistani state itself, but the whole world at large.
- Borrowing from the line, "poverty anywhere is a threat to prosperity everywhere", in the case of terrorism it could be stated that "terrorism anywhere is a threat to peace everywhere".

7. COVID-19 pandemic may create opportunities to deepen India's engagement with Africa

Background

- Africa Day is observed every year on May 25 to commemorate the founding of the Organisation of African Unity (now known as the African Union).
- India has been closely associated with it on account of its shared colonial past and rich contemporary ties.
- The Manohar Parrikar Institute for Defence Studies and Analyses has hosted an Africa Day Round Table annually for the last four years in order to commemorate this event.

Economic condition in Africa

- The World Bank's Africa's Pulse is a biannual analysis of the near-term macroeconomic outlook for the region.
 - * Each issue includes a special focus on a particular development challenge that is shaping Africa's economic future.
 - * Growth is expected to plummet to between -2.1 and -5.1 per cent in 2020, from a modest 2.4 per cent in 2019.
- With high rates of HIV, malaria, diabetes, hypertension and malnourishment prevalent, a large number of Africans were already faced with a health and economic crisis.
 - * The steep decline in commodity prices has spelt disaster for the economies of Nigeria, Zambia and Angola.
- Precarious fiscal positions have ruled out any major governmental stimulus. Public debt has mounted.
- It is clear that without outside support, Africa will find it very difficult to meet the challenge.

Economic Opportunities in Africa

- Africa's rich natural resources, long-term economic potential, youthful demography and influence as a bloc of 54 countries in multi-lateral organisations are apparent.
- In recent years, several extra-regional economies have strengthened their engagement with African states, with an eye to rising opportunities, including in energy, mining, infrastructure and connectivity.

1. China

- China's engagement of Africa, as elsewhere, is huge but increasingly regarded as predatory and exploitative. Its annual trade with Africa in 2019 stood at \$208 billion, in addition to investments and loans worth \$200 billion.
- Traditionally, China's participation in infrastructure projects has been astonishing. Having famously built the 1,860 km Tanzania-Zambia railway line in 1975, and the Addis Ababa-Djibouti and Mombasa-Nairobi lines more recently, China is now eyeing to develop the vast East Africa Master Railway Plan.
- At the Forum for China-Africa Cooperation (COCAC) in 2018, China set aside \$60 billion in developmental assistance, followed by a whopping \$1 billion Belt and Road (BRI) Infrastructure Fund for Africa.
- China has followed up with robust health sector diplomacy in the wake of the pandemic.

China's image was tarnished.

- This was due to supply of defective PPE gear and discriminatory behaviour against Africans in Guangzhou, leading to an embarrassing diplomatic row.
2. Japan hosted the 7th Tokyo International Conference for African Development (TICAD) in August 2019.
 3. Russia hosted the first-ever Russia-Africa Summit in 2019.
 4. Brazil, home to the largest population of people of African descent outside of Africa, has also sought to develop closer ties.
 5. Cuba has sent medical teams to help Africa.

India's relationship with Africa

- Prime Minister Narendra Modi has redefined India's relations with Africa. India-Africa trade reached \$62 billion in 2018 compared to \$39 billion during 2009-10.
- After South Asia, Africa is the second-largest recipient of Indian overseas assistance with Lines of Credit (LOC) worth nearly \$10 billion (42 per cent of the total) spread over 100 projects in 41 countries.
- Ties were boosted at the India Africa Forum Summit (IAFS) in 2015.
- Approximately 6,000 Indian soldiers are deployed in UN peace-keeping missions in five conflict zones in Africa.

- Bilateral cooperation includes solar energy development, information technology, cyber security, maritime security, disaster relief, counter-terrorism and military training.

Amidst COVID-19 Crisis

- India has already dispatched medical assistance to 25 African countries and PM Modi has had a telephonic talk with President Cyril Ramaphosa of South Africa who is the current chairperson of the African Union, and separately with others such as the Presidents of Uganda and Ethiopia.
- The Minister of External Affairs has also reached out to counterparts in Africa to reiterate India's support in the fight against the coronavirus.

What should India do?

- India could consider structuring a series of virtual summits in zonal groups with African leaders across the continent over the next few months that could both provide a platform for a cooperative response to the pandemic and also serve as a precursor to the actual summit in the future.
- The Aarogya Setu App and the E-Gram Swaraj App for rural areas for mapping COVID-19 are technological achievements that could be shared with Africa.
- Since the movement of African students to India for higher education has been disrupted, India may expand the e-VidyaBharti (tele education) project to establish an India-Africa Virtual University.
- With the locust scourge devastating the Horn of Africa and the pandemic worsening the food crisis, India could ramp up its collaboration in this sector.
- It is also time for the Quad Plus, in which the US, India, Japan and Australia have recently engaged other countries such as the ROK (South Korea), Vietnam, New Zealand, Israel and Brazil, to exchange views and propose cooperation with select African countries abutting the Indian Ocean.

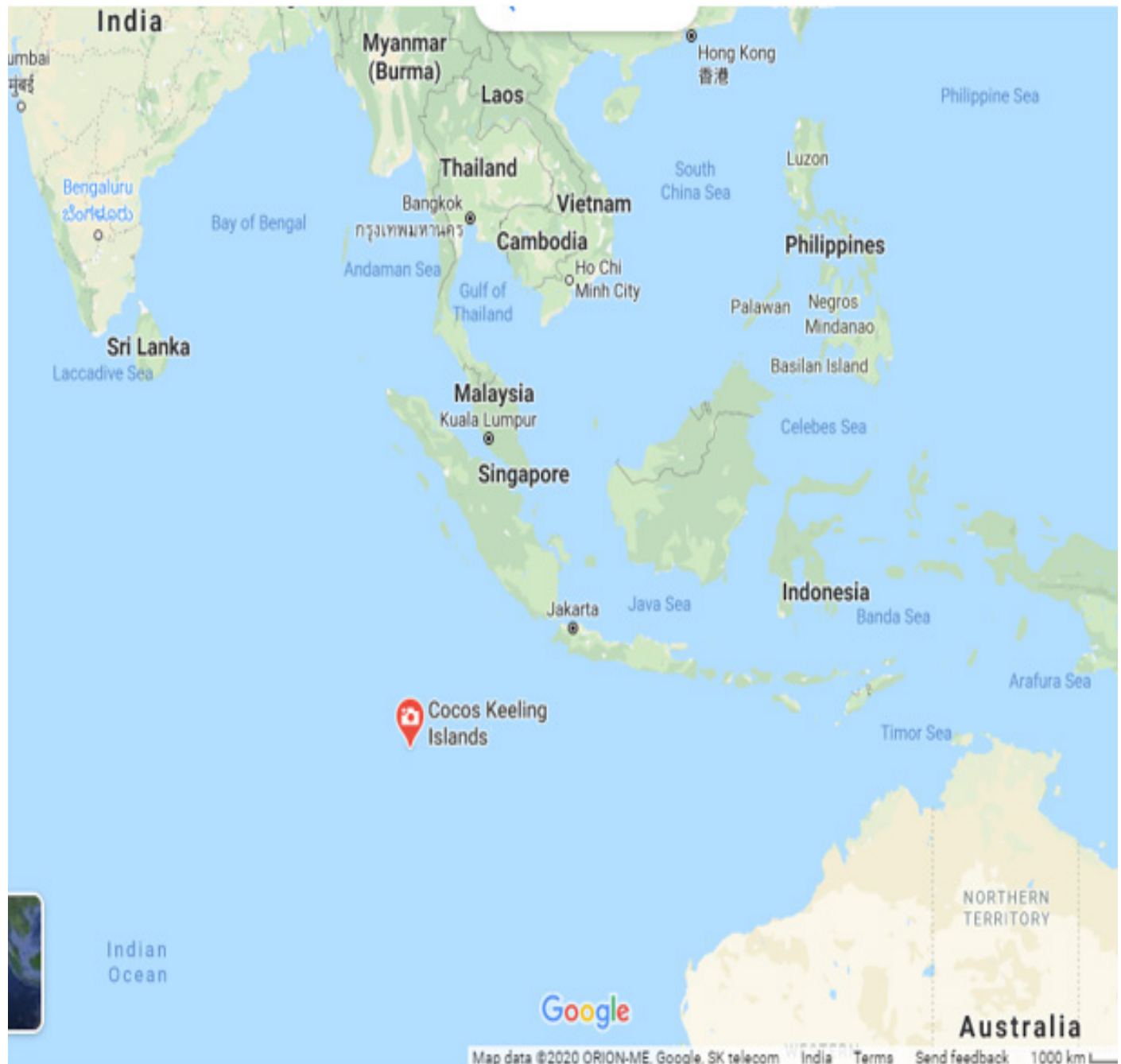
8. Anchoring ties with Canberra the virtual way

Context:

- India and Australia under the leadership of Prime Ministers of both the countries are preparing for a virtual summit.
- This will be India's first virtual bilateral summit.

Possible Strategic Initiative

- This could involve the cooperative use of their respective island territories in the Indian Ocean for strategic purposes.
- India's Andaman and Nicobar Islands and Australia's Cocos (Keeling) islands are well-positioned to offer significant advantages for both countries.



The strategic relationship between the two countries is currently underdeveloped, despite strong converging interests.

- One challenge in the relationship comes from differences in priority theatres, with India's in Indian Ocean and Canberra's in the Pacific.
- If New Delhi defines the Pacific as its secondary area of interest then for Canberra the Indian Ocean is its second sea.
- Capacity limitations on both sides mean there is a challenge in deploying resources in secondary areas of interests.

Importance of these Islands

- These islands are located near strategic chokepoints and trading routes, with the Andaman and Nicobar islands near the straits of Malacca, while the Cocos Islands lie in close proximity to the Indonesian straits of Sunda, Lombok, and Ombai-Wetar.
- Together, these straits are the entry and exit points between the Indian and the Pacific Oceans. In the current geopolitical competition in the Indo-Pacific, these islands can provide advantages for strategic, practical, and signalling purposes.
- Both India and Australia already use their islands for maritime surveillance and reconnaissance missions using P-8 aircraft based in southern India and Australia.
 - * A joint coordinated effort utilising island territories through mutual access agreements would allow India and Australia to expand its presence and Maritime Domain Awareness (MDA) missions beyond their respective individual capacities.
- These islands provide an opportunity for coordinated and joint anti-submarine warfare missions for both the Indian and the Pacific Oceans.

India-Australia collaboration thus sends a strong political message across the Indo-Pacific, sending a message of deepening strategic trust between two key players of the Indo-Pacific.

Convergence of interests

- India and Australia can perhaps begin by using the AUSINDEX as a platform for a coordinated patrolling.
- In addition, it may be prudent for New Delhi and Canberra to elevate the 'two plus two' format for talks from the Secretary level to the level of Foreign and Defence Ministers.
- This will allow both sides to test logistical and administrative challenges laying the foundation for more complex and sustained missions in the future.
- This would require political agreement at the highest level.

Mutual Logistics Support Agreement

- The upcoming summit will likely include the execution of a long-awaited mutual access and logistics facilities agreement similar to India's existing arrangements with the US and France.
- This would enhance defence cooperation and ease the conduct of large-scale joint military exercises.

9. Trump's executive order, targeting social media platforms

Context:

- President Donald Trump signed an executive order targeting social media companies, days after Twitter called two of his tweets "potentially misleading."

Background

- Donald Trump had tweeted "There is NO WAY (ZERO!) that Mail-In Ballots will be anything less than substantially fraudulent. Mailboxes will be robbed, ballots will be forged & even illegally printed out & fraudulently signed," Mr. Trump tweeted, singling out the Governor of California (Gavin Newsom).
- Twitter reacted with a link that said, "Get the facts about mail-in ballots" that linked to a page titled, "Trump makes the unsubstantiated claim that mail-in ballots will lead to voter fraud." The page included details on the President's false claims and links to articles from publications including the Washington Post and CNN.

Social Media

- It is decentralised and democratic, which allows people to voice their opinion and influence the outcome.
- But they have also played a major role in genocides and election rigging.
 - * It has also been misused to spread falsehoods and incite violence.
- Big tech companies such as Google, Facebook, Amazon, Microsoft and Apple have given rise to concerns of privacy, data misuse, political bias, monopoly behaviour, tax avoidance and national security.

Accusation of Political Parties

- Republicans say social media platforms are anti-conservative.
- Democrats believe some of these platforms are easily manipulated by enemies of the nation and accuse them of unfair trade and labour practices, and call for breaking them up.
- Facebook's attempt to launch a digital currency Libra has triggered sovereignty concerns among nations.
 - * It had to pay \$5 billion in fines to settle investigations into its misuse of data in the

Cambridge Analytica controversy.

Platforms like Twitter have often declared their commitment to stop fake news, but any attempt to enforce content regulation comes with additional complications, as Twitter's attempt to fact-check the President shows.

What is an executive order?

- An executive order is a signed, written, and published directive from the President of the United States that manages operations of the federal government.
- Such orders are not legislations and don't require the approval of the Congress, which also means that the Congress cannot overturn them.
- According to the American Bar Association, Congress may pass legislation that makes it difficult or impossible to carry out an executive order, such as removing funding.
- However, ultimately, only a sitting U.S. president can overturn an executive order by issuing another one to that effect.

What triggered the move?

The move comes after Twitter labelled two posts made by Trump about California's vote-by-mail plans as fact-checked.

- As part of its new policy undertaken amid the Coronavirus pandemic, the platform has introduced labels and warning messages that aim to provide "additional context and information" on Tweets containing disputed, misleading or unverified claims related to the pandemic.
- However, the labels can also be used in situations where the risk of harm associated with a Tweet is less severe and people may be confused or misled by the content.

Communications Decency Act

- Under Section 230 of the Communications Decency Act, tech companies currently enjoy broad immunity from civil lawsuits stemming from what users post because they are treated as "platforms" rather than "publishers".

* It, therefore, draws a distinction between platforms on the one hand and publishers or speakers on the other.

- Significantly, the Act also protects online platforms from civil liability, which means that they may not be liable for restricting access to certain content that platforms may consider being, "obscene, lewd, lascivious, filthy, excessively violent, harassing or otherwise objectionable" and when such content is removed in "good faith".
- However, the executive order says that when online platforms remove or restrict access to content, which are not based on the aforementioned criteria, or is in bad taste, it engages in editorial conduct and thereby becomes the "publisher" of all the content posted on

its website.

- * Based on this, the order seeks to revoke the liability shield offered to platforms and exposes them to liability "like any traditional editor and publisher that is not an online provider."

What are the implications of this order?

- The order can certainly give rise to a policy debate about the liabilities and responsibilities of social media platforms.
- Attempts to unilaterally erode the law threatens the future of online speech and Internet freedoms.
- This would mean that social media companies could be sued for defamatory content over what other people post on their platforms.
- The order could discourage companies from taking an active role in curating the content on their platforms and raise the risk and cost of doing business.

In India

Intermediary Guidelines Rules of 2011

- The rules fall under Section 79 of the Information Technology Act, 2000 which provides internet companies a safe harbour from content hosted on their platforms but requires them to carry out a certain level of due diligence.

Revised IT intermediary guidelines

- The government is expected to notify the revised IT intermediary guidelines that seek to make social media companies more responsible for content on their platforms.
- The guidelines propose additional responsibilities on social media companies. These include verifying users through mobile numbers, tracing origin of messages required by a court order and building automated tools to identify child pornography and terror-related content. All these requirements come under the ambit of under due diligence.

10. Non-Aligned Movement

Context

- Indian Prime Minister Narendra Modi participated in a virtual summit of the Non-Aligned Movement Contact Group under the chairmanship of President of Azerbaijan Ilham Aliyev.
- This was the first time Modi had participated in a NAM meeting since the beginning of his tenure in 2014.

Previous Meetings

- Between 2014 and 2020, two NAM summits were held, in 2016 (Venezuela) and 2019 (Azerbaijan) respectively. At both these summits, India was represented by its vice president.

Virtual summit

Mr. Modi was joined by more than 300 heads of state and governments from across the world in the virtual summit.

- The summit leaders adopted a declaration underlining the importance of international solidarity in the fight against COVID-19.
- The leaders announced the creation of a Task Force for a “common database” showing medical, social and humanitarian details from the participating countries.

India's Stand

- NAM should call upon the international community and the W.H.O. to focus on building health-capacity in developing countries.
- We should develop a platform for all NAM countries, to pool our experiences, best practices, crisis-management protocols, research, and resources.
- Needs for a new template of globalization
 - * COVID-19 has shown us the limitations of the existing international system. In the post-COVID world, we need a new template of globalization, based on fairness, equality, and humanity.
 - * We need international institutions that are more representative of today's world. We need to promote human welfare, and not focus on economic growth alone. India has long championed such initiatives.
- On Terrorism
 - * India also spoke about how some are busy spreading other deadly viruses like terrorism, fake news, doctored videos to divide communities and countries.

Advantages with NAM

- First, India can take up leadership role in the one world's largest multilateral organization
- Second, as the world expects the emergence of a new global order in the aftermath of COVID-19, emerging middle powers like India are set to play an important role.

Conclusion

- New Delhi with its current position in the global world order would be keen to lead this middle power balancing through leadership of the NAM within the ambit of South-South cooperation.

11. Afghan President, rival sign power sharing deal**Context**

- Afghan President Ashraf Ghani and political rival Abdullah Abdullah have signed a power-sharing agreement

Deal

- Mr. Ghani would remain President of the war-torn nation.

- The deal calls for Abdullah to lead the country's National Reconciliation High Council and some members of Abdullah's team would be included in Ghani's Cabinet.

Reconciliation Council

- The Reconciliation Council has been given the authority to handle and approve all affairs related to Afghanistan's peace process.

Significance

- There would be working Govt with due consensus developed
- They would be able to contain the spread of the coronavirus.

United Nations Secretariat meeting

- The United Nations Secretariat organised a meeting on Afghanistan where it invited the six current physical neighbours of Afghanistan—China, Pakistan, Iran, Turkmenistan, Uzbekistan and Tajikistan.
- In addition, invitations were extended to the United States, Russia and the Ghani government.
- Obviously, Mr. Ghani did not condition his participation on India's inclusion. He could have lobbied and ensured India's participation.
- He should have done so if only for the constructive role New Delhi has played in Afghanistan's reconstruction since the Taliban were ousted from the country in 2001-2002 after 9/11.

U.S. going along with India's absence

- U.S. acts to promote its interests in Afghanistan.
- U.S. official said “India should talk directly to Taliban, discuss terror concerns directly”

Despite India's contributions to Afghanistan's economic development, as well as its long history of contacts with that country, it does not have a place in international diplomacy on Afghanistan.

- Clearly, as the most significant power in the region, India should have ensured that it had a place on the table and should have devised ways to achieve that end.
- This is especially so because Afghanistan impacts on India's interests, especially its security concerns

The question that India's security and foreign policy decision makers should therefore ask themselves is this: why did the powers not consider India's participation vital to the present peace-making efforts

Talks with Taliban

- Engagement between India and all the key players in Afghanistan, should not only be in terms of the government but also in terms of the political forces, society and the Afghan body politic
- Dialogue between India and the Taliban are important, and it would be important that issues of concerns like terrorism are raised directly.

- Avoiding open contacts with the Taliban, India has reduced its role in international diplomatic efforts says Mr. Khalilzad.
 - * It becomes even more important because Taliban was informally conveying that India should not consider them as Pakistan's puppets and also because they had gained international recognition.
 - * The group has learned from the past and wants international recognition, not isolation. Its spokespeople have regularly expressed a desire to have better ties with India
 - * There are also strong indications that, while dependent, the Taliban leadership may no longer be under the thumb of Pakistan.
 - * More importantly, India's allies in the region, both Russia and Iran, are cooperating with the Taliban and could influence its attitude toward India.

Amar Sinha Interview

- Amar Sinha former envoy to Kabul says the deal is promising and a positive development as they come together setting aside their differences for the prosperity of Afghanistan.
- With respect to talks to Taliban he says "At present, the Taliban is a destructive force. It will become a political force only when it joins the intra-Afghan talks".
 - * Taliban should deal with India as an independent entity, as a nationalist Afghan entity, and not a proxy for other countries.
- India hopes agreement will ensure peace, stability

Conclusion

- India does not have the luxury to choose when, and with whom, to talk in Afghanistan. Thereby it must begin openly talking to the Taliban and with all political groups in the country. It must realise that its Afghan policy needs changes as engaging with all potential political actors in Afghanistan is a strategic necessity.

12. India-China border tension

Context

- Incidents of face-off occurred between Indian and Chinese troops, resulting in injuries to several soldiers on both sides.

What are the various sectors on the India-China border?

India-China border is divided into three sectors:

- The Line of Actual Control (LAC) in the western sector falls in the union territory of Ladakh and is 1597 km long,
- The middle sector of 545 km length falls in Uttarakhand and Himachal Pradesh, and
- The eastern sector falls in the states of Sikkim and Arunachal Pradesh. It is 1346 km long.

- The middle sector is the least disputed sector, while the western sector witnesses the highest transgressions between the two sides.

What exactly is a Chinese transgression?

- A Chinese transgression across the border is recorded once the Indian border guarding forces in an area – either the Army or the ITBP – are "reasonably certain" that Chinese soldiers had crossed over to the Indian side of the LAC.
- A Chinese transgression – in air, land or the waters of Pangong Tso lake – can be recorded, officials said, if it is visually observed by border posts, through use of surveillance equipment, in face-offs by patrols, indicated reliably by locals, or based on evidence left by the Chinese in the form of wrappers, biscuit packets, etc. to show their presence in an unmanned area.

Key Stats

- Nearly three-quarters of the transgressions, data since 2015 show, have taken place in the western sector of the LAC, which falls in Ladakh.
- The eastern sector, which falls in Arunachal Pradesh and Sikkim, witnessed almost one-fifth of the Chinese transgressions.
- The highest number of aerial transgressions by China, according to official data, also took place in 2019 — there were 108 instances, up from 78 in 2018 and 47 in 2017.
- Overall, there were 663 recorded Chinese transgressions in 2019, up from 404 in 2018. This included a 75 per cent spike in the western sector and a 55 per cent rise in the eastern sector.

Do the higher number of Chinese transgressions matter?

- A higher number indicates that the Chinese soldiers are coming to the Indian side more often, and their movements are being observed and recorded by the Indian soldiers.
- This can be seen as an indicator of increased Chinese assertiveness, but as long as there are no major incidents, it means that the established border mechanisms between the two sides are working.

Why Face-off?

- Both countries have differing perceptions owing to the undemarcated boundary, which lead to transgressions and face-offs as each side patrols up to the areas they claim along the 3,448-km Line of Actual Control (LAC).
- The stand-off in Ladakh appears to have been triggered by China moving in troops to obstruct road construction activity by India.

India upgrades the infrastructure

- At Muguthang, the road on the Chinese side is motorable, and on the Indian side, it is a remote area. Due to this, they can bring in a large number of troops if needed.

- But in 2019, India completed the Darbuk-Shyok-Daulet Beg Oldi (DSDBO) road which connects Leh to the Karakoram Pass. India also maintains a key landing strip at DBO at 16,000 feet.
- The broader context for the tensions is the changing dynamic along the LAC. India has been upgrading its roads as it plays catch-up with China, already enjoying an advantage in both terrain and infrastructure. China now seems to be telling India it has no right to carry out the kind of activity that Beijing has already done.
- India is well within its rights to carry out construction work. Delhi needs to remind Beijing that a fundamental principle that underpins all previous agreements is recognising the right to mutual and equal security of the two sides.

Location of the stand-off

- The Galwan River Valley is located in north-eastern Ladakh, east of the Aksai Chin plateau illegally occupied by China.

Basic Framework for dealing with such issues

- "Agreement on the Maintenance of Peace and Tranquility along the Line of Actual Control in the India-China Border Areas" was initiated in 1993.
- The two sides agreed to "peaceful and friendly consultations" to resolve the boundary dispute and disclaimed the threat of force as a legitimate bargaining tool.
- Further, until such an agreement could be reached, the sanctity of the LAC was to be maintained.
- Any "contingencies or other problems arising in the areas" were to be dealt with "through meetings and friendly consultations between border personnel of the two countries."
- An informal summit took place in Wuhan between Prime Minister Narendra Modi and Chinese President Xi Jinping in 2018, the year after the Doklam stand-off. Both countries declared they "respect each other's sensitivities, concerns and aspirations" and reiterated their commitment to the terms of the 1993 Agreement.

Way Forward

- The immediate priority is for both sides to use existing channels and step back. Flag meetings between brigade commanders have so far been unable to break the stalemate. The incidents have underlined how the new LAC situation is placing existing mechanisms under renewed stress.
 - * Focus should also be on military-to-military communication, which would "allow the two sides to immediately clarify any relevant issues at a more senior directive level."
- India and China should grasp the current situation as an opportunity to revive the stalled process

of clarifying the LAC. China has resisted this as a distraction to the boundary negotiations. But rather than agree on a line, both can instead simply seek to better understand the claims of the other and reach a common understanding to regulate activity in these areas.

- Clarifying the LAC may even provide a fresh impetus to the stalled boundary talks between the Special Representatives. Beyond the posturing, both sides know a final settlement will ultimately have to use the LAC as a basis, with only minor adjustments.

Conclusion

- Only a settlement will end the shadow boxing on the LAC. With both countries in the midst of an unprecedented global pandemic, the time to push for a settlement to a distracting, protracted dispute is now.

Operation Juniper

- In 2017, the Indian Army executed "Operation Juniper" and positioned armed troops in the Doklam area of Bhutan.
- This mobilization was intended to deter a team of Chinese People's Liberation Army (PLA) soldiers from constructing a road that would have given the Chinese access to Indian Territory.
- The road would have circumvented Indian posts in Dokala, and provided the Chinese access to Jampheri Ridge and a clear line of sight to the narrow Siliguri Corridor.

Commitment Problem

In terms of their border dispute, India and China are struggling with what game theorists refer to as a "commitment problem."

Meaning

- A commitment problem arises when two states, who would be better off in the present if they consented to a mutually beneficial agreement, are unable to resolve their disputes due to different expectations of future strengths, and a consequent inability to commit to future bargaining power or a division of benefits.

In Simple terms

- If "rising" India assumes that its material power and leverage vis-à-vis China is likely to improve over time, it has no incentive to accept China's "benign hegemony" and to accept a negotiated settlement at a time when it cannot realize the advantages of this increased leverage.
- This is also true in China's case, as it too expects to increase its material strength and cement its superpower status in the coming decades. This could create a reasonable expectation of being able to exact greater concessions from India in the future.

- A status quo agreement thus, that seeks to formalize the existing LAC becomes difficult to accept.

May Fourth Movement

- It is an intellectual revolution and sociopolitical reform movement that occurred in China on May 4th in 1919.
- On that day, more than 3,000 students from 13 colleges in Beijing held a mass demonstration against the decision of the Versailles Peace Conference, which drew up the treaty officially ending World War I, to transfer the former German concessions in Shandong province to Japan.
 - * Students poured into the public spaces of Beijing and other cities, directing their rage against not only the Western powers and Japan, but against their own government, which had proven ineffective in resisting Western imperialism.
- The movement was directed toward national independence, emancipation of the individual, and rebuilding society and culture.

13. Diamer-Bhasha dam

Context:

- Official spokesperson of the Ministry of External Affairs reminded China about India's claims over the territory of Gilgit-Baltistan under Pakistan's control.
 - * China has teamed up with Pakistan to build the Diamer-Bhasha dam.
- It was asserted that India's position is clear and the entire territory of Jammu and Kashmir is part of India.
- In the past too, India has opposed projects jointly taken up by Pakistan and China in Pakistan-occupied Kashmir as part of the China-Pakistan Economic Corridor (CPEC).

Significance:

- The assertion is important as it was made a day after Power China, one of the biggest Chinese power companies, received a contract to build the Diamer-Bhasha dam.
- Chinese state-run firm Power China holds 70% and the Frontier Works Organisation (FWO), a commercial arm of the Armed Forces of Pakistan, 30% share in the consortium.

Diamer-Bhasha Dam:

- The project is designed to serve as the main storage dam of the country, besides Mangla and Tarbela dams.
- The dam, once completed, will allow Pakistan to use the waters of the Indus for irrigation.
- Islamabad claims that the dam will help reduce downstream flood by the Indus.

- The project is estimated to help alleviate acute irrigation shortage in the Indus basin irrigation system caused by progressive siltation of the existing reservoirs.

14. The changing nature of Chinese diplomacy

Context:

- The author of the article, Vijay Gokhale, a former Foreign Secretary of India, analyzes the changes in Chinese diplomacy over the years.

Zhou Enlai Era:

a. Strategy:

- As against the charismatic Mao Zedong who had famously stated that "power flows out of the barrel of a gun", Zhou Enlai opted for a more refined approach. Zhou Enlai adopted the strategy of persuasion and compromise to seduce his opponents and challengers both domestically and internationally.
- The use of force was rare and only when all other means of persuasion failed.
- The Chinese diplomatic strategy was consistent: avoid isolation, build solidarity with non-aligned countries, divide the West. The tactics were called 'united front' which involved isolating the main threat by building unity with all other forces.

b. Significant events:

War in Korean peninsula:

- During the war in the Korean peninsula, Zhou Enlai first tried to convey Chinese concerns to the advancing U.S. forces against further advancement. This he tried to convey through diplomatic channels rather than choosing to do so in the public domain. This shows that Zhou Enlai always chose to give diplomacy a chance.
- When, however, the U.S., regardless of Chinese concerns, crossed the 38th Parallel, the Chinese attacked and brought the U.S. forces to a standstill.

Indochina War:

- In 1954, the Vietnamese were winning against the French in the First Indochina War, and the Americans were preparing to intervene on the side of the French, fearing an increasing spread of communism.
- China's self-interest lay in ending the war while denying the U.S. a foothold in its backyard.
- Instead of direct confrontation, Zhou's strategy was to undermine western unity. Zhou's tactful intervention in placating French concerns played an important role in de-escalating tensions.

Bandung Conference:

- At the Afro-Asian Conference of 1955 in Bandung, Zhou Enlai deliberately kept a low profile, allowing India and Indonesia to take the lead. This allowed China to create conducive conditions for establishing diplomatic work or diplomatic relations between China and a number of Afro-Asian countries.

Cold war era:

- Despite being ideologically similar to Soviet Union, China navigated the Cold War deftly by playing the Soviets and Americans against each other.
- China maintained ties with both blocs.

Taiwan issue:

- In 1972, Zhou Enlai persuaded U.S. President Richard Nixon to abandon Taiwan ties and adopt a one China policy, despite the fact that the communists had not exercised actual sovereignty over that island even for a single day since 1949. It was a staggering act of diplomacy.

c. Significance:

- Zhou's style of diplomacy came to define Chinese foreign policy over the next half-century.
- This helped China expand its global presence and gain international acceptability.

Deng Xiaoping era:

- Deng Xiaoping took over the Chinese premiership in the 1980s in the early days of China's opening up to the outside world.

a. Strategy:

- Deng supplemented Zhou's strategy with a "24-Character Strategy" involving significant aspects like measured response to changes, securing gradually Chinese position in the global order, while hiding its capacities and maintaining a low profile and not claiming leadership.
- The same strategy was employed by Chinese diplomats who measured their words and kept their dignity even while projecting power.
 - * They built relationships by making it a point to engage the less-friendly interlocutors with greater courtesies than friends.
 - * They resorted to extensive negotiations to understand the other side better.
 - * Though occasionally and subtly they would hold out a veiled threat, their actions rarely offended any country.

b. Significant events:

- China played host to many significant global leaders in the 1980s and 1990s.
- China normalised relations with many nations and won over many nations through general financial help.
 - * The successful Chinese diplomacy led to Americans breaking their own sanctions imposed after the 1989 Tiananmen Incident.
- Based on Chinese assurances that it would soon transition to a market economy, the U.S. and the European Union helped steer China into the World Trade Organization.

Current era:

- China has begun to occupy centre stage in world diplomacy, but there have been significant changes in the Chinese Diplomatic efforts.

a. Strategy:

- The most distinctive aspects of current Chinese diplomacy are:
 - * More assertive approach.
 - * Lesser emphasis on persuasion and negotiations and increasing unilateralism.
 - * Lesser tolerance of countries taking actions contrary to Chinese wishes.
 - * Adoption of a one-size-fits-all approach.

b. Recent events:

- The Chinese have pursued unilateralism instead of negotiations in the South China Sea.
- China has resorted to repeated border skirmishes with neighboring countries.
- China has not been accepting blame for its handling of the COVID-19 pandemic.

c. Concerns:

- Unilateralism and a one-size-fits-all approach have replaced the Zhou and Deng strategy of persuasion and compromise.
- The reserves of goodwill earned by China over years are fast depleting.
- Post-COVID-19, China would be operating in a very difficult external environment.

15. Hong Kong Protests**Context**

- China has started pushing for an "improvement" in the Basic Law — the mini-constitution that defines ties between Hong Kong and Beijing — signalling a fundamental change in the way the highly autonomous city-state is run.

Hong Kong's 'Basic Law'

- A former British colony, Hong Kong was handed over to mainland China in 1997, becoming one of its Special Administrative Regions (SAR).
- It is governed by a mini-constitution called the Basic Law — which affirms the principle of "one country, two systems".
- The constitutional document is a product of the 1984 Sino-British Joint Declaration— under which China promised to honour Hong Kong's liberal policies, system of governance, independent judiciary, and individual freedoms for a period of 50 years from 1997.

- Under the Basic Law that has governed Hong Kong since 1997, SAR has a high degree of autonomy “to enjoy executive, legislative and independent judicial power, including that of final adjudication”; only defence and foreign affairs are to be handled by Beijing under Article 18.
- Article 23 of the law requires Hong Kong to pass national security legislation, but the law makes clear it is Hong Kong’s legislature that enjoys the power to make and repeal laws — the bedrock of the “one country, two systems” model.

National security law for Hong Kong

- What has concerned pro-democracy activists in Hong Kong is a new provision for China’s national security organs to “set up institutions” in the Special Administrative Region (SAR).
- A decision from the ruling Communist Party in Beijing is set to authorise Chinese legislators to draft a national security law for Hong Kong.
- The proposed law will cover four main matters:
 - * Subversion – undermining the power of an authority
 - * secession – breaking away from the country
 - * terrorism – using violence or intimidation against people
 - * activities by foreign forces that interfere in Hong Kong
- It also intends to bring ‘Anthem Bill’ that would make it illegal to insult or abuse the Chinese national anthem in the semi-autonomous city.

Why are people against this?

- This law can be used as a convenient pretext for the political prosecution of dissidents, activists, human rights lawyers and journalists.
- The opposition to the extradition law has grown into a wider civil movement to protect liberties, bringing all sections of society together.
- This could be a major blow to Hong Kong’s freedoms, the law could effectively bring the city under full control of mainland China.
- The move could also undermine Hong Kong’s position as an East Asian trading hub, and invite global disapproval for Beijing, which is already being accused of withholding key information related to the coronavirus pandemic.

China seeks India’s support for its new draconian law to crack down on Hong Kong protesters

- China has sought the support and understanding of India and other countries for its controversial decision to impose a new national security law on Hong Kong, saying the new legislation is aimed at containing the “secessionist” forces who have posed a “grave threat” to the country’s national security and sovereignty.

- It said “upholding national security” in Hong Kong is “purely China’s internal affair and no foreign country may interfere in this matter”.

16. India-Nepal Border Dispute

Background

- In November 2019, India released fresh maps of the then newly created Union Territories (UTs) of Jammu and Kashmir, and Ladakh, along with a map of India depicting these UTs.
- In the maps, Pakistan-occupied Kashmir was part of Jammu and Kashmir, while Gilgit-Baltistan was included in Ladakh.
- The new map showed Kalapani, Lipulekh and Limpiyadhura as part of Pithoragarh district in Uttarakhand state.
- Nepal government lodged a protest against the inclusion of Kalapani area in India’s far west, claiming it as Nepalese territory.
 - * Kalapani, they claimed, was a part of the Darchula district of Nepal, while the Indian map placed it under the Pithoragarh district in the state of Uttarakhand.

Context

- Nepal’s cabinet endorsed a new political map of that country that showed Kalapani and Lipulekh as part of Dharchula district of Nepal.

Sugauli Treaty of 1816

Before the 1816 Treaty of Sugauli, the Nepalese kingdom stretched from the Sutlej River in the West to the Teesta River in the East. Nepal lost the Anglo-Nepalese War and the resulting Treaty limited Nepal to its present territories.

- The Treaty of Sugauli established the boundary line of Nepal.
- It was signed between the East India Company and King of Nepal following the Anglo-Nepalese War of 1814-16.
- The Treaty that brought the Anglo-Nepal war to an end demarcated the Mahakali River as the western boundary of Nepal. But it is the origin of this river that causes the dispute.

Nepal:

- It claims that River Mahakali originates at Limpiyadhura, Northwest of Lipulekh, and flows Southwest.
- Thus all the territories East of Kali (Mahakali) river, including Limpiyadhura, Kalapani and Lipulekh, belong to Nepal.

India:

- India says that Kali Ganga (as the Mahakali is called in Uttarakhand) originates in black water springs at Kalapani (which is how the area gets its name) well below the Lipulekh Pass and flows South and slightly East.

Historical References:

- The British used the Lipu Lekh pass for trade with Tibet and China. The Survey of India maps since the 1870s showed the area of Lipu Lekh down to Kalapani as part of British India.
 - * Both the Rana rulers of Nepal and the Nepalese Kings accepted the boundary and did not raise any objection with the government of India after India's Independence.
- As a reward for the military help rendered by Jung Bahadur Rana in controlling the 1857 uprising, the areas of Nepalgunj and Kapilvastu were restituted to Nepal soon thereafter. The British did not return any part of Garhwal or Kumaon, including the Kalapani area, to Nepal.
- India's present borders, not just with Nepal, but with many of its other neighbors, were drawn by the erstwhile British regime. India inherited the boundaries of British India. It cannot now unravel the historic past.

Nepal's Diversion Tactics?

- The controversy has given Nepal's Prime Minister K.P. Sharma Oli an opportunity to hide his government's incompetence and failure to meet the basic needs of the people, and to divert attention away from the rising tide of opposition from within his own party.

Concerns

- What this war of maps and words really points to is the steady deterioration of the India-Nepal relationship.
- The issue appears to threaten the basis of a special relationship between India and Nepal, which has nurtured open borders and the free movement of people.
- The Tensions have also been fueled by Mr. Oli's jibe that the "Indian virus looks more lethal than the one from China".
- The mention by the Indian Army Chief, of a China hand behind Nepal's new assertiveness, did not help. It made the issue seem bigger by making it appear as if Nepal has no mind of its own, thereby provoked more anti-India nationalism in Nepal.

Solving Boundary issues an example:

India has successfully resolved far more intractable border issues with Bangladesh, covering both the land and maritime boundaries.

- Land Boundary Settlement: It was solved by mutual exchange of territories. It also included the transfer of population. This was done by amending the constitution to give effect to the 1974 India-Bangladesh Land Boundary Agreement.
- Maritime Boundary Issue: The issue persisted between India and Bangladesh for a long time and India approached the Hague-based Permanent Court of Arbitration.

- * The Court ruling accepted much of Bangladesh's claim and rejected India's assertion on a baseline that took into account the curved nature of the India-Bangladesh shoreline

Compared to what was accomplished between India and Bangladesh, the India-Nepal border issues appear more easily solvable, so long as there is political goodwill and statecraft exercised on both sides. The way to move forward is to demarcate the entire India-Nepal boundary, and speedily execute the work of boundary maintenance.

Conclusion

- The more the trouble festers, those who stand to gain by deteriorating India-Nepal relations will benefit. There is need for the two countries to lower the temperature and defuse the issue. They must invest time and effort to find a solution.
- India and Nepal must not let their differences grow into a full-blown diplomatic crisis.
- Given the importance of ties with Nepal, India must not delay dealing with the matter, and at a time when it already has its hands full with the pandemic and a faceoff with China in Ladakh and Sikkim. This is a matter best handled bilaterally, through quiet diplomacy.

Lipulekh Pass road (New Kailash-Mansarovar road)

Background

- Pilgrims from India can reach Kailash Mansarovar through three routes — via Sikkim, Uttarakhand and Kathmandu in Nepal.
- The route via Uttarakhand involves three stretches.
 - * The first stretch is a 107.6 km-long road from Pithoragarh to Tawaghat.
 - * The second is from Tawaghat to Ghatiabgarh on a 19.5-km single lane.
 - * The third stretch is the 80 kms from Ghatiabgarh to Lipulekh Pass at the China border.

Context

- The Border Roads Organisation (BRO) is converting the second stretch into a double lane road and has built a new road on the third stretch to allow vehicles.

Details

- BRO had laid a new 80-km road in Uttarakhand.
- This is a new road constructed via Lipulekh pass up to the Line of Actual Control.
- It thus opens a new route for Kailash Mansarovar yatra via Lipulekh Pass.

Significance

- The biggest advantage of the new route over the earlier ones is that it is the shortest and cheapest route with just one-fifth distance of road travel as compared to others.

- The road built would essentially cut down travel time by three days each way.

Historical Background

- For India, the Lipulekh pass has always been part of the road to Tibet, and was mentioned as one of the border passes for trade in a 1954 agreement with China, which was also reaffirmed in another trade agreement in 2015.
- Since 1981, when China re-opened the Kailash-Mansarovar pilgrimage route for Indians, they have also used the pass to walk into Tibet.

Nepal considers Lipulekh its own territory

- Nepal claims that the Lipulekh pass comes under its territory and lies in the Dharchula district in Sudurpashchim Pradesh.
- Nepal has objected to India recently opening the 80-km-long Lipulekh-Dharchula road in Uttarakhand saying the “unilateral act” was against the understanding reached between the two countries on resolving border issues.

ART AND CULTURE

1. Channapatna Toys

- Channapattana is a city and taluk headquarter in Ramanagara District in Karnataka.
- It is noted for its famous handmade lacquer wooden toys all over the world and hence popularly known as "Gombegala Ooru" or the "Toy-City" of Karnataka.
 - * Made of aale mara or ivory wood, which is coloured with vegetable dyes, these environment-friendly toys line the streets of the town.
- This traditional craft is protected as a Geographical Indication (GI)
- The origin of the wooden toys dates back to the period of Tipu Sultan, the ruler of Mysore who was a great admirer of wooden toys. He took the initiative to invite artisans from Persia and train the local artists to earn the process of making the wooden toys.

Rosewood inlay

- The wooden inlay is the process of decorating the surface of wood by setting in pieces of material such as ivory, bone, plastic, or wood of different colours whose history goes back to the time of Tipu Sultan.
- It is a GI-tagged craft

Context

- Ministry of Tourism brings centuries-old crafts of Mysuru through webinar titled 'Mysuru: Craft Caravan of Karnataka' under "Dekho Apna Desh" series.
- It offered an immersive tour of crafts forms namely Channapatna Toys, Rosewood inlay craft that have been thriving for centuries around the city of Mysuru.

2. Danda Nata

- It is a seasonal folk dance festival organized in different parts of South Odisha and particularly in the Ganjam District, the heartland of ancient Kalinga Empire
- The festival is celebrated in the month of 'Chaitra'.
- Danda as the name implies, is self-inflicted pain, which the danduas (people who take in the festival) undergo to pay their obeisance to lord Kali. It is also a form of worshipping lord Shiva and his consort Parvati.
 - * Only male persons take part in this festival
- Abhinava Chandrika, a literary work of 1568, mentions about the prevalence of Danda Yatra
- The origin of the festival was traced to 8th and 9th AD after the decline of Buddhism in Orissa

3. Jagannath Rath Yatra

- It is a Hindu festival associated with Lord Jagannath held at Puri in Odisha.
- It is the oldest Ratha Yatra taking place in India and the World, whose descriptions can be found in Brahma

Purana, Padma Purana, and Skanda Purana and Kapila Samhita

- Jagannath means "lord of the world" and is the form of Hindu gods Krishna/Vishnu/ Rama.
- The festival marks the annual ceremonial procession of Lord Jagannath, his elder brother Balabhadra and younger sister Subhadra, who go on their annual vacation, travelling on grand chariots from the Puri temple to their aunt's place in the Gundicha temple.

Idols

- Nabakalebara, a ritual that holds a significant place in the existence of Jagannath Temple in Odisha.
 - * It is a ritual which involves replacing the existing wooden idols of Lord Jagannath, Balabhadra, their sister Subhadra, and the image of Lord's Sudarshan Chakra with newly carved ones.
- They are not made of metal or stone, but of wood and cloth and resin, and therefore must be replaced from time to time
- The images are malformed, with no hands or feet, and disproportionately large heads.

Chariots of the deities

- The chariots of the deities are newly built every year.
- Jagannath's chariot is called Nandighosa, the chariot of Balabhadra is called Taladhwaja and that of Subhadra is called Dwarpadalana.

4. Purandara Dasa

- Purandara Dasa (1484–1564) was a Haridasa, great devotee of Lord Krishna, a Vaishnava poet, a saint and a social reformer.
- He was a disciple of the celebrated Dvaita philosopher saint Vyasa-tirtha, and a contemporary of yet another great Haridasa, Kanakadasa.
- Purandaradasa was the pioneer who blended the rich musical streams, namely the Dravidian and Aryan music, into a single stream known as Carnatic music.
- Purandara Dasa is hailed as the father figure 'Pitamaha' of Carnatic music.
 - * Purandara Dasa's Carnatic music compositions are mostly in Kannada, though some are in Sanskrit.
- 'Purandara Vithala' was the pen name of his compositions.

Context

- Karnataka govt. takes efforts to solve mystery over birthplace of Purandara Dasa

Issue:

- It was widely believed that the poet was born in Purandharagad, Maharashtra. However, many in Malnad claimed that he hailed from this region.

- According to historians, Araga in Malnad was a buzzing commercial centre during the Vijayanagar rule, the period to which the poet belonged.
- Referring to the names of the places in the vicinity of Keshavapura — Varthepura, Vithalanagundi, Dasanagadde, it was argued that these places were inhabited by merchant community influenced by the Vaishnava tradition to which Purandara Dasa belonged.
- Prior to his initiation to Haridasa tradition, Purandara Dasa was a rich merchant and was called as Srinivasa Nayaka.
- Referring to this, the proponents of the theory that Puranadara Dasa was born in Malnad point out that the 'Nayaka' title was attributed to locally influential people, including wealthy merchants in Malnad during the Vijayanagar rule.

Conclusion:

- To solve the mystery regarding the birthplace, the Karnataka State Government had directed the Kannada University, Hampi, to form an expert committee.
- After visiting Keshavapura and surrounding places, the committee members said there was enough evidence to come to the conclusion that the devotional poet was born here.
- The committee had recommended that further research be conducted on the issue.

5. Sohrai Khovar painting and Telangana's Telia Rumal

Context

- Jharkhand's Sohrai Khovar painting and Telangana's Telia Rumal were given the Geographical Indication (GI) tag

Sohrai Khovar painting

- It is a traditional and ritualistic mural art being practised by local tribal women during local harvest and marriage seasons using local, naturally available soils of different colours in the area of Hazaribagh district of Jharkhand.
- Traditionally painted on the walls of mud houses, they are now seen on other surfaces, too.
- The style features a profusion of lines, dots, animal figures and plants, often representing religious iconography.

Telia Rumal cloth

- It involves intricate handmade work with cotton loom displaying a variety of designs and motifs in three particular colours — red, black and white.
- Telia Rumal can only be created using the traditional handloom process and not by any other mechanical means as otherwise, the very quality of the Rumal would be lost.
- During the Nizam's dynasty, Puttapaka, a small, backward village of the Telangana region of Andhra Pradesh had about 20 families engaged in handloom weaving, who were patronised by rich Muslim families and the Nizam rulers.
 - * The officers working in the court of the Nizam would wear the Chituki Telia Rumal as a symbolic representation of status
 - * Telia Rumals were worn as a veil by princesses at the erstwhile court of the Nizam of Hyderabad; and as a turban cloth by Arabs in the Middle East.

SCIENCE AND TECHNOLOGY

1. ARCI scientists develop next-generation biodegradable metal implants

Context

- Scientists at the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) and Sree Chitra Tirunal Institute of Medical Sciences, Thiruvananthapuram both autonomous institute under the Department of Science & Technology (DST) have jointly developed new generation Iron-Manganese based alloys for biodegradable metal implants for use in humans.

Details

- Biodegradable materials (Fe, Mg, Zn, and polymer), which can participate in the healing process and then degrade gradually by maintaining the mechanical integrity without leaving any implant residues in the human body are better alternatives to currently used metallic implants which remain permanently in the human body and can cause long-term side effects like systemic toxicity, chronic inflammation, and thrombosis.
- Iron-Manganese based alloy Fe-Mn (having Mn composition of more than 29% by weight) is a promising biodegradable metallic implant which exhibits single austenitic phase (non-magnetic form of iron) with MRI compatibility.

2. National AI Portal of India

Context

- Union Minister for Electronics and IT, Law and Justice and Communications has launched the National AI Portal of India.

Details

- India's national Artificial Intelligence Portal has been jointly developed by the Ministry of Electronics and IT and the IT Industry.
- National e-Governance Division of the Ministry of Electronics and IT and NASSCOM from the IT industry will jointly run this portal. This portal shall work as a one stop digital platform for AI related developments in India, sharing of resources such as articles, start-ups, investment funds in AI, resources, companies and educational institutions related to AI in India.
- The portal will also share documents, case studies, research reports, etc. It has sections about learning and new job roles related to AI.

"Responsible AI for Youth"

- The IT Minister also launched a National Program for the youth, "Responsible AI for Youth".

- The aim of this Program is to give the young students of our country a platform and empower them with appropriate new age tech mind-set, relevant AI skill-sets and access to required AI tool-sets to make them digitally ready for the future.
- The Program has been created and launched by the National e-Governance Division, Ministry of Electronics & IT in collaboration with Intel India, with support from the Department of School Education and Literacy (DoSE&L), Ministry of Human Resource Development.
- DoSE&L will help reach out to State Education Departments to nominate teachers as per eligibility criteria.
- "Responsible AI for Youth" will empower the youth to become AI ready and help reduce the skill gap, while enabling youth to create meaningful social impact solutions.
- The Program is designed to reach out to students from Government schools pan India and provide them with an opportunity to become part of the skilled workforce in an inclusive manner.

3. China launches new rocket, spacecraft

Context

- China has successfully launched a new rocket and prototype spacecraft.

Details:

- The launch of 'The Long March 5B' rocket is a major test of the country's ambitions to operate a permanent space station and send astronauts to the Moon.
- Following the launch of the rocket, an unmanned prototype spaceship successfully separated and entered its planned orbit.
- It is expected that the spaceship will be instrumental in transporting astronauts to a space station that China plans to complete by 2022 — and eventually to the Moon.
- It would have capacity for a crew of six.
- China plans to send an astronaut to the Moon in about a decade and then build a base there.
- The new Long March 5B rocket has been specially designated to propel modules of the future space station into orbit.
- This is a step forward in its deep-space ambitions of building an orbiting space station, furthering its aspirations to rival the U.S., Russia and private companies in outer space exploration.

Note:

- The United States is so far the only country to have successfully sent humans to the Moon.

- But China has made huge strides in its effort to catch up, sending astronauts into space, satellites into orbit and a rover to the far side of the Moon.
- The U.S., however, has banned most space cooperation with China out of national security concerns, keeping China from participating in the International Space Station and prompting it to gradually develop its own equipment.

4. IASST develops electrochemical sensing platform for detecting carcinogenic & mutagenic compounds in food

What's in News?

Institute of Advanced Study in Science and Technology (IASST), Guwahati, has developed an electrochemical sensing platform for detecting carcinogenic or mutagenic compound N-nitrosodimethylamine (NDMA) and N-nitrosodiethanolamine (NDEA).

- It was achieved by developing a modified electrode by immobilizing carbon nanomaterials (carbon dots) in DNA.
- The electrochemical biosensor platform was developed using the ability of NDMA and NDEA, to alter the DNA.
 - * The scientists took advantage of the fact that out of the base pairs A, T, G, C, Guanine (G) is electrochemically active.
- The DNA adducts formed are electrochemically active, which ultimately leads to an increase in peak current in electrochemical set-up, helping in the detection of the chemicals.
- Carbon dots (CDs), a carbon-based nanomaterial, was used, which is already established as a biocompatible and environmentally friendly material.
- Naturally derived chitosan, (natural biopolymer obtained from the shells of shrimp, lobster, and crabs) is an environment-friendly sustainable material that was used to synthesize CDs.

Significance:

- The scientists pointed out that with changing food habits of urban Indians, they are exposed to harmful chemicals belonging to Nitrosamine family in cured meats, bacon, some cheese, low-fat dry milk, and fish. Such chemicals include carcinogenic ones like NDMA and NDEA, which may also alter the chemical composition of our DNA.
- Hence it is important to develop detection techniques to detect them.

5. Sonic Boom

Background

- Sound travels in the form of waves which are emitted outwards from its source. In air, the speed of these waves depends on a number of factors, such as the temperature of the air and altitude.

- From a stationary source, such as a television set, sound waves travel outwards in concentric spheres of growing radii.
- When the source of sound is moving – e.g, a truck– the successive waves in front of the truck get closer together, and the ones behind it spread out.
 - * This is also the cause of the Doppler Effect– in which bunched waves at the front appear at a higher frequency to a stationary observer, and spread out waves that are behind are observed at a lower frequency.
- As long as the source of the sound keeps moving slower than the speed of sound itself, this source– say a truck or a plane – remains nested within the sound waves that are travelling in all directions.

Meaning of sonic boom

- A sonic boom is said to occur when an object travels through the air faster than the speed of sound and creates shock waves.
- This can lead to a huge emission in energy, usually in the form of sound, which can be similar to an explosion of thunderclap.
- According to NASA, a sonic boom is a thunder-like noise a person on the ground hears when an aircraft or other type of aerospace vehicle flies overhead faster than the speed of sound, or “supersonic.”
 - * Air reacts like fluid to supersonic objects. As those objects travel through the air, molecules are pushed aside with great force and this forms a shock wave, much like a boat creates a wake in water. The bigger and heavier the aircraft, the more air it displaces.

General Factors Associated with Sonic Booms

- There are several factors that can influence sonic booms — weight, size, and shape of the aircraft or vehicle, plus its altitude, attitude, and flight path, and weather or atmospheric conditions.
- A larger and heavier aircraft must displace more air and create more lift to sustain flight, compared with small, light aircraft. Therefore, they will create sonic booms stronger and louder than those of smaller, lighter aircraft. The larger and heavier the aircraft, the stronger the shock waves will be.

Aircraft and Sound

- The sonic boom is a continuous sound which is emitted by the aircraft all the while it is travelling at a supersonic speed.
- If the aircraft is flying at a low altitude, the sonic boom may also lead to tremors similar to earthquakes and shattering of glass.

Examples of sonic boom

- A sonic boom can be produced while cracking a whip through air. This happens because the whip travels at a supersonic speed and breaks the sound barrier.

- * Since the whip is a small and manageable object, the boom is not loud enough to cause alarm and structural damage.
- The loud noise produced when a bullet is fired from a gun is also a sonic boom, as the bullet travels at supersonic speed.
 - * Not all guns fire bullets at supersonic speeds as people prefer silent guns which don't make too much noise. Sometimes people also use silencers for their guns, which makes the bullet travel at a subsonic speed.
- A sonic boom is most commonly heard when an aircraft is travelling at a low altitude, which leads to a very loud boom and tremors in the ground.

Context

- 'Loud Sound' heard in Bengaluru.

Details

- The sonic boom was probably heard while the aircraft was decelerating from supersonic to subsonic speed between 36,000 and 40,000 feet altitude.
- According to the Ministry of Defence, the sound of a sonic boom can be heard and felt by an observer even when the aircraft is flying as far away as 65 to 80 kilometres away from the person.

6. Unicode Consortium

- The Unicode Consortium is a non-profit corporation devoted to developing, maintaining, and promoting software internationalization standards and data, particularly the Unicode Standard, which specifies the representation of text in all modern software products and standards.
- An essential part of this purpose is to standardize, maintain, educate and engage academic and scientific communities, and the general public about, make publicly available, promote, and disseminate to the public a standard character encoding that provides for an allocation for more than a million characters."
- Unicode's success at unifying character sets has led to its widespread adoption in the internationalization and localization of software.
- The standard has been implemented in many recent technologies, including XML, the Java programming language, Swift, and modern operating systems

7. Antarctic Impulsive Transient Antenna (ANITA)

- It is an experiment that is maintained by NASA. It involves an array of radio antennas attached to a helium balloon which flies over the Antarctic ice sheet at 37,000 meters.
- The height is important here to shut out all other "noises" so that the ANITA antennas can "listen" to the cosmos and detect high-energy particles, known as neutrinos, which constantly bombard the planet.

What are neutrinos?

- Neutrinos are high-energy particles that pose no threat to us and pass through most solid objects without anyone even noticing. Neutrinos constantly bombard Earth and as per some estimates emerging from studies, 100 trillion neutrinos pass through our body every second!
- Rarely do they interact with matter. But if they do smash into an atom, they produce a shower of secondary particles we can detect, which allows us to probe where they came from in the universe.
- ANITA detects neutrinos pinging in from space and colliding with matter in the Antarctic ice sheet.

What has ANITA found?

- ANITA has detected a handful of "anomalous" events. Instead of the high-energy neutrinos streaming in from space, they seem to have come from a strange angle, through the Earth's interior, before hitting the detector

8. Quantum Entanglement

Context

- Scientists from S. N. Bose National Centre for Basic Sciences (SNBNCBS), Kolkata, an autonomous institute of the Department of Science and Technology have developed a novel protocol to find out whether a pair of electrons is in an entangled state so that they can be safely used as resources for facilitating quantum information processing tasks.
- The protocol has been developed through theoretical and experimental analysis.

What is it?

- Quantum entanglement is one of the peculiarities of quantum mechanics, which makes phenomena such as quantum teleportation and super-dense coding possible.
- It is the physical phenomenon that occurs when a pair or group of particles is generated, interact, in a way such that the quantum state of each particle of the pair or group cannot be described independently of the state of the others.
- Entangled states are key resources to facilitate many quantum information processing tasks and quantum cryptographic protocols.

Measuring entanglement

- However, entanglement is fragile and is easily lost during the transit of photons through the environment. Hence it is extremely important to know whether a pair of photons is entangled, in order to use them as resource.
- Verification of entanglement requires the use of measurement devices, but such devices may be hacked or compromised by eavesdroppers.

- Device-independent self-testing (DIST) is a method that can be used in order to overcome such a possibility.
 - * This method enables the verification of entanglement in an unknown quantum state of two photons without having direct access to the state, or complete trust in the measurement devices.

SECURITY AND DEFENCE

1. Cerberus Trojan

Context:

- The Central Bureau of Investigation has issued an alert to state governments, Union Territories and central agencies, based on inputs received from INTERPOL, against a trojan virus that has the potential to rob people of their financial data.

Details:

- The trojan, named Cerberus, much like the slew of malicious websites painstakingly exploiting common terms like coronavirus, covid, or vaccine, is also said to exploit the ongoing COVID-19 crisis for hackers' vested interests.
- It is primarily used to steal financial data, such as credit card numbers.

How does it work?

- The banking trojan is apparently taking advantage of the COVID-19 pandemic as a guise to send people an SMS that lures them to download COVID-19 related content.
- As is usually the case with most trojans, the content is actually a link to download a malicious app, that people may be tricked into downloading and installing on their devices.
- Once installed, the trojan can potentially steal their financial data such as credit card details in addition to getting access to their other personal information.

Steps taken

- Alerts have been sent informing that this malicious software takes advantage of the COVID-19 pandemic to impersonate and send SMS using the lure of COVID-19-related content to download the embedded malicious link.
- Interpol has also launched an awareness campaign on cyber threats during the COVID-19 outbreak, in coordination with the law enforcement agencies across the world.
 - * Through the international network, it is providing basic cyberhygiene advice to ensure that individuals and businesses are equipped with the knowledge of how to protect their systems and data.

2. Drug Supply

Context:

- The United Nations Office on Drugs and Crime (UNODC) has released a report titled 'Synthetic Drugs in East and Southeast Asia'.

- According to the report, movement restrictions owing to the COVID-19 pandemic may lead to an initial statistical reduction in drug seizures, but without a real change in terms of supply in the East and Southeast Asia region.

Details:

- The UNODC said a large proportion of Methamphetamine, the main synthetic drug of concern in the region, was manufactured, trafficked and consumed without the need for globalised supply chains.
- The report states that re-ordering of governments' priorities and resources towards the pandemic could also jeopardise the efforts to strengthen drug prevention and treatment programmes.
- Organised crime groups active in the region have shown a high degree of flexibility to respond to shortages of supplies, raising risk levels on certain trafficking routes.
- It said that not every fluctuation in terms of drug seizures, prices, drug-related arrests or deaths would be a direct or indirect consequence of the outbreak.
- It warned that the flexibility of the illicit economy, which does not have to wait for new rules and regulations to enter into force, must not be underestimated.
- Where movements were significantly affected, for instance, couriers and body-packing through airports, methods would change quickly, leading to an initial statistical reduction in seizures, but without a real change in terms of supply.
- It said that additional efforts would be required at the national, regional and international levels to carefully analyse methods and trends to understand changes to drug markets in the wake of the pandemic.

Increased crime

- Due to social distancing and movement restrictions in several countries, street dealing of drugs might be significantly impacted and altered.
- Users' methods to access drugs would also change. Economic hardship might also reduce the disposable income of some drug users, and result in increased crime.

Recommendation

- Additional efforts should be taken at the national, regional and international level to carefully analyze methods and trends to understand changes to drug markets in the wake of the pandemic

3. Indian Coast Guard Ship (ICGS) Sachet

- The ICGS Sachet, the first in the series of five Offshore Patrol Vessels (OPVs) has been designed & built indigenously by Goa Shipyard Limited (GSL) and is fitted with state-of-the-art navigation and communication equipment.
- The ship is 105 metre long ship, displaces approximately 2,350 tons and is propelled by two 9,100 KW diesel engines.
- The ship is designed to carry a twin-engine helicopter and four high speed boats and one inflatable boat for swift boarding and search & rescue operations.
- The ship is also capable of carrying limited pollution response equipment to undertake oil spill pollution response at sea.
- 'Sachet' meaning alert is a projection of will and commitment of ICG 'to be ever vigilant for serving and protecting' the maritime interest of the Nation.

Significance

- It is a significant contribution to the vision of 'Make in India' and 'Self-reliant India campaign'
- The ships, on joining the Coast Guard fleet, will be deployed extensively for Exclusive Economic Zone (EEZ) surveillance, coastal security and other duties as enshrined in the Coast Guard charter of duties, to safeguard the maritime interests of the Nation

4. INS Jalashwa

- INS Jalashwa is an amphibious transport dock currently in service with the Indian Navy.
- It is a Landing Platform Dock and an amphibious warship.
- INS Jalashwa is the second-largest combat warship in the Indian Navy after the aircraft carrier INS Vikramaditya.
- INS Jalashwa was acquired from the United States and is based in Visakhapatnam under the Eastern Naval Command.

5. Missile Park "AGNEEPRASTHA"

- 'Agneeprastha' aims to capture glimpses of Missile History of INS Kalinga since 1981 till date.
- The Missile Park has been set up with a replica of missiles and Ground Support Equipment (GSE) that showcase the evolution of missiles handled by the unit.
- The main attraction is P-70 'Ametist', an underwater launched anti-ship missile from the arsenal of the old 'Chakra' (Charlie-1 submarine) which was in service with IN during 1988-91.
- AGNEEPRASTHA' will also provide a one-stop arena for motivation and stimulation of inquisitive minds regarding the missiles and related technologies.

Context

- The foundation stone for a missile park was laid at INS Kalinga

6. Fresh leaks of personal details detected on dark web

Context:

- Data leak of sensitive information on the dark web.

Details

- The fresh leaks include nearly 2,000 Aadhaar cards and details of 18 million Indians, all available for free on the dark web.
- Of the approximately 2,000 Aadhaar cards, a large number of files appear to have originated from 2019, and several IDs were scanned from mobile cameras, and often transferred to other parties via WhatsApp.

Concerns:

- It is likely that more IDs may have been compromised, and only a small share of it has been shared on the dark web.
- The leak of the Aadhar details and the associated sensitive information could be utilized by Cyber criminals for identity theft.

Conclusion:

- State and Central cybercrime agencies have initiated their own investigations into the data leaks.

7. Army proposes 3-year stint for civilians

Context:

- In a first of its kind proposal, the Army plans to take civilians on a three-year "Tour of Duty (ToD) or short service" on a trial basis to serve as officers and in other ranks initially for a limited number of vacancies which will be expanded later.

Details:

- This is expected to result in significant reduction in the expenditure on pay and pensions and free up funds for the Army's modernisation.
- The overall purpose of the ToD concept is 'internship/ temporary experience' and so there will be no requirement of attractive severance packages, resettlement courses, professional encashment training leave, ex-servicemen status, ex-servicemen Contributory Health Scheme for ToD officers and other ranks.
- Analysing the cost of training incurred on each personnel compared with the limited employment of the manpower for three years, the proposal calculates that it will indeed have a positive benefit.
- According to the proposal, the savings can be used for the much-needed modernisation of the Army.
- The proposal adds that in addition, the nation and the corporates are likely to benefit from trained, disciplined, confident, diligent and committed men and women who have completed the ToD.

8. Sukhoi-30 MKI

- The Sukhoi Su-30MKI is a twinjet multirole air superiority fighter developed by Russia's Sukhoi and built under licence by India's Hindustan Aeronautics Limited (HAL) for the Indian Air Force (IAF).
- A variant of the Sukhoi Su-30, it is a heavy, all-weather, long-range fighter.
- Development of the variant started after India signed a deal with Russia in 2000 to manufacture 140 Su-30 fighter jets.
- The first Russian-made Su-30MKI variant was accepted into the Indian Air Force in 2002, while the first indigenously assembled Su-30MKI entered service with the IAF in 2004.
- The IAF has nearly 260 Su-30MKIs in inventory as of January 2020.
- The Su-30MKI is expected to form the backbone of the Indian Air Force's fighter fleet in 2020 and beyond.

In January 2020, a squadron of fourth-generation fighter jets Sukhoi-30 MKI were equipped with the BrahMos missile, and was inducted in the Southern Air Command, Thanjavur.

- Sukhoi 30 jets have been modified to carry BrahMos air-to-surface missiles giving them the capacity to conduct long-range precision strikes.
- It was for the first time in the world that such a heavyweight missile was integrated on a fighter aircraft.
- The induction will help India to maintain its air and maritime dominance in the Indian Ocean Region (IOR).

9. Defence Testing Infrastructure Scheme

Context:

- In order to give a boost to domestic defence and aerospace manufacturing Govt has approved a Defence Testing Infrastructure Scheme (DTIS) with an outlay of Rs 400 crore.

Details

- The Scheme would run for the duration of five years and envisages to setup six to eight new test facilities in partnership with private industry.
- This will facilitate indigenous defence production, consequently reduce imports of military equipment and help make the country self-reliant.

Funding

- The projects under the Scheme will be provided with up to 75 percent government funding in the form of 'Grant-in-Aid'.
- The remaining 25 per cent of the project cost will have to be borne by the Special Purpose Vehicle (SPV) whose constituents will be Indian private entities and

State Governments.

- The SPVs under the Scheme will be registered under Companies Act 2013 and shall also operate and maintain all assets under the Scheme, in a self-sustainable manner by collecting user charges.

Significance

- It will be a Greenfield Defence Testing Infrastructure which will help in boosting production in both the defence and aerospace sector which had been lacking such facility for the private players.

ENVIRONMENT AND ECOLOGY

1. Charru Mussel

- The Charru mussel resembles the green and brown mussels but is much smaller in size.
- Its colour varies from black to brown, purple or dark green.
- In many areas, this invasive species has smothered beds of the short-neck clam.
 - * The short-necked clam fisheries in the lake had obtained an eco-label from the Marine Stewardship Council and about 3,000 people are dependent on fisheries here.
 - * In such a scenario, the fast-breeding Charru mussel could be seen as a 'pest,' the authors state.

Context:

- An invasive mussel native to the South and Central American coasts – the Charru mussel (*Mytella strigata*) is spreading quickly in the backwaters of Kerala.

Details:

- The rapid spread of the Charru mussel (*Mytella strigata*) may have been triggered by Cyclone Ockhi which struck the region in 2017.
- Surveys show the presence of the Charru mussel in the Kadinamkulam, Paravur, Edava-Nadayara, Ashtamudi, Kayamkulam, Vembanad, Chettuva and Ponnani estuaries/backwaters.
- Ashtamudi Lake, a Ramsar site in Kollam district, remains the worst-hit.
 - * With a population as high as 11,384 per sq metre here, it has replaced the Asian green mussel (*Perna viridis*) and the edible oyster *Magallana bilineata* (known locally as muringa).

Concerns:

- The Charru mussel is elbowing out other mussel and clam species.
- It is threatening the livelihoods of fishermen engaged in molluscan fisheries.
- The potential of Charru mussel to outcompete the lucrative clam fishery is a serious concern that urgently needs to be addressed
- Though this smaller mussel is edible, the overall economic loss and impact on biodiversity is much bigger.

2. IDEathon on 'The Future of River Management'

Context

- The National Mission for Clean Ganga (NMCG) under the Ministry of Jal Shakti and National Institute of Urban Affairs (NIUA) organized an IDEathon on "The future of River Management" to explore how the COVID-19 crisis can shape River Management strategies for the future.

Background

- The general narrative around this crisis has been that of anxiety and concern, the crisis has also thrown up some positive developments. One of these is the visible improvement in the natural environment.
- Rivers have become cleaner. The air has become fresher. There has been a significant drop in GHG emissions. Animals and birds are returning to and enjoying their habitats.
- Purely from a river management point of view, in India there has been a noticeable improvement in the water quality of the Ganga and Yamuna.
 - * The Gangetic Dolphin, an indicator species, has been showing improvements with sightings at several stretches of the river.

Namami Gange

- It is one of the largest river rejuvenation programs aimed at ensuring effective abatement of pollution and rejuvenation of the Ganga basin by adopting an integrated river basin approach and promoting inter-sectoral coordination for comprehensive planning and management.

IDEathon

- It was initiated to garner more attention towards river management.
- It highlights the interconnectivity of Cities with the River.
 - * The River cities will not only focus on socio-cultural significance of the river but also on the ecological importance and economic potential which can help the city, if properly planned

Key Recommendations

COVID 19 and lockdown has shown that the river can be rejuvenated if all of us do the right thing.

- To keep the river in similar condition after lockdown we need behavioral change to supplement infrastructure creation.
 - * Citizen engagement programmes designed to lead to a behavioral change, to streamline the people's efforts in claiming its water resources are the need of the hour.
- Water governance of the future, will have to integrate efforts not only within the government infrastructure, but those of communities, societies, NGOs, action groups, startups and individuals as well.
- Hydropower projects that are being developed on the rivers, should be studied along with their impacts such as floods, low e-flow, sedimentation etc. There should be provision for trans-boundary Environmental Impact Assessment for all the new big projects coming up on the river.

3. Koundinya Wildlife Sanctuary

- It is a wildlife sanctuary and an elephant reserve situated in Andhra Pradesh
- The sanctuary has dry deciduous forests with thorny scrubs interspersed with trees.

Threats and conservation issues

- The threats faced in the sanctuary are man-animal conflict, over-grazing and illegal collection of wood.
- Insufficient fodder in the forest due to over-grazing by livestock, and availability of crops like sugarcane, sorghum and ragi attracts elephants, resulting in man-animal conflict

Concerns

- Elephants enter the fields close to the village and consume the standing crops of tomato and other vegetables, besides trampling a stretch of paddy.
- There are incidents of wild elephants killing the cattle.



5. Puntius sanctus

Context

- A new species of small freshwater fish of the family Cyprinidae has been discovered. It was encountered in a small waterbody in Velankanni, Tamil Nadu.

Details:

- The silver-hued fish has been named Puntius sanctus.
 - * 'sanctus' is Latin for holy — after the popular pilgrim town.
- Puntius sanctus grows only to a length of 7 cm.
- It is used both as food and as an aquarium draw.
- They are purely freshwater fishes.
- Its physical characteristics include a protractible mouth, a pair of maxillary barbels (a sensory organ near the snout), 24-25 lateral line scales and 10 pre-dorsal scales.

6. World Turtle Day

- It is celebrated annually on May 23rd since 2000.

- It's a day to encourage human action to help these creatures to survive and thrive with the hope that vigilance will carry on in our everyday lives.
- Founded in 1990, American Tortoise Rescue is the founding sponsor of World Turtle Day
- People organize various events and activities to celebrate this day for the preservation of turtles for the upcoming generations.
- Spreading awareness in schools is also an important activity to make the youth aware of the risks involved with the survival of these species of the reptile family.

7. Massive revamp of Forest Ministry units

Context:

- Restructuring plan of the regional offices and departments of the Ministry of Environment, Forest and Climate Change (MoEF&CC).

Details:

- The reorganisation plan involves merging the 10 regional offices of the MoEF&CC and 19 centres of the Forest Survey of India (FSI), National Tiger Conservation Authority (NTCA), Wildlife Crime Control Bureau (WCCB) and Central Zoo Authority (CZA) into just 19 regional offices of the Ministry.
- The stated objective of merging regional offices with the NTCA, WCCB, CZA and FSI centres is improving efficiency and ensuring better coordination between the constituent units.

Concerns:

- Though increasing efficiency and transparency is required, there are doubts as to whether merging of these organizations would achieve it given the fact that the specialized organisations have very different objectives.
- Environment and wildlife activists are concerned that the proposed restructuring would make the key conservation wings of the Ministry powerless and thus weaken India's efforts to protect the environment.

Counter arguments:

- Though the specialised wings of the Ministry have some independence in their functioning, they report to the same higher-ups.
- The merging of the different organizations would help in better coordination in the sanctioning and implementation of various schemes.

8. GMR told to stop dredging in Kakinada

Context

- The Andhra Pradesh Forest Department has directed GMR Energy Limited to stop dredging activity in the Kumbabhishekham mudflat.

Details:

- The forest department has ordered the removal of the bund around the mangrove cover adjacent to the company's 220 MW barge-mounted power plant on the Kakinada coast.

- The dredging was being carried out by GMR Energy Limited to shift existing installations.
- The action comes in response to the threat to the mudflat and the mangrove cover and destruction of the prime habitat of birds — endangered Great knots (*Calidris tenuirostris*), and Indian skimmers (*Rynchops albirostris*), which are listed as a vulnerable species.

Dredging:

- Dredging is the removal of silt, sediments and debris from the bottom of lakes, rivers, harbours and other water bodies.
- Dredging is a routine necessity in waterways because sedimentation—the natural process of sand and silt washing downstream—gradually fills channels and harbors.
 - * Dredging often is focused on maintaining or increasing the depth of navigation channels, anchorages, or berthing areas to ensure the safe passage of boats and ships.
 - * Dredging is also performed to reduce the exposure of fish, wildlife, and people to contaminants and to prevent the spread of contaminants to other areas of the water body.

Mudflats:

- Mudflats also known as tidal flats, are coastal wetlands that form in inter-tidal areas where sediments have been deposited by tides or rivers.
- Most of the sediment within a mudflat is within the inter-tidal zone, and thus the flat is submerged and exposed approximately twice daily. This helps maintain the ecosystem balance.

Significance:

- Tidal flats, along with inter-tidal salt marshes and mangrove forests, are important ecosystems.
 - * They usually support a large population of wildlife, and are a key habitat for migratory shorebirds.
- The maintenance of mudflats is important in preventing coastal erosion.

Threats:

- Mudflats worldwide are under threat from predicted sea level rises, land claims for development, dredging due to shipping purposes, and chemical pollution.

9. International Day for Biological Diversity 2020

What's in News?

In a virtual celebration of the International Day for Biological Diversity 2020, Union Minister of Environment, Forest and Climate Change launched key initiatives towards conservation of biodiversity.

- The year 2020 which is also the “SUPER YEAR FOR BIODIVERSITY”, as the Strategic Plan for Biodiversity with 20 global Aichi targets adopted in 2010 ends in 2020 and all the countries together are in the process of preparation of Post-2020 Global Biodiversity Framework.

Details:

- The National Biodiversity Authority (NBA) and United Nations Development Programme (UNDP) Biodiversity Samrakshan Internship Programme was launched.
- United Nations Environment Programme (UNEP) Campaign on Illegal Trafficking of Endangered Species: ‘Not all Animals Migrate by Choice’ was launched.
 - * The campaign ‘Not all Animals Migrate by Choice’, launched by the Wildlife Crime Control Bureau, with UNEP, seeks to address these environmental challenges, to raise awareness, and to advocate solutions.
- A Webinar Series on ‘Biodiversity Conservation and Biological Diversity Act, 2002’ was also launched along with the WWF Model Conference of Parties (MCoP), an initiative which involves the younger generation so they can usher in a new beginning and engage in conversations around impact of humanity’s footprint on biodiversity and also the importance of sustenance of biodiversity for our own survival.
- An awareness campaign supported by WWF to highlight the crucial role played by nature through its free ecological services provided for humankind was also launched.

International Day for Biological Diversity:

- The United Nations has proclaimed May 22nd as the International Day for Biological Diversity (IDB) to increase understanding and awareness of biodiversity issues.
- The theme for International Day for Biological Diversity 2020 is “Our solutions are in nature”.

10. Sal forest tortoise habitat stretches over unprotected areas

Context:

- A study by ecologists from the Wildlife Institute of India, Dehradun.

Details:

Sal forest tortoise:

Habitat:

- Also known as the elongated tortoise (*Indotestudo elongata*), the Sal forest tortoise is widely distributed over eastern and northern India and Southeast Asia.

Threat:

- Sal forest tortoise is heavily hunted for food. It is collected both for local use, such as decorative masks, and international wildlife trade.
- Around 29% of the predicted distribution of the species falls within high occurrence fire zones or areas where there is management burning.
- Sal forest tortoise in northeast India is exposed to the risk of jhum fire. Apart from the direct fatalities due to the forest fires, the fires also open up habitats, which increase the chance of people finding the tortoise

easily.

- Forest fires also decrease soil moisture levels which may disturb forest floor ecosystem affecting the predominantly ground based animals.

Conservation status:

- Sal forest tortoise has been recently assessed as critically endangered.
- According to the IUCN, the population of the species may have fallen by about 80% in the last three generations (90 years). Once widely distributed the Sal tortoise is now no longer common over its habitat.

Concerns:

Threatened status:

- 23 of the 29 species of freshwater turtle and tortoise species found in India come under the threatened category in the IUCN red list and are under severe existential threat due to human activities.

Faulty demarcation of protected areas:

- The study by Wildlife Institute of India found that the areas designated as protected areas have only a small overlap with the actual habitat of the Sal forest tortoise.
 - * Over 90% of the potential distribution of the Sal forest tortoise falls outside the current protected area network. In northeast India, the representation of the species in protected areas is least.
 - * There is little to no connectivity among most of the protected areas where the species is present.
- Protected areas are designated in a largely mammal-centric way. Many reptiles and amphibians which are equally threatened live outside protected areas where exploitation risk is more.

Way forward:

Monitoring needed:

- Given the fact that tortoises are equally threatened as the tigers, there is the need for regular monitoring of the species.
- Given the scarce information available on Sal forest tortoise, enhanced monitoring will help increase the understanding of the species and aid conservation efforts.

Focused efforts:

- In summer Sal forest tortoises select moist patches such as dry stream beds. Such areas should be protected from the spread of forest fire.

Transboundary collaboration:

- Given that the species is found even in Bangladesh, Bhutan and Nepal, transboundary collaboration may aid the conservation efforts.

Additional information:

- Transboundary conservation reserves for tigers:
 - * Manas for the Indo-Bhutan region

* Sundarban for the India-Bangladesh region.

- The critically endangered brackish water turtle (Batagur baska) is distributed in India and Bangladesh.

11. Vikramshila Gangetic Dolphin Sanctuary

- It is located in Bhagalpur District of Bihar
- It is protected area for the endangered Gangetic dolphins in Asia.
- The Gangetic dolphins have been declared as the national aquatic animal of India

Context

- Bihar government is setting up India's first observatory for the mammals in Bhagalpur district.
- Construction at the Vikramshila Gangetic Dolphin Sanctuary (VGDS) in the state's Bhagalpur district is scheduled to be completed by 2021.

12. New plant species found in Western Ghats

- A team of scientists of the Botanical Survey of India (BSI) have reported the discovery of three new plant species in the evergreen forest of the southern end of the Western Ghats in Kerala and Tamil Nadu.
- The three species are *Eugenia sphaerocarpa* of the Myrtaceae or Rose apple family, *Goniiothalamus sericeus* of the Annonaceae family of custard apple and *Memecylon nervosum* of the Melastomataceae family.
- The fruits of *Eugenia* species are known for their palatability and hence are edible fruits.

13. Keeping Asia-Pacific afloat

Context

- The article sheds light upon how, in less than a century, climate change and unsustainable resource management have degraded ecosystems and diminished biodiversity in the seas of the Asia-Pacific region.

Issues:

Degraded Ecosystems:

- Escalating strains on the marine environment are threatening to drown progress and way of life in the Asia-Pacific region.
 - * For generations, the region has thrived on the seas for food, livelihoods and a sense of identity.

Lack of data:

- Due to limitations in methodology and national statistical systems, information gaps have persisted at uneven levels across countries.
- Insights from 'Changing Sails: Accelerating Regional Actions for Sustainable Oceans in Asia and the Pacific' (the theme study of this year's Economic and Social Commission for Asia and the Pacific – ESCAP) reveal that without data, there is lack of clarity about the state of water bodies in the region.

- * Data are available for only two out of ten targets for the Sustainable Development Goal 14, 'Life Below Water'.

Plastic pollution:

- Marine plastic pollution in the region's rivers has contributed to most of the debris flooding the ocean.
- Asia and the Pacific produces nearly half of global plastic by volume, of which it consumes 38%.
- Plastics represent a double burden for the ocean:
 - * Their production generates CO₂ absorbed by the ocean.
 - * Also, the final product enters the ocean as pollution.
- Beating this challenge will hinge upon effective national policies and re-thinking production cycles.

Impact on fishing stocks:

- Levels of overfishing have exponentially increased, leaving fish stocks and food systems vulnerable.
- Environmental decline is also affecting fish stocks.
- The region's position as the world's largest producer of fish has come at the cost of over-exploitation.
- The percentage of stocks fished at unsustainable levels has increased threefold from 10% in 1974 to 33% in 2015.
- Generating complete data on fish stocks, fighting illicit fishing activity and conserving marine areas must remain a priority.

Way forward:

- Closing the maritime connectivity gap must be placed at the centre of regional transport cooperation efforts. While the most connected shipping economies are in Asia, the small island developing States of the Pacific experience much lower levels of connectivity, leaving them relatively isolated from the global economy.
- Efforts must be taken to navigate toward green shipping. Enforcing sustainable shipping policies is essential.
- Trans-boundary ocean management and linking ocean data call for close cooperation among countries in the region.
- Harnessing ocean statistics through strong national statistical systems will serve as a compass guiding countries to monitor trends, devise timely responses and clear blind spots.
 - * Through the Ocean Accounts Partnership, ESCAP is working with countries to harmonise ocean data and provide a space for regular dialogue.
- Translating international agreements and standards into national action is also key.
- Countries and all ocean custodians must be fully equipped to localize global agreements into tangible results.

- * ESCAP is working with member states to implement International Maritime Organization (IMO) requirements.

- Keeping the ocean plastic-free will depend on policies that promote a circular economy approach. This minimizes resource use and will require economic incentives and disincentives.

Conclusion:

- While the COVID-19 pandemic has temporarily reduced pollution in the seas, this should not be a moment of reprieve.
- Rather, recovery efforts need to build a new reality, embedded in sustainability. Efforts are needed to steer our collective fleets toward sustainable oceans.

14. Climate Adaptation and Resilience for South Asia (CARE) Project

Context

- The World Bank Board of Executive Directors approved a \$39.5 million project to help South Asia build resilience to climate threats and disasters by sharing regional data and knowledge, developing regional standards and guidelines for infrastructure, and promoting climate-resilient policies and investments.

Details

- The Climate Adaptation and Resilience for South Asia (CARE) Project will help develop a public platform to inform climate planning and investments, and fund innovative and disruptive technology to support resilience in South Asia.
- It will also assess climate impacts in districts across Bangladesh, Nepal, and Pakistan to support agriculture, livestock, water, and transport.
- CARE will help governments mainstream climate resilience within key ministries such as finance, agriculture, water, and transport and develop climate resilience guidelines in those sectors.

Why South Asia?

- South Asia is highly vulnerable to the social and economic impacts of climate-related hazards. Between 1990 and 2019, more than 1,000 climate-induced disasters in South Asia affected 1.7 billion people and caused more than \$127 billion in damages.
- The World Bank estimates that climate change could drive 62 million people in South Asia into extreme poverty; floods alone could cost an estimated \$215 billion annually by 2030.

15. Global Forest Resources Assessment 2020 (FRA 2020)

Context

- The FRA 2020 was released by the United Nations Food and Agriculture Organization (FAO)

Details

- The FRA 2020 has examined the status of, and trends in, more than 60 forest-related variables in 236 countries and territories in the period 1990–2020.
- The rate of forest loss in 2015–2020 declined to an estimated 10 million hectares (mha), down from 12 million hectares (mha) in 2010–2015
- The world lost 178 mha of forest since 1990, an area the size of Libya, according to the report.
- However, the rate of net forest loss decreased substantially during 1990–2020 due to a reduction in deforestation in some countries, plus increases in forest area in others through afforestation and the natural expansion of forests

Among the world's regions

- Africa had the largest annual rate of net forest loss in 2010–2020, at 3.9 mha, followed by South America, at 2.6 mha.
- On the other hand, Asia had the highest net gain of forest area in 2010–2020, followed by Oceania and Europe.
- The largest proportion of the world's forests were tropical (45 per cent), followed by boreal, temperate and subtropical.
- More than 54 per cent of the world's forests were in only five countries — the Russian Federation, Brazil, Canada, the United States of America and China.
- The highest per cent of plantation forests were in South America while the lowest were in Europe.

16. Locust Attack in India

- Locusts are a group of short-horned grasshoppers that multiply in numbers as they migrate long distances in destructive swarms.
- Locusts need moist, sandy soil in which they lay eggs and fresh vegetation for hoppers to grow into adults.
 - * A good monsoon is, therefore, always cause for concern to locust authorities and farmers.
 - * Under suitable conditions, they start to breed abundantly, and become nomadic (loosely described as migratory) when their populations become dense enough.

What is the difference between locusts and grasshoppers?

- Locusts are part of a large group of insects commonly called grasshoppers which have big hind legs for jumping. Locusts belong to the family called Acrididae.
- Locusts differ from grasshoppers in that they have the ability to change their behaviour and habits and can migrate over large distances.

How many species of locusts are there in the world and India?

- There are 10 important species of locusts in the world:
 - * The Desert Locust, the Bombay Locust, the Migratory Locust, the Italian Locust, the Moroccan Locust, the Red Locust, the Brown Locust, the South American Locust, the Australian Locust & the Tree Locust.

- Only four types of locusts in India-
 - * Desert locust (*Schistocerca gregaria*),
 - * Migratory locust (*Locusta migratoria*)
 - * Bombay Locust (*Nomadacris succincta*)
 - * Tree locust (*Anacridium* sp.) are reported.
- India is most at risk of a swarm invasion just before the onset of the monsoon.
 - * The swarms usually originate in the Arabian Peninsula and the Horn of Africa.

How far and how fast can Desert Locusts migrate?

- Desert Locusts usually fly with the wind at a speed of about 16–19 km/h depending on the wind. Swarms can travel about 5–130 km or more in a day.
- Locusts can stay in the air for long periods of time. For example, locusts regularly cross the Red Sea, a distance of 300 km.

Can locusts hurt humans?

- Locusts do not attack people or animals. There is no evidence that suggests that locusts carry diseases that could harm humans.

Economic Impact

- The swarms devour leaves, flowers, fruits, seeds, bark and growing points, and also destroy plants by their sheer weight as they descend on them in massive numbers.
- The adults are powerful fliers; they can travel great distances, consuming most of the green vegetation wherever the swarm settles.
- Adult locusts can eat their own weight every day and a swarm can consume vast quantities of food. They thus, pose a threat to human food security.

Institutional Setup

- India has a locust control and research scheme that is being implemented through the Locust Warning Organisation (LWO), established in 1939 and amalgamated in 1946 with the Directorate of Plant Protection Quarantine and Storage (PPQS) of the Ministry of Agriculture.
- The LWO's responsibility is monitoring and control of the locust situation in Scheduled Desert Areas, mainly in Rajasthan and Gujarat, and partly in Punjab and Haryana.

Different control measures of locusts

- Mechanical methods – digging trenches, beating and burning
- Baiting – scattering locust food impregnated with insecticide
- Dusting – applying a fine dust impregnated with insecticide
- Spraying liquid insecticides

How can locusts be controlled?

- At present, the primary method of controlling Desert Locust swarms is with mainly organophosphate chemicals applied in small concentrated doses (referred to as Ultra-Low Volume (ULV) formulation) by vehicle-mounted and aerial sprayers and to a lesser extent by knapsack and hand-held sprayers.

Other measures include

- The spray of high-intensity Malathion insecticide helps in killing them.
- The government also plans to deploy drones for spraying pesticides.
- Locust Circle Offices (LCO) are conducting survey & control operations in close coordination with the District Administration and agriculture field machinery of the affected States.
- Advisories have been issued to the States of Rajasthan, Gujarat, Haryana and Punjab regarding the locust attack and necessary measures to be taken for effective control, and pesticides that are to be used for effective locust control in the cropped area.
- Currently, Locust Control Offices have 21 Micronair and 26 Ulvamast (47 spray equipment) which are being utilized for locust control.
- e-Tender has been invited for the empanelling agencies to provide services of drones for aerial spraying of insecticides for effective control over tall trees and inaccessible areas.

Are there any non-chemical ways to kill locusts?

- Extensive research is in progress on biological control and other means of non-chemical control of locusts.
- Thus far, control by natural predators and parasites is limited since locusts can quickly migrate away from most natural enemies.

What is the relationship between locusts and climate change?

- During quiet periods—known as recessions—desert locusts are usually restricted to the semi-arid and arid deserts of Africa, the Near East and South-West Asia that receive less than 200 mm of rain annually.
 - * In normal conditions, locust numbers decrease either by natural mortality or through migration.
- However, the last five years have been hotter than any other since the industrial revolution, and since 2009. Studies have linked a hotter climate to more damaging locust swarms.
- Wet weather also favours multiplication of locusts. Widespread, above average rain that pounded the Horn of Africa from October to December 2019 were up to 400 per cent above the normal rainfall amount.
 - * These abnormal rains were caused by the Indian Ocean dipole, a phenomenon accentuated by climate change.

Context

- Locust swarm in Rajasthan, Gujarat and even parts of Madhya Pradesh.

HEALTH ISSUES

1. Acute Encephalitis Syndrome (AES)

- Acute Encephalitis Syndrome (AES) including Japanese Encephalitis (JE) is a group of clinically similar neurologic manifestation caused by several different viruses, bacteria, fungus, parasites, spirochetes, chemical/ toxins etc.
- The outbreak of JE usually coincides with the monsoon and post monsoon period when the density of mosquitoes increases while encephalitis due to other viruses specially enteroviruses occurs throughout the year as it is a water borne disease.

Who is affected?

- It predominantly affects population below 15 years.
 - * Most vulnerable age group between 1-5 years followed by 5-10 years and 10-15 years in that order.
 - * Least JE infections in infants (0-1 year).
- There is seasonal and geographical variation in the causative organism.
- JEV has its endemic zones running along the Gangetic plain including states of UP (east), Bihar, West Bengal and Assam, and parts of Tamil Nadu.

Signs and Symptoms

- AES is characterized by an acute onset of fever and clinical neurological manifestation that includes mental confusion, disorientation, delirium, or coma
- Apart from viral encephalitis, severe form of leptospirosis and toxoplasmosis can cause AES.
- Keeping in mind the wide range of causal agents and the rapid rate of neurological impairment due to pathogenesis, clinicians face the challenge of a small window period between diagnosis and treatment.

Context

- Acute Encephalitis Syndrome (AES) in Bihar.

2. Alzheimer's-IIT Guwahati discovers new ways to prevent memory loss

Context:

- Researchers from the Indian Institute of Technology Guwahati (IIT-G) have discovered new ways that can help prevent or reduce short-term memory losses associated with the Alzheimer's disease.

Memory Loss

- A defining hallmark of Alzheimer's is the accumulation of Amyloid beta peptides in the brain.
 - * This peptide is akin to the plaque that blocks arteries over a period of time, affecting blood supply and leading to cardiovascular diseases.

- * Its aggregation, meaning the formation of one over the other, deforms the cortex of the brain leading to Alzheimer's

- The research team explored new ways to prevent the accumulation of neurotoxic molecules in the brain that are associated with short-term memory loss due to Alzheimer's disease.

Methods

- Application of a low-voltage, the safe electrical field can reduce the formation and accumulation of toxic neurodegenerative molecules that cause short-term memory loss in Alzheimer's disease.
 - * External electric/magnetic field modulates the structure of these peptide molecules, thereby preventing aggregation.
- Use of 'trojan peptides' to arrest aggregation of neurotoxic molecules in the brain.
 - * The researchers have designed Trojan peptides by adopting a similar approach of 'deceit' to impede the aggregation of the amyloid peptide, arrest the formation of toxic fibrillar assemblies, and reduce poisoning of nerve cells that leads to memory loss
 - * The Trojan Peptide is roughly like the peptide in the body. But while it goes along with the other peptides, its function is contrary to aggregation.
 - * The degeneration of cells can be delayed by about 10 Years through intravenous injection of the trojan peptide.

3. International Nurses Day

- The International Nurses Day is celebrated every year on May 12 to commemorate the birth anniversary of Florence Nightingale, the founder of modern nursing.
- The International Council of Nurses (ICN) has celebrated this day since 1965.
- The theme for 2020 is "Nurses: A Voice to Lead – Nursing the World to Health".

Role of the Nurses in the Healthcare system

- A nurse's contribution is a vital component of any reliable health care organisation striving for zero patient harm and quality care. There are various invaluable roles that nurses fulfill on a daily basis.
- Their role largely revolves around providing the best possible care to the patient and helping them lead a healthy life.
- Nurses spend most of their time with patients, and therefore, they can be their best advocates. They administer appropriate treatment, safe medication and timely symptom management.

- Additionally, they also play the role of care-coordinator/caregiver and ensure a patient's safety while minimising inconvenience.
- Another important role played by a nurse is that of a teacher. Nurses educate patients about their health, conditions, and medication while resolving their queries.

WHO has urged countries to ensure:

- the occupational safety and health of nurses and all health workers, including notably, unhindered access to personal protective equipment so they can safely provide care and reduce infections in health care settings.
- Nurses and all health care workers have access to mental health support, timely pay, sick leave and insurance; as well as access to the most up-to-date knowledge and guidance required to respond to all health needs, including outbreaks.
- Nurses are given the financial support and other resources required to help respond to and control COVID-19 and future outbreaks.

4. Less Invasive Surfactant Administration (LISA)

- It is a medical technique for treatment of lung disease or respiratory distress syndrome among premature babies.
- Less-Invasive Surfactant Administration (LISA) is a technique whereby surfactant is given via a thin catheter inserted in the trachea.
 - * The surfactant is administered via a thin feeding tube, instead of endotracheal tube, which is immediately removed after the procedure, while the baby is on the continuous positive airway pressure (CPAP) machine.
 - * The LISA technique allows the infant to remain on non-invasive ventilation support and avoids intubation and therefore mechanical ventilation.
- LISA has been developed as a lung protective strategy for respiratory management and ventilation, in view of the mechanical ventilation causing damage to the preterm lungs of newborns.
- It is found that LISA technique is very helpful in minimizing the side effects.

5. Septicaemia

- It is another term used to describe blood poisoning.
- It is an infection caused by large amounts of bacteria entering the bloodstream.

What causes septicaemia?

- Blood contains millions of white blood cells that fight off infections from bacteria and viruses. These cells are very efficient at fighting infection and will usually keep it under control.

- Sometimes infections can develop that can't be controlled by these cells. This might be because the infection is very bad or because the immune system is weak from another illness. When this happens the bacteria causing the infection can enter the blood stream.
- Once in the blood, bacteria can be carried to other tissues and organs in the body causing other complications.

6. Aiming to achieve herd immunity naturally is 'dangerous', WHO warns

Context

- The World Health Organization has condemned the "dangerous" concept of herd immunity for managing the coronavirus (COVID-19) pandemic.

How Does Herd Immunity Work?

- On an individual level, our bodies build up immunity by producing antibodies that recognize and fight off an infection from invading pathogens such as SARS-CoV-2, which causes COVID-19.
- Herd immunity looks at protection from a particular disease at the population level. The more people who are immune, the fewer people a virus can jump to, and the fewer it can infect.
- Herd immunity is what happens when enough people are immune to a disease for the chains of transmission to be broken.

Issues

- This could be potentially dangerous—leading to increased hospitalizations that overwhelm the health system and eventually cause a high number of deaths.
- Scientists are still unsure whether individuals who have recovered from the novel coronavirus are immune to further infection — much less whether entire populations can keep the disease from reaching their most vulnerable members.
 - * Experts don't know a lot about COVID-19 immunity, especially how long immunity lasts, what kind of protection it offers, and whether reinfection is possible. These are all questions that researchers around the world, including those at the World Health Organization, are still trying to figure out.
- Herd immunity is being recommended for India on the assumption that since the country has a large young population, many of these younger adults will not have a severe reaction to COVID-19.
 - * Nearly 40 percent of Indian adults aged 45-54 and 22 percent of those aged 20-44 have hypertension;
 - * Nearly 4 percent of adults aged 15-44 years have reported Type 2 diabetes, along with a high rate of unreported cases; and
 - * 2.1 million People are living with HIV, of whom 83 percent are between 15 and 45 years old.

- * Finally, the prevalence of chronic pulmonary disease and asthma among adults was reported as 4.2 and 3 percent, respectively, and nearly a third of adults use tobacco.

- With such high rates of risk factors among the young population, letting the virus spread for the sake of an experimental strategy of herd immunity could lead to hundreds of thousands of people being hospitalized and requiring intensive care.
- Furthermore, seeking herd immunity among younger populations would still require shielding older adults (roughly 50 million Indians are over the age of 65) who are at higher risk.

7. Super-Spreading Event

- Super-spreading events "occur when a single person infects a large number of other people — sometimes 10, 20, sometimes even more in one setting,"
- The term "super-spreader" refers to a person who spreads a disease to a large number of people.

How do super-spreading events happen?

- An infected person has to be at a point in their illness when they are very transmissible and they have to be in a place where they can infect a lot of other people.
- Places where people are densely packed and engaging in something that involves a lot of breathing, like singing or talking, are particularly risky for super spreading

How do we prevent super-spreading events?

- The social distancing guidelines many places have adopted help reduce super-spreading events.
- Some recommended steps to make events safer are reducing crowd density, wearing masks, changing seating layouts and installing good ventilation.

8. Blood clots in the lung may be a major cause of COVID-19 deaths

Background

- The death toll from COVID-19 continues to rise daily. But how SARS-CoV-2, the new coronavirus that causes the disease, actually causes death remains poorly understood.
- Clinical reports show that people with severe COVID-19 develop pneumonia, acute respiratory distress syndrome, and multiple organ failure.

Context

- Experts now highlight that a significant proportion of those with severe COVID-19 show signs of blood clots, which can lead to life-threatening complications.

Thrombosis

- Blood clotting is a natural mechanism in response to an injury. However, when a blood clot forms within a blood vessel, it can restrict blood flow.

- Thrombosis is the formation of a blood clot which prevents blood from flowing normally through the circulatory system.

Embolus

- If a thrombus breaks free and travels to another part of the body, doctors call it an embolus. If an embolus reaches the lungs, brain, or heart, the ensuing embolism can become life-threatening.
- A Pulmonary Embolism is a blood clot that has traveled to the lungs.
 - * A piece of the blood clot can break off and be carried to the lungs.
 - * PE can block the flow of blood to the lungs, causing serious damage to the lungs and affecting a person's ability to breath.

D-dimer

- The D-Dimer is a protein fragment which is a by-product of the blood clotting. It is a general marker of thrombosis in blood vessels.
- A D-dimer test is a blood test that can be used to help rule out the presence of a serious blood clot.

It has been recognized from the reports that very high proportions of patients with COVID-19 infection presenting to hospitals had elevated levels of d-dimer

Inference

- Those with highly elevated d-dimer levels were more prone to severe respiratory complications and death.

Need for interventions

- The critical need therefore is for early recognition and intervention with blood thinners (anti-coagulation) in this illness and with appropriate doses. This can be easily implemented in all hospital.
- D-dimer levels should be checked immediately. If found to be elevated (more than 2-3 fold above normal), this would indicate the evolving condition in the lung.
- Such patients should immediately receive commonly used blood thinners such as heparin or Low Molecular Weight Heparin (LMWH) in therapeutic doses till the symptoms resolve.

Way forward

- It is important therefore that the public as well as health care professionals be aware of this problem of blood clots in the lung whose severity is unique to COVID-19.

9. Working safely: On workplaces during the pandemic

Context:

- The Ministry of Health and Family Welfare has issued guidelines on preventive measures that need to be followed in workplaces to contain the spread of COVID-19.

Basic preventive measures

These measures need to be followed by employees and visitors at all times.

- Physical distancing of at least one metre to be followed at all times.
- Use of face covers/masks to be mandatory.
- Practice frequent hand washing and use of alcohol-based hand sanitizers.
- Respiratory etiquettes to be strictly followed. This involves the strict practice of covering one's mouth and nose while coughing/sneezing with a tissue/handkerchief/flexed elbow and disposing of used tissues properly.
- Self-monitoring of health by all and reporting any illness at the earliest.

Preventive measures for offices

- Employees who feel ill or are suffering from flu-like illness are advised to not attend office and seek medical advice from local health authorities.
- Further, "Any staff requesting home quarantine based on the containment zone activities in their residential areas should be permitted to work from home."

What happens when someone in the office tests positive?

In case one or a few persons who share a room or a closed space are found to be suffering from symptoms suggestive of COVID-19, the following measures are recommended:

- Place the ill person in a room or area where they are isolated from others at the workplace. Provide a mask/face cover till such time he/she is examined by a doctor.
- Report to concerned central/state health authorities.
- A risk assessment will be undertaken by the designated public health authority (district RRT/ treating physician) and accordingly further advice shall be made regarding the management of a case, his/her contacts and need for disinfection.
- The suspect case if reporting very mild/mild symptoms on an assessment by the health authorities would be placed under home isolation, subject to the fulfilment of certain criteria.
 - * Suspect case, if assessed by health authorities as moderate to severe, he/she will follow guidelines released by the Ministry on the appropriate management of suspected and confirmed COVID-19 cases.
- The rapid response team of the concerned district shall be requisitioned and will undertake the listing of contacts.
- The necessary actions for contact tracing and disinfection of workplace will start once the report of the patient is received as positive. The report will be expedited for this purpose.

Closure of workplace

- If there are one or two cases reported, the disinfection procedure will be limited to places/areas visited by the patient in the past 48 hrs.
 - * There is no need to close the entire office building/halt work in other areas of the office and work can be resumed after disinfection as per laid down protocol.
- However, if there is a larger outbreak, the entire building will have to be closed for 48 hours after thorough disinfection. All the staff will work from home, till the building is adequately disinfected and is declared fit for re-occupation.

Working from home as a viable alternative

The National Directives for COVID-19 Management said the practice of work from home should be followed to the extent possible and staggered work hours should be adopted in respect of all offices and other establishments.

1. Institutional Challenges

- Most organisations do not have well documented policies and guidelines to support extended work from home arrangements at scale.
- An employer has to compute the wage of an employee based on the days and hours of work and maintain statutory registers as evidence.

2. Measuring Productivity

- Employees working for the company might not have adequate power back up and reliable high-speed internet.
- Most of them confuse work from home with a facility to lounge around.
- There are not enough tools available to measure their availability and engagement from the remote work location.

Conclusion

- There may still be occasion to resort to intermittent lockdowns if opening up leads to mounting cases.
- A prudent course would be to navigate the present with a minimalist approach, as the quest for a medical breakthrough makes progress.

10. Silent Hypoxia**Context**

- As medical practitioners around the world are busy treating people for Covid-19, many have reported a condition called 'silent' or 'happy' hypoxia, in which patients have extremely low blood oxygen levels, yet do not show signs of breathlessness.
- The condition has puzzled medical practitioners, and many are now advocating for its early detection as a means to avoid a fatal illness called Covid pneumonia.

What is hypoxia?

- Hypoxia is a condition wherein there is not enough oxygen available to the blood and body tissues. Hypoxia can either be generalised, affecting the whole body, or local, affecting a region of the body.
- Normal arterial oxygen is approximately 75 to 100 millimetres of mercury (mm Hg), and normal pulse oximeter readings usually range from 95 to 100 per cent. Values under 90 per cent are considered low.
- When levels fall below 90 per cent, patients could begin experiencing lethargy, confusion, or mental disruptions because of insufficient quantities of oxygen reaching the brain. Levels below 80 per cent can result in damage to vital organs

What is silent hypoxia?

- It is a form of oxygen deprivation that is harder to detect than regular hypoxia, a serious medical condition found in severe Covid-19 patients.
- In 'silent' or 'happy' hypoxia, patients appear to be less in distress. Many Covid-19 patients, despite having oxygen levels below 80 per cent, look fairly at ease and alert.
 - * There are examples of Patients having oxygen levels below 80 or 70 per cent, in some cases even lower than 50 per cent.
 - * Those with such low levels of oxygen would ordinarily appear extremely ill, but not in silent hypoxia cases
- Covid-19 patients with silent hypoxia did not exhibit symptoms such as shortness of breath or coughing until their oxygen fell to acutely low levels, at which point there was a risk of Acute Respiratory Distress (ARDS) and organ failure.

Reasons

- The reason why people are left feeling breathless is not because of the fall in oxygen levels itself, but due to the rise in carbon dioxide levels that occur at the same time, when lungs are not able to expel this gas efficiently. This response does not appear to be kicking in some Covid-19 patients.
- This happens because in patients with Covid pneumonia, the virus causes air sacs to fall, leading to a reduction in levels of oxygen.
 - * However, the lungs initially do not become stiff or heavy with fluid, and remain "compliant" — being able to expel carbon dioxide and avoiding its buildup. Thus, patients do not feel short of breath.

Detection

- A medical device called a pulse oximeter— used to detect oxygen level in the blood— could help in the early detection of silent hypoxia.

- Using the device, those who have Covid-19 or those suspected of having it, can check their oxygen levels early on. A fall in oxygen levels, caused by the silent hypoxia, can serve as a signal for seeking additional treatment immediately, and not wait for a coronavirus test.

11. Agappe Chitra Magna**Context:**

- A testing kit for detection of COVID-19 was developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) - Trivandrum along with Agappe Diagnostics Ltd
 - * SCTIMST is an Institute of National Importance of the Department of Science and Technology (DST)
 - * Agappe Diagnostics Ltd, an in vitro diagnostics manufacturing company based in Cochin

Details:

- It uses an innovative technology for isolating RNA using magnetic nanoparticles to capture the RNA from the patient sample.
- The magnetic nanoparticle beads bind to the viral RNA and, when exposed to a magnetic field, give a highly purified and concentrated RNA.
- The kit can be used for RNA extraction for RT-LAMP, RT-qPCR, RT-PCR and other isothermal and PCR based protocols for the detection of SARS-COV-2.
- This product has been independently validated at National Institute of Virology for Covid19 RNA isolation.

Significance

- Agappe Chitra Magna RNA Isolation Kit priced around Rs. 150 per kit is expected to reduce the cost of testing and the country's dependence on imported kits which cost around Rs 300.
- As the sensitivity of the detection method is dependent on getting an adequate quantity of viral RNA, this innovation enhances the chances of identifying positive cases.

12. 'India, U.S. to collaborate on vaccine trials'**Context:**

- India and the U.S. plan to work together on vaccine research and testing for COVID-19, U.S. health officials said, listing a number of other ways in which the two countries are working together.

Details:

- U.S. and Indian scientists have been collaborating on key research questions fostering the development and testing of safe, cost-effective vaccines against a range of infectious diseases that could save innumerable lives in India, the United States, and around the world.

- In the context of the current pandemic, partners under the Vaccine Action Programme (VAP) are planning to collaborate on the development and testing of vaccine candidates and diagnostics for COVID-19.
- The U.S. Centres for Disease Control and Prevention said it would separately fund the Government of India \$3.6 million to support prevention, preparedness, and response activities in India, in collaboration with and concurrence from the GoI.

Vaccine Action Programme (VAP):

- The VAP is an Indo-US bilateral program, which supports a broad spectrum of activities relating to new and improved vaccines.
- The programme was designed to encompass laboratory-based research, evaluation of candidate vaccines, testing for clinical development, vaccine quality control, and delivery of vaccines and so on.
- It is a collaboration between the U.S. National Institutes of Health, the Indian Department of Biotechnology (DBT) and the Indian Council of Medical Research (ICMR) along with other partners.
- The programme is under implementation since 1987 under the Gandhi-Reagan Science & Technology Agreement.
- The VAP is also known as the Indo-U.S. Vaccine Action Program (VAP).

13. SwasthVayu

Context:

- CSIR – National Aerospace Laboratories (NAL), Bengaluru develop BiPAP Non-Invasive Ventilator “SwasthVayu” in 36 days for COVID-19.

Details:

- BiPAP Non-Invasive ventilator is a microcontroller-based precise closed-loop adaptive control system with a built-in biocompatible “3D printed manifold & coupler” with HEPA filter (Highly Efficient Particulate Air Filter).
- It has features like Spontaneous, CPAP, Timed, AUTO BiPAP modes with provision to connect oxygen concentrator or enrichment unit externally.
- The system has been certified for safety and performance by NABL accredited agencies.
- The system has undergone stringent biomedical tests and beta clinical trials at NAL Health Centre.
- The major advantage of this machine is that it is simple to use without any specialized nursing, cost-effective, compact and configured with mainly indigenous components.
- This is ideal for treating COVID-19 patients in wards, make shift hospitals, dispensaries and homes in the current Indian COVID-19 scenario.
- CSIR-NAL is in talks with public and private companies for its mass production.

14. UV Blaster

- The Defence Research and Development Organisation (DRDO) has developed an Ultra Violet (UV) disinfection tower for rapid and chemical-free disinfection in infection prone areas.
- It is an ultra violet sanitizer designed and developed by Laser Science and Technology Centre (LASTEC), the Delhi-based premier laboratory of DRDO, with the help of a private company in Gurugram.

Applications

- The UV Blaster is useful for hi-tech surfaces like electronic equipment, computers and other gadgets in laboratories and offices that are not suitable for disinfection using chemical methods.
- The product is also effective for areas having large footfall, including airports, shopping malls, metros, hotels, factories, offices, etc.

15. NIV develops test to detect antibodies

Context:

- The National Institute of Virology (NIV), Pune, has developed a test kit for COVID-19.

Details:

- The National Institute of Virology (NIV), Pune, has developed an immunological assay — Enzyme-Linked Immunosorbent Assay (ELISA) — to detect antibodies that the body develops in response to infection by the SARS-CoV-2 novel coronavirus.
 - * ELISA is routinely used for detecting HIV infection.
- NIV had transferred the technology to Zydus Cadila for mass-scale production subsequent to the Drug Controller General granting commercial production and marketing permission to Zydus Cadila.

Significance:

Checking for community transmission:

- Since the ELISA test is based on detection of antibodies, it helps detect cases in which the infected person has remained symptom-free (asymptomatic) during the entire course of the infection. It will also help ascertain if the person was previously infected, which is not possible with the RT-PCR (Reverse Transcription Polymerase Chain Reaction) test.
- The newly developed kit can test 90 samples together in a single run of 2.5 hours enabling faster testing.
- The ELISA test will be used to screen 30,000 samples from 75 hotspot districts to understand the extent of the spread of the virus in the community. This would help ascertain whether there is community transmission in India.

Increase availability of test kits:

- This is the first time India has developed an indigenous ELISA test for coronavirus. While ELISA tests for coronavirus are already available in other countries, procuring them in large numbers may be a challenge, particularly during a pandemic. With the indigenous ELISA test kit, availability will be a non-issue.

Better sensitivity:

- The ELISA test developed by NIV gains significance as the rapid antibody tests imported from China were found to be unreliable.
- The kit has reported high sensitivity and accuracy.

16. NIAB develops portable coronavirus detection kit

Context:

- Development of testing kits.

Details:

- Researchers from the National Institute of Animal Biotechnology (NIAB), Hyderabad, have developed a biosensor that can detect the novel coronavirus in saliva samples.

* Previously, biosensors have been used across the world to detect toxins, narcotic drugs, and are also considered as a reliable tool to detect infectious diseases.

Mode of functioning:

- The new portable device named eCovSens consists of a carbon electrode and the coronavirus antibody.
- The antibody is capable of binding with the spike protein found on the outer layer of the virus. An electrical signal is generated when the antigen and antibody binds.
- Electrical components in the device further amplify this signal, process it, convert it to digital readings on an LCD display.
- The signal's intensity was found to be proportional to the concentration of the antigen in the sample.

Significance:

- The device can also be connected to a computer or cellphone via Bluetooth and studied.
- The device can be battery-operated as it uses very low voltage of 1.3V to 3V.
- The device is portable and can be taken to the bedside of the patient too.
- The device is stable and when built in bulk can drastically bring down the cost of testing.

17. Can antibody tests help tackle COVID-19?

Context:

- The rapid testing kits being used to detect antibodies to the novel coronavirus were found to be providing unreliable results

RT-PCR test:

- An RT-PCR test on a nasal or throat swab involves extracting RNA or ribonucleic acid, the genetic material of the virus, and checking if it shares the same genetic sequence as the SARS-CoV-2 virus.

Concerns:

- The current RT-PCR technology requires RNA extracting machines, a specialised laboratory, and trained technicians.
- The test is a time consuming process, involves large scale logistics, requires many chemicals and involves substantial costs.

Advantages:

- The only way such tests turn negative is if the actual sample does not have the virus or the swab was not properly administered and too little of the virus was gleaned. So, the chances of faults are limited if the set guidelines are appropriately followed
- The RT-PCR test is currently the 'gold standard' in detecting the virus.

Antibody tests:

- Antibody tests, also called serological tests, detect the presence and quantity of antibodies that are produced by the immune system to battle an infection.
- It is an indirect test because it cannot find the virus, but it can determine if the immune system has encountered it.
- Two kinds of antibodies result from an infection: Immunoglobulin M and Immunoglobulin G (IgM and IgG). In response to an infection, the IgM is first produced within a week of infection. Two weeks later, the levels of IgM reduce and are replaced by IgG. The latter is a longer-lasting antibody and, depending on the infectious agent involved, can offer different durations of immunity.

Concerns:

- Antibodies can show up only between nine to 28 days after an infection has set in. Thus, an undetected infected person, if not isolated, can spread the disease.
- The antibodies may be produced in response to a closely-related pathogen also and not necessarily novel coronavirus.
- Due to a lack of sufficient research on the study of the antibodies and the profile of recovered patients, the antibody tests remain imperfect.
- The duration of the antibodies against SARS-nCoV-19 is not documented. The lack of antibodies does not necessarily rule out the previous exposure of the person to coronavirus.

Advantages:

- Antibody tests are fast and relatively inexpensive.
- Antibody tests are portable, can be administered on-site and can be conducted en masse.

Significance of anti-body testing:

- Antibody tests can be used to gauge the extent of infection in a community or a large group of people who may have had exposure to the virus.
 - * Studies in India too have shown that for every symptomatic positive, there are two asymptomatic or presymptomatics (those who do not visibly manifest the disease).
- It helps identify if the virus is present in certain clusters. This can help government authorities decide on what regions in a lockdown can be opened up if the aim is to get regular life back on track as soon as possible.
- Rapid antibody tests can also play a role in determining the degree of “herd immunity” in a population.
 - * Herd immunity means that when a sizeable fraction of the population has been infected, the virus ceases its pace of spread.

Way forward:

- The Indian Council of Medical Research (ICMR) has advised States to use antibody testing for surveillance and use real time RT-PCR (or real-time reverse transcription-polymerase chain reaction) tests for diagnosis.
- There have been efforts to produce the antibody testing kits domestically.

18. COBAS 6800

- The COBAS 6800 is a fully automated, high-end machine for performing RT-PCR tests for COVID-19.
- The machine will provide high-volume, and quality testing and will be able to test around 1200 samples in 24 hours.
 - * This will help to increase the testing capacity in the country.
- The COBAS 6800 is a sophisticated machine enabled with robotics. This machine will help minimize the chance of contamination and the risk of contraction of the virus by healthcare professionals as the machine is operated remotely, with very little human intervention.
- COBAS 6800 can also reportedly detect other pathogens like Viral Hepatitis B and C, HIV, Mtb, Papilloma, CMV, Chlamydia, Neisseria, etc.

19. Operation Warp Speed

- It is a public-private partnership, initiated by the Federal Government of the United States, to facilitate and accelerate the development, manufacturing, and distribution of COVID-19 vaccines, therapeutics, and diagnostics.
- Operation Warp Speed will promote mass production of multiple vaccines based on preliminary evidence allowing for faster distribution if clinical trials confirm one of the vaccines is safe and effective

SOCIAL ISSUES

1. Bois Locker Room

Context

- The Delhi police have cracked down on the 'Bois Locker Room'.
 - * It is an Instagram group allegedly consisting of boys from Delhi's prominent schools, who reportedly used the platform to sexually objectify young women (including minor girls and classmates of the boys)

Details:

- The Delhi Commission for Women (DCW) had issued notices to Instagram and the Delhi Police.
- About 10 members of the group have been identified and are being dealt with as per the provisions of the Juvenile Justice Act.
- The police have registered a case under Sections 465 (forgery), 471 (using as genuine a forged document or electronic record), 469 (forgery for purpose of harming reputation), and 509 (word, gesture or act intended to insult the modesty of a woman) of the IPC and Sections 67 (publishing or transmitting obscene material in electronic form) and 67A (publishing or transmitting of material containing sexually explicit act in electronic form) of the Information Technology Act.

Issues:

- Rumour mongering:
 - One of the fallouts of the matter was the rumour-mongering that started either to take focus away from the core issue or to malign others in a similar way with fabricated evidence.
- Copycat groups:
 - Cyber experts have observed scores of Copycat groups with similar names or themes that were formed within hours of the matter becoming public knowledge.
 - Cyber experts said the copycat groups were trying to capitalise on the dubious fame and gain followers.
 - The pages have been created with the obvious intent to cash in on the attention and gain followers.
- Lack of clarity in laws:
 - There are no clear laws for many of the instances that are coming to light.
 - For example, there are so many instances of body shaming but no laws that deal with cyber bullying.
- Effect on Free Speech:
 - While it is argued that the firms (here, Instagram) are liable if platforms are misused, punitive action could have a 'chilling effect on free speech'.

- Without an actual crime being committed, it will be tough for platforms to provide user data to law enforcement.
- This could also lead to grave harm when it comes to conversations around politics or other thorny issues that often happen in chat groups online.

Violence against women

The Bois Locker Room opens a window to a crisis of individuality and masculinity.

- The anonymity of the internet gives a false sense of power, online abuse takes the form of women receiving unsolicited images of sexual content, verbal abusive messages, using images without their permission like in the case of Boys Locker Room.
- Vicious behaviour like this propagates rape culture and puts the lives of women in danger making them feel unsafe all the time.
- Stalking is equated with "love", in society and popular culture, and is often not even recognised as a problem.

Way forward

- Gender and sex education should be made part of the primary school curriculum. Schools need to urgently conduct cyber-bullying, gender sensitisation and gendered-abuse workshops with parents, teachers and students regularly.
- There should be a focus on the sexual needs of adolescents and the inquisitiveness of children. They should be guided about what can and cannot be pursued and why.

2. Female Genital Mutilation (FGM)

- The World Health Organization defines Female Genital Mutilation (FGM) as involving "the partial or total removal of external female genitalia or other injuries to the female genital organs for non-medical reasons."
- The practice has no health benefits for girls and women.
- FGM can cause severe bleeding and problems in urinating, cysts, infections, as well as complications in childbirth and increased risk of newborn deaths.
- According to the UN, over 200 million women in several African countries, including Sudan, Egypt, Nigeria, Djibouti and Senegal, and some in Asia, have been subject to this brutal social custom.

Context:

- Sudan has criminalized the act of Female Genital Mutilation (FGM).

Details:

- Sudan's decision to outlaw the practice of Female Genital Mutilation (FGM) is a landmark victory for women's rights in a country that is still in a transition from dictatorship to democracy.
- The development follows the transitional government's decision to scrap the repressive social codes and humiliating penalties that targeted women during the nearly 30-year dictatorship of Omar al-Bashir, which fell in 2019 amid protests.
- Under the law, offenders will serve a punishable sentence of up to three years in prison.
- It is a historic move in a country where the United Nations says 9 out of 10 women between the ages of 15 to 49 have been subjected to the practice.
- The UN estimates that some 87% of Sudanese women have had their external genitalia removed on non-medical grounds during childhood, leaving them with life-long emotional and physical injuries.

Concerns:

- The new measure, which entails punishment with a fine and a prison sentence, must still be approved by the Supreme Council (made up of civilians and military officials that oversees the democratic transition). The government's decision builds on the curbs already in place in a number of provinces, although enforcement has been a concern.
- While the latest measure has been widely welcomed, campaigners remain cautious about a shift in attitude against this custom, as it is regarded as crucial prior to matrimony.
- Even in countries where FGM is outlawed, enforcement remains an issue.
 - * In Egypt's first FGM trial in 2014, six years after Cairo clamped a ban, the doctor who had carried out the procedure, as well as the father of the deceased girl, were acquitted, despite incriminating forensic evidence.
 - * In Somalia, the country with the highest prevalence rate but no legal ban, the death of a girl in 2018 after a similar procedure led to the first prosecution in such incidents.
 - * In Uganda, reports in 2019 of some 300 cases of mutilation within a month shed light on the government's uphill task to back existing legislation with vigorous awareness campaigns.
 - * In Kenya, where the practice was criminalised in 2011, the government strategy requiring girls to be tested for circumcision raised concerns of victimisation and privacy violation.

Practice of FGM in India:

- Female Genital Mutilation (FGM) is practised in India by the Dawoodi Bohras, a sect of Shia Islam with one million members in India.

- The procedure is generally performed when a girl is seven years old and involves the total or partial removal of the clitoral hood.
- In 2017 a Public Interest Litigation (PIL) case was raised in India's Supreme Court, seeking a ban on FGM in India.
- The petition claimed the practice violated children's rights under Article 14 (Right to Equality) and Article 21 (Right to Life) of the Constitution of India.
- The defendants argue that khafz (FGM) is an essential part of the community's religion, and their right to practise the religion is protected under Articles 25 and 26.
- The community believes that male and female circumcision is required as "acts of religious purity".
- In 2018 the Supreme Court referred the PIL to a five-judge constitution bench for further hearing.

Conclusion:

- These practices suggest that legislation alone may not stop this practice that has deep cultural roots. The governments must eradicate it.
- While there is ongoing research to rectify the damage, WHO is somewhat skeptical about the effectiveness of recent reconstruction surgeries.
- The prevailing scenario thus underscores the need for stronger campaigns and bold actions to stop this social scourge.
- Sustaining the country's (Sudan) progressive currents and the democratic transition would be crucial to consolidate the gender reforms it has introduced in recent months.

3. Katkari Tribe

- Katkari is one of the 75 Particularly Vulnerable Tribal Groups, as per the classification by Ministry of Home Affairs. They are classified as a Scheduled Tribe.
- They are located primarily in Raigad and in parts of Palghar, Ratnagiri and Thane districts as well and in some places of Gujarat.
- The British administration had classified them under the Criminal Tribes Act, 1871.
- Katkaris were historically forest dwellers.
- The name Katkari is derived from a forest based activity – the making and barter or sale of Katechu (kath) from the khair tree (Acacia Katechu). It is produced by boiling wood from the Khair tree and evaporating the resulting brew.
- They are bilingual, speaking the Katkari language amongst themselves and Marathi with others. A few of them speak Hindi as well.

4. Sherdukpen

- They are a designated Scheduled Tribe in Arunachal Pradesh.

- The Sherdukpen tribe derives its name from Sher (Shergaon) and Tukpen (old name for Rupa) villages in western Arunachal Pradesh.
- They are known for their honey-hunting skill.
 - * Chi means honey and Lupo is hunter in the dialect of the Buddhist Sherdukpen community
 - * Honey is collected from the wild for its medicinal properties and for preparing delicacies.
- Khiksaba is an indigenous non-Buddhist festival of the Sherdukpen, dedicated to appease the forest deities and other mountain spirits.
- The Sherdukpen speak their own language, Sherdukpen, which isn't directly related with the neighboring Bugun Monpa language. It is possibly of Tibeto-Burman derivation.

5. **Van Dhan Monit Dashboard**

Context

- The Ministry of Tribal Affairs has advised all states to speed up procurement operations for Minor Forest Produce (MFP) to support the Tribals especially in the backdrop of situation created by Covid19 and also keeping in view that it is now peak season for gathering of MFP.

Details

- It is an online monitoring dashboard that has been created for reporting the activities undertaken at the State level for procurement of Minor Forest Produce.
- It is part of the "TRIFED E-Sampark Setu" being created for an exchange of information to and from every Panchayat and Van Dhan Kendra, either through Mail or Mobile.
 - * States have appointed the Van Dhan Kendras as their primary procurement agents for MFP procurements from haat bazaars
- The State Implementing Agencies have started updating the dashboards as the work progresses in their States.

Minor Forest Produce (MFP)

- They are non-wood forest products
- It includes all non-timber forest produce of plant origin and will include bamboo, canes, fodder, leaves, gums, waxes, dyes, resins and many forms of food including nuts, wild fruits, Honey, Lac, Tusser etc.

6. **GOAL - Going Online As Leaders**

Context

- The Ministry of Tribal Affairs and Facebook India launched 'GOAL' programme to provide online mentorship to tribal youth

Details

- The GOAL programme is designed to provide mentorship to tribal youth through digital mode.

- The initiative aims to enable scheduled tribe youth (called mentees in the programme) in remote areas use digital platforms for sharing their aspirations, dreams and talent with their mentors.
- The programme will focus on three core areas - digital literacy, life skills and leadership and entrepreneurship, and on sectors such as agriculture, art and culture, handicrafts and textiles, health and nutrition, among others.

Significance

- It will help in their personal development of tribal youth as well as contribute to all-round upliftment of their society.
- The programme intends to upskill and empower 5,000 tribal youths in the current phase to harness the full potential of digital platforms and tools to learn new ways of doing business, explore and connect with domestic and international markets.

7. **Manipur's Khudol (gift)**

Context

- The United Nations Secretary-General's Envoy on Youth has listed Manipur's Khudol (gift) among the top 10 global initiatives for an inclusive fight against the COVID-19 pandemic.

Details

- Khudol is a crowdfunded initiative of Ya_All, an Imphal-based NGO that had created India's first transgender football team.
- The initiative entails ensuring food, health and hygiene of the LGBTQI+ community, people living with HIV, daily-wage earners, children and adolescents.

GEOGRAPHY

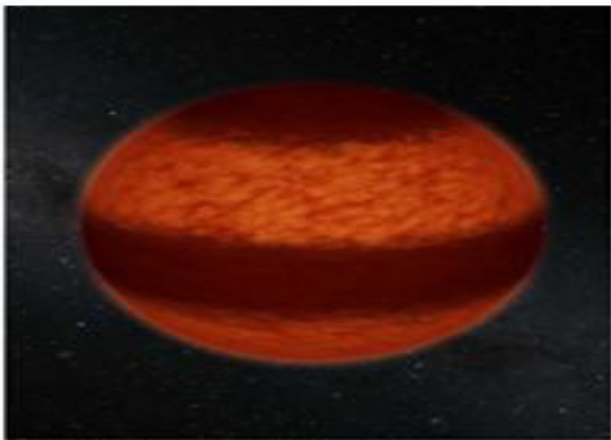
1. Band-like clouds seen over Sun's neighbour

Context:

- A group of international astrophysicists have identified cloud bands on the surface of Luhman 16A, one of a pair of binary brown dwarfs in the Vela constellation.

Details:

- The astrophysicists have used an idea put forth nearly two decades ago by Indian astrophysicist Sujan Sengupta that the light emitted by a cloudy brown dwarf, or reflected off an extrasolar planet, will be polarised.
 - * He suggested that a polarimetric technique could serve as a potential tool to probe the environment of these objects.
- The group, by using the Very Large Telescope at European Southern Observatory, Chile, found that Luhman 16A had band-like clouds in its atmosphere, whereas the same was not true of Luhman 16B.



Luhman 16:

- Luhman 16 is a binary star system, the third closest system to the Sun after Alpha Centauri and Barnard's star.
- This pair of brown dwarfs referred to as Luhman 16A and Luhman 16B orbit each other, casting a dim light.
- They are at a distance of about 6.5 light years from the Sun.

Brown Dwarfs:

- Brown dwarfs are also called failed stars, because their masses are intermediate to the largest planets and the smallest main sequence stars.

- Their masses being too small, they are unable to sustain fusion of their hydrogen to produce energy.
- It is believed that some of the more massive brown dwarfs fuse deuterium or lithium and glow faintly.

Significance:

- The researchers have now found the actual structure of the clouds. It is found that they form bands over one of the pair (Luhman 16A) of brown dwarfs.
- Since brown dwarfs glow faintly, the faintness of the glow proved to be providential in finding the cloud bands.
- Unlike a star whose brightness would be too high, or an extrasolar planet orbiting a star, where the extra light from its star would have to be cut off to make the measurement, the light of the brown dwarfs was just right.
- Understanding the cloud system over a brown dwarf can shed light on the pressure, temperature and climate on the surface of the celestial body.

2. Kerala to source weather inputs from private agencies

Context

- Kerala has been home to some natural disasters which has ravaged human life, infrastructure and the economy.
- The state feels the weather inputs provided by the India Meteorological Department (IMD) is inadequate. Hence Kerala has decided to additionally source inputs from four private agencies during the upcoming monsoon season.

Automated Weather Stations

- An automated weather station is an integrated system of components that are used to measure, record, and often transmit weather parameters such as temperature, wind speed and direction, solar radiation, and precipitation.
- Weather stations are used on land and sea for a variety of operational and research purposes.

Details

- The Kerala State Disaster Management Authority (KSDMA) decided to access inputs from Skymet Weather Services, Windy, the IBM Weather Company and Earth Networks
- The government has granted the department permission to spend 10% of funds from the State Disaster Response Fund (SDRF) for the services

- The KSDMA has pointed out that the IMD has only 15 Automated Weather Stations in the State.
 - * The KSDMA had transferred land for establishing 73 more, and the IMD had promised to set up 15 AWS before the 2020 monsoon season. But they have not yet materialised, according to the Disaster Management Department.
- Moreover, "near-time data streaming is minimal to nil. Just about five AWS are providing live data in the State," the Department noted.
 - * With such an unreliable network, the State will be unable to issue localised alerts.
- Kerala has been demanding the IMD to establish one more doppler radar on the Kozhikode-Wayanad district boundary.
 - * The IMD has only one such radar in the State and the second one, operated by the Vikram Sarabhai Space Centre (VSSC) in Thiruvananthapuram, operates only on demand
 - * The Doppler radar gives accurate information for forecasting weather patterns and accurate rainfall information in specific regions.

But none of the requirements has been satisfied despite the State bearing the brunt of two devastating flood. They now intend to source the data from Private agencies.

Advantages with Private Agencies

- They release related data more frequently and faster.
- Advance predictions will help reduce the losses

3. Jia Bharali and Puthimari River

Context

- Heavy rains in many parts of Assam

Details

- Most rivers in the state including the Brahmaputra and its tributaries witnessed a rise in water
- Jia Bharali and Puthimari River crossed the red mark
 - * The Puthimari River rises in Assam
 - * 1. It is a tributary of the Brahmaputra River
 - * 2. The Puthimari is known for its floods and high sediment load
 - * Kameng River (Kameng in Arunachal Pradesh and Jia Bharali (Jia Bhoreli) in Assam) in the eastern Himalayan mountains, originates in Tawang district from the glacial lake below snow-capped Gori Chen mountain on the India-Tibet border
 - * 1. It is one of the major tributaries of the Brahmaputra River
 - * 2. The Kameng forms the boundary between East Kameng District and West Kameng Districts and is also the boundary between the Sessa and Eaglenest sanctuaries to its west and the Pakke tiger reserve to the east

4. Scientists discover 'rare' Super-Earth planet in centre of galaxy

Context

- Scientists have spotted a new planet towards the center of the galaxy that bears some similarities to Earth

Details

- The planet's host star is about 10% the mass of our Sun
- The Super Earth planet's mass would be somewhere between that of Earth and Neptune, and would orbit at a location between Venus and Earth from the parent star.
- The planet's 'year' would be of approximately 617 days.

Exoplanets

- All of the planets in our solar system orbit around the Sun. Those planets that orbit around other stars are called extra solar planets or exoplanets
- They are very hard to see directly with telescopes as they are hidden by the bright glare of the stars they orbit.
- So, astronomers use other ways to detect and study these distant planets.

Micro Lensing

- It is the method of discovering planets at truly great distances from Earth.
- It can be used to detect objects that range from the mass of a planet to the mass of a star, regardless of the light they emit.
- In the gravitational microlensing method, one star passes in front of another, it bends the light like a lens, making it brighter. If the lens-making star has a planet, it makes another star even brighter.

EDUCATION

1. SAMARTH Enterprise Resource Planning (ERP)

- SAMARTH is an e-Governance platform, developed under National Mission of Education in Information and Communication Technology Scheme (NMEICT) of M/o HRD
- ERP, SAMARTH, is an Open Standard Open Source Architecture, Secure, Scalable and Evolutionary Process Automation Engine for Universities and Higher Educational Institutions. It caters to faculty, students and staff at a University/Higher Educational Institutions
- The ERP, SAMARTH, has been implemented at National Institute of Technology, Kurukshetra, a participating unit under the World Bank supported Technical Education Quality Improvement Program (TEQIP).
- The objective of this initiative is to automate the processes of the Institute.

Significance

- This initiative will enhance the productivity through better information management in the institute by seamless access to information, and its utilization for various purposes.

National Mission of Education in Information and Communication Technology Scheme (NMEICT)

- NMEICT has been envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time anywhere mode.
- The Mission has two major components:
 - * providing connectivity, along with provision for access devices, to institutions and learners;
 - * Content generation.

Significance

- It seeks to bridge the digital divide, i.e. the gap in the skills to use computing devices for the purpose of teaching and learning among urban and rural teachers/learners in Higher Education domain and empower those, who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

2. NEET is not student-friendly, merit-promoting

Context:

- Recent judgment of the Supreme Court on the National Eligibility-cum-Entrance Test (NEET).

Background:

- NEET was initially struck down as unconstitutional in Christian Medical College, Vellore case (2013) by a 2:1 majority.
- In 2016, NEET notifications were incorporated as statutory provisions under the Medical Council of India Act and the Dentists Act.
- In 2016, a review petition was allowed and NEET was made compulsory even prior to a full hearing by the constitution Bench.

Details:

- The Supreme Court in its judgment has held that there is no fundamental right violation in prescribing National Eligibility cum Entrance Test (NEET) for admissions of graduate and post-graduate programs in medical and dental courses across aided and unaided minority professional institutes and has upheld the NEET examination for institutes across the country.
- The SC has held that a uniform entrance examination like NEET helps weed out evils from the system and various malpractices which have decayed the educational system.

Concerns:

- The author of the article expresses concerns over the recent judgment and argues that key concerns of NEET have been overlooked by the SC bench.

Disadvantaged students:

- With NEET and similar other national tests such as the Joint Entrance Examination and Common Law Admission Test, coaching institutes are prospering and gaining undue influence over the coaching industry.
- The large-scale variation in the syllabus and standards of the Central Board of Secondary Education and State boards place at a disadvantage the students coming from state boards.
- The author argues that in the case of multiple tests a student tends to gain due to the following reasons:
 - * If a student falls ill or has not done well in one test, he/she will still have a chance to qualify in another without losing a year.
 - * It gives a student a right to select an institution of his choice.

Element of class:

- Though the SC bench notes that NEET promotes merit, the author argues that true meritocracy requires competition and equality of opportunity.

- * Since most of the coaching institutes are located in cities, poorer students from a rural background and who have studied in the vernacular medium face a disadvantage.

- Empirical research in the United States on standardised common tests has found that these tests are biased against the poorer and underprivileged sections of population, women and minorities. Thus there is an element of class in NEET that the Indian judiciary has so far overlooked.

Minority rights:

- SC has stated that the minority institutions are equally bound to comply with the conditions imposed under the relevant Acts and regulations to enjoy affiliation and recognition.
- The author argues that minority rights are not the violation of the equality provision in Article 14 as the Constitution does permit classification. Substantive equality, as opposed to formal equality, mandates differential treatment.
- The author argues that the rights of minority institutions are being violated through the regulation measures of the government.
- Though minority institutions cannot grant admission based on their whims and fancies, but if such an institution follows an identifiable or reasonable methodology of admitting students, the imposition of NEET with mandatory centralised counselling is indeed an unreasonable restriction on these institutions.
- Even if one concedes the necessity of NEET, centralised counselling due to which several minority institutions and private medical colleges are unable to fill their seats is indeed an 'intolerable encroachment' of the rights of minority institutions.
- This leads to the denial of Article 30 rights of minority institutions and Article 19(g) rights of private unaided institutions. The Supreme Court has upheld the importance of Article 30 time and again through its numerous judgments.

Lessens autonomy of institutes:

- The NEET exam is a clear case of centralization in the educational sector.
- The author argues that NEET lessens the autonomy of universities and higher education institutions, particularly private, unaided ones.

Increasing government domination of the educational process:

- The author argues that exclusive control of education by the State may have undesirable impacts on the society. Institutions of higher learning controlled and managed by governmental agencies may promote the political purposes of the State.
- The author argues that the trend towards the governmental domination of the educational process must be resisted in the interest of democracy.

Other concerns:

- NEET paper has been leaked twice in the last four years and therefore, there is not much confidence in NEET's fairness and transparency.
- In the 2018 NEET, as many as 49 questions had errors in Tamil translation.
- Some argue that common admission tests cannot measure abilities that are essential for learning such as imagination, curiosity and motivation.

3. PM e-Vidya programme

Background

- With all educational institutes shut down in the nation due to the coronavirus outbreak and the nationwide lockdown, the students of the country are suffering academically.
- To combat this problem, Finance Minister launched the PM eVidya Programme, a venture by the government which will help students gain access to educational content at home.

What is it?

- This programme has the objective of promoting e-learning and digital content for students across the nation.
- As a lot of students don't have access to the internet, this programme will help them access the educational content through television and radio during the nationwide lockdown.
- It is multi-mode access to digital educational content among students and teachers.
 - * There will be 12 DTH channels introduced, with one each dedicated to classes 1 to 12

Manodarpan:

- This is an initiative for the psychosocial support of students, teachers and families, who are struggling to maintain their mental health and emotional well-being during this lockdown. This platform will be launched immediately.

DISASTER MANAGEMENT

1. Amphan Cyclone

- Amphan is a Super Tropical Cyclone originated from the Bay of Bengal.
 - * It is considered the first super cyclonic storm in the Bay of Bengal since the 1999 Odisha cyclone.
- It made landfall between Digha, some 180 km south of Kolkata in West Bengal, and Hatiya islands in Bangladesh on May 20.
- Amphan intensified from a maximum wind speed of around 140 kilometre per hour to more than 200 kmph.
 - * This meant it witnessed 'rapid intensification'.
 - * The main reason behind this was the high sea surface temperatures of 32-34 degrees celsius in the Bay of Bengal. General long-term warming of the Bay of Bengal was the leading cause of rapid intensification.

Naming

- The name Amphan, which is pronounced as 'Um-pun', means sky and was given by Thailand in 2004.
- India, Bangladesh, Myanmar, Pakistan, Maldives, Oman, Sri Lanka and Thailand decide names of cyclones in the region.
- The countries submit a list of cyclone names from time to time to choose the names from the pool.
- While selecting names for cyclones, countries first analyse them to see if the word is easily understood by people in the region, hence the names are generally familiar words.

How devastating was the first super cyclone in Bay of Bengal in 1999?

- In 1999, Odisha was ravaged by a super cyclone that left around 10,000 people dead along its trail of destruction.
- One of the powerful cyclones of the 20th century, the 1999 super cyclone had also damaged lakhs of houses, killed about two lakh livestock and affected about 2.5 to 3 million people, leaving large tracts of agricultural land unfit for cultivation for a long time due to salinity.

Tropical cyclones

- Cyclones are low-pressure systems that form over warm tropical waters, with gale force winds near the centre. The winds can extend hundreds of kilometres (miles) from the eye of the storm.
- Sucking up vast quantities of water, they often produce torrential rains and flooding resulting in major loss of life and property damage.

Tropical cyclones in the Bay of Bengal are graded according to maximum wind speeds at their centre.

- At the lower end are depressions that generate wind speeds of 30 to 60 km per hour followed by,
- Cyclonic Storms (61 To 88 kph),
- Severe Cyclonic Storms (89 to 117 kph) and
- Very Severe Cyclonic Storms (118 to 166 kph).
- At the top are
 - * Extremely Severe Cyclonic Storms (167 to 221 kph) and
 - * Super Cyclones (222 kph or higher).

Storm surges

- The term "storm surge" refers to rising seas whipped up by a storm, creating a wall of water several metres higher than the normal tide level.
- The surge can extend for dozens of kilometres inland, overwhelming homes and making roads impassable.
- A storm surge is shaped by a number of different factors, including storm intensity, forward speed, the size of a storm and the angle of approach to the coast.
- The underlying features of the land at the coast, including bays and estuaries, are also at play.

Bay of Bengal

- The tropical cyclone season in the Bay of Bengal and neighboring Arabian Sea has two peaks around May and November, according to the World Meteorological Organisation.
- The cyclones can form in the western Pacific Ocean and travel in a northwest direction before arriving in the Bay of Bengal. Some reach the southeastern coast of India but others divert northeast and move up to West Bengal and Odisha states.
- The Bay of Bengal has conditions favorable to the development of cyclones, including high sea surface temperatures.

Steps taken by the Govt.

- Evacuations, arranging for backup power, warning people to stay far from the coasts, designating strong buildings as cyclone shelters, and providing for at least a week's supply of cooked food besides bolstering medical supplies.
- Fishermen are advised not to venture into North Bay of Bengal along and off North Odisha, West Bengal and adjoining Bangladesh coasts.

What all damage is expected in Odisha and Bengal?

- Extensive damage is expected to all types of kutcha houses and some damage to old badly managed pucca structures.

- Also, there is a potential threat from flying objects.
- Extensive uprooting of communication and power poles is also likely along with disruption of rail/road at several places.
- Aside from these, extensive damage to standing crops, plantations, orchards and blowing down of palm and coconut trees, uprooting of large bushy trees are expected.
- The storm surge may have also led to the ingress of saline water into the fields and homes in the Sundarbans. This will hit soil quality and impact productivity, and force people to migrate in search of livelihood.

Challenge of COVID-19

- There is an additional challenge, as thousands of people have been moved to crowded shelters where the COVID-19 pandemic poses a continuing threat.
- Adhering to hygienic practices, monitoring those requiring medical assistance and testing for the virus is a high priority.

Ocean warming

- Cyclone Amphan is also a reminder that oceans are warming due to rising emissions, and warm ocean water is a key ingredient for the formation of tropical cyclones.
- The number of cyclones in the Arabian Sea and the Bay of Bengal has increased by 32% in the last five years, says IMD data.
- However, the solutions — tackling the sources of global warming, and investing in and upgrading climate resilience and adaptation techniques — are complex processes and expensive.
- It also needs tremendous political will and people's support and participation to ensure that development is sustainable. But it has to be done; otherwise, the costs, as Cyclone Amphan has shown, will be massive and recurring.

Conclusion

- The states now need to carry out a detailed assessment of what Amphan has done.
- They have to start rebuilding infrastructure and reaching out to people with food, clean water and medical help.

2. Heat Wave

Definition

- A Heat Wave is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the summer season in the North-Western parts of India.
- * Heat Waves typically occur between March and June, and in some rare cases even extend till July.

Stats

- According to the National Disaster Management Authority (NDMA), between 1992 and 2016, heatwave caused 25,716 deaths.
- But these numbers are highly unreliable because only deaths due to 'heat stroke' and 'heat exhaustion' were recorded; overheating can lead to organ failure, stroke, cardiac arrest, etc., which are seldom linked and recorded as heatwave deaths.

The Indian Meteorological Department (IMD) has given the following criteria for Heat Waves:

- Heat Wave need not be considered till maximum temperature of a station reaches atleast 40°C for Plains and atleast 30°C for Hilly regions
- When normal maximum temperature of a station is less than or equal to 40°C
 - * Heat Wave Departure from normal is 5°C to 6°C
 - * Severe Heat Wave Departure from normal is 7°C or more
- When normal maximum temperature of a station is more than 40°C
 - * Heat Wave Departure from normal is 4°C to 5°C
 - * Severe Heat Wave Departure from normal is 6°C or more
- When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat waves should be declared.

Health Impacts of Heat Waves

It causes Heat cramps, Heat Exhaustion, and Heat Stroke. They are collectively known as heat-related illness. Heat cramps are the least serious of the three.

- Heat Cramps: Symptoms of heat cramps include profuse sweating with involuntary spasms of the large muscles in the body.
 - * It is accompanied by fever below 39°C i.e. 102°F.
- Heat Exhaustion: Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.
- Heat Stroke: Heat stroke results from prolonged exposure to high temperatures -- usually in combination with dehydration -- which leads to failure of the body's temperature control system.
 - * The medical definition of heat stroke is a core body temperature greater than 104 degrees Fahrenheit (40 degree C)
 - * Heat stroke can kill or cause damage to the brain and other internal organs
 - * A heat stroke can be much more serious than heat exhaustion.

Children, the elderly and those with pre-existing morbidities are particularly vulnerable.

Other Problems associated with Heat Waves

- The agriculture sector is more vulnerable compared to the industrial and service sectors because workers there were more likely to be exposed to heat.
 - * This has worrying implications for rural employment and the well-being of a large section of the population
- Heat wave can also result in death of cattle and wildlife besides affecting animals in various zoos in India.
 - * Food and livelihood security may also be strained if people lose their crops or livestock due to extreme heat.
- It can also cause major disruption in community infrastructure such as power supply, public transport and other essential services
- Heat wave is also called a “silent disaster” as it develops slowly and kills and injures humans and animals nationwide.

Heat-wave Action Plan

The Heat-Wave Action plan aims to provide a framework for implementation, coordination and evaluation of extreme heat response activities in cities/town in India that reduces the negative impact of extreme heat. The Plan's primary objective is to alert those populations at risk of heat-related illness in places where extreme heat conditions either exist or are imminent, and to take appropriate precautions, which are at high risk.

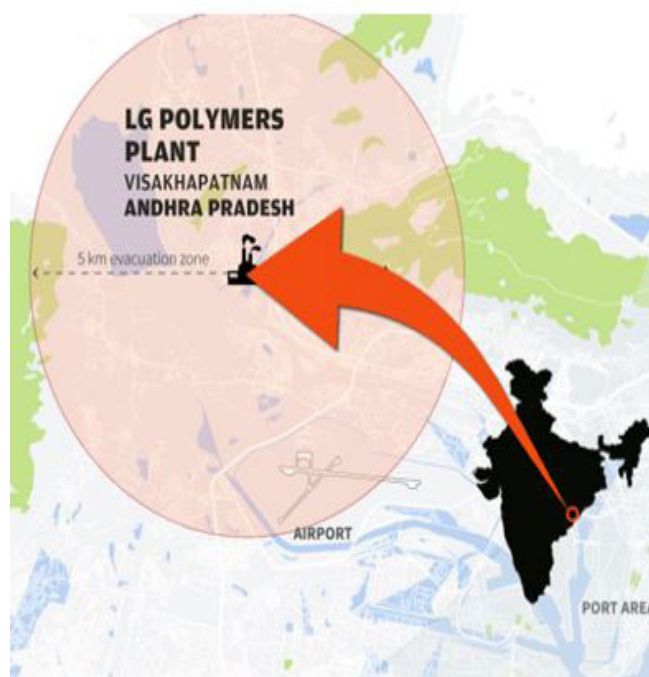
- Temperature forecasts and heat alerts should be sent as bulk messages on mobile phones
- Public Awareness and community outreach: Disseminating public awareness messages on how to protect against the extreme heat-wave through print, electronic and social media and Information
 - * Education and Communication (IEC) materials such as pamphlets, posters and advertisements and Television Commercials (TVCs)
- Collaboration with non-governmental organizations and civil society organizations to improve bus stands, building temporary shelters, wherever necessary, improved water delivery systems in public areas and other innovative measures to tackle Heat wave conditions.
- Identify “heat hot-spots” through appropriate tracking of meteorological data and promoting “timely development and implementation of local Heat Action Plans with strategic inter-agency co-ordination, and a response which targets the most vulnerable groups.”

3. Visakhapatnam Gas Leak

Context

- Styrene monomer gas leaked from a chemical plant belonging to LG Polymers in Visakhapatnam (Vizag).

Steps taken by the Govt.



What is styrene?

- Styrene is an organic compound with the formula C_8H_8 . It is a derivative of benzene (C_6H_6).
- It is stored in factories as a liquid, but evaporates easily, and has to be kept at temperatures under 20°C .

What is styrene used for?

- Styrene is the main raw material for synthesis of polystyrene, or $(C_8H_8)_n$.
- Polystyrene, in turn, is a versatile plastic that is used to make parts of various appliances such as refrigerators or micro-ovens; automotive parts; and parts of electronics such as computers; and also to manufacture disposable cups and in food packaging.
- Styrene is also used as an intermediate to produce copolymers — which are polymers derived from one or more species of monomers such as styrene.

What happens if someone is exposed to styrene gas?

- Exposure to styrene gas affects the central nervous system
- Breathlessness, respiratory problems, irritation in eyes, indigestion, nausea, transient loss of consciousness, unsteady gait, giddiness are caused by exposure to it.
- However, in people suffering from respiratory illness such as asthma, and those who have chronic obstructive pulmonary diseases, these conditions may get exaggerated
- Those suffering from diabetes or hypertension may have anxiety disorders
- It is the mucous membrane that is mainly affected by exposure to styrene gas.

What are the long-term effects?

- Experts say that if people are exposed to the gas for a long period, there is a chance of their developing leukaemia and headaches.
- And long-term exposure could drastically affect the central nervous system and lead to other related problems like peripheral neuropathy.
- It could also lead to cancer and depression in some cases.

What was the factory from which styrene leaked?

- Styrene gas leaked from a storage tank of LG Chem Polymers. The factory was established in 1961, originally as Hindustan Polymers, to manufacture polystyrene.
- It was merged with McDowell & Co of the UB Group in 1978, then taken over in 1997 by South Korea-based LG Chem, which renamed it LG Polymers.
- The factory manufactures general-purpose polystyrene and high-impact polystyrene, expandable polystyrene, and engineering plastics compounds.
- It is located at RRV Puram in Gopalapatnam, 15 km from Visakhapatnam city.

Were safety protocols in place?

- Styrene has to be stored in gas tanks under 20°C to keep it stable. The temperature has to be continuously monitored, and any exposure to light or heat may result in polymerisation. A team of 15 engineers and officials remained on duty at the factory throughout the lockdown period to monitor it.
- If temperature rises, inhibitors have to be added to keep the styrene stable. At LG Chem, an inhibitor tank is attached to the styrene storage tank but it failed to stabilise it in time.

Why could the inhibitor not prevent what happened?

- As the styrene was stagnant for 44 days, officials said, it was possible that some gas accumulated at the ceiling of the storage tank and its temperature rose beyond the specified 20°C, and the styrene started vaporising and escaped. This is called auto-polymerisation.
- However, the exact cause is still being ascertained. The company has not explained how the storage tank ruptured and the gas escaped.

Negligence of the company?

- The unit is an ISO certified facility, which means it has a protocol for everything. What seems to be the case is that the management, in its haste to restart the plant, ignored the protocol pertaining to maintenance of the plant before resuming operations.
 - * The factories inspector and PCB (Pollution Control Board) did not inspect the plant that has been lying idle during lockdown
- LG Polymers handed over critical operations to untrained casual workers.

- As per an assessment by Delhi non-profit Centre for Science and Environment (CSE), the accident can be attributed to the company's negligence and failure to adhere to the safety protocol.

The law in India provides protection to victims of such chemical disasters

- Bhopal Gas Leak (Processing of Claims) Act, 1985, which gives powers to the central government to secure the claims arising out of or connected with the Bhopal gas tragedy. Under the provisions of this Act, such claims are dealt with speedily and equitably.
- The Environment Protection Act, 1986, which gives powers to the central government to undertake measures for improving the environment and set standards and inspect industrial units.
- The Public Liability Insurance Act, 1991, which is an insurance meant to provide relief to persons affected by accidents that occur while handling hazardous substances.
- The National Environment Appellate Authority Act, 1997, under which the National Environment Appellate Authority can hear appeals regarding the restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986.
- National Green Tribunal, 2010, provides for the establishment of a National Green Tribunal for effective and expeditious disposal of cases related to environmental protection and conservation of forests.

Under the Indian Penal Code (IPC)

- Section 278 (making atmosphere noxious to health)
- Section 284 (negligent conduct with respect to poisonous substance)
- Section 285 (negligent conduct with respect to fire or combustible matter)

Other Acts and rules applicable in case of industrial accidents

- The Inflammable Substances Act, 1952
- The Petroleum Act, 1934 & its rules
- The Insecticide Act, 1968 (amended 2000) & its rules
- The Explosives Act, 1884 (amended till 1983) & its rules

Way forward

- The Andhra Pradesh government must focus immediately on the medical needs of those who have been grievously affected by the gas leak
- Solatium payments and compensation for the victims and families are important, but so is access to the highest quality of health care for the victims.
- As India aims for a wider manufacturing base, it needs to strengthen its approach to public and occupational safety.

Green tribunal directs LG Polymers to deposit 50 cr rupees.

Context:

- The National Green Tribunal (NGT) has taken suo motu cognisance of the gas leak at the LG polymer plant in Vishakhapatnam.

Details

- The National Green Tribunal (NGT) has directed LG Polymers India to deposit an initial amount of 50 crore rupees for the damage caused by the gas leak.
- The statutory authorities responsible for authorising and regulating such activities may also be held accountable for their lapses, if any, in dealing with the matter and in this regard NGT has issued notice to the Andhra Pradesh Pollution Control Board, the Central Pollution Control Board and the Union Ministry of Environment, seeking their response.
- The NGT has also constituted a five-member fact-finding committee to probe the incident and submit a report.
 - * The Committee has been directed to investigate the causes of failure and the persons and authorities responsible, measure the extent of damage to life, human and non-human, public health and the environment, including water, suggest steps to be taken for compensation of victims and restitution of the damaged property and environment and the cost involved.

Concerns:

- The National Green Tribunal order's reference to the archaic law principle of "strict liability" has been questioned.
 - * Under the strict liability principle, a party is not liable and need not pay compensation if a hazardous substance escapes his premises by accident or by an "act of God" among other circumstances.
 - * The strict liability principle provides companies with several exemptions from assuming liability.
 - * The Supreme Court in the Oleum gas leak case of Delhi, found strict liability woefully inadequate to protect citizens' rights in an industrialised economy like India (in the backdrop of the 1984 Bhopal gas tragedy) and replaced it with the 'absolute liability principle'.

Way forward:

- The term "absolute liability" should have been used by the NGT.
 - * Under the absolute liability principle, a company in a hazardous industry cannot claim any exemption. It has to mandatorily pay compensation, whether or not the disaster was caused by its negligence. The Supreme Court has previously held that a hazardous enterprise has an "absolute non-delegable duty to the community".

- There is a need to quickly ascertain the causes of the gas leak. Appropriate accountability must be fixed accordingly.
- There is a need to put in place, suitable measures to ensure that such untoward incidents do not occur in the future.

GOVERNANCE

1. Star Rating of Garbage Free Cities (GFC)

- The Star Rating Protocol was launched by the Ministry in 2018 to institutionalize a mechanism for cities to achieve Garbage Free status, and to motivate cities to achieve higher degrees of cleanliness.
- The protocol has been devised in a holistic manner including components such as cleanliness of drains & water bodies, plastic waste management, managing construction & demolition waste, etc. which are critical drivers for achieving garbage free cities.
- While the key thrust of this protocol is on Solid Waste Management (SWM), it also takes care of ensuring certain minimum standards of sanitation through a set of prerequisites defined in the framework.

How does it work?

- The star rating conditions are based on 25 key parameters across the solid waste management spectrum and has been designed to both help cities assess their progress while encouraging them to move towards a better rating thereby improving their cities' overall cleanliness and aesthetics.
- The Star Rating is supported by a robust verification mechanism to ensure transparency and standardisation.
- Cities are required to carry out self-assessment and self-verification for achieving a certain star rating.
- Finally it involves an assessment by a third-party agency selected and appointed by MoHUA.

Context:

- Ministry of Housing & Urban Affairs announces results of Star rating of garbage free cities.

Rating

- For the assessment year 2019-2020, a total of six cities have been certified as 5-Star, 65 cities as 3-Star and 70 cities as 1-Star.
- Cities which achieved the 5-Star status:
 - * Ambikapur – Chhattisgarh
 - * Rajkot – Gujarat
 - * Surat – Gujarat
 - * Mysore – Karnataka
 - * Indore – Madhya Pradesh
 - * Navi Mumbai – Maharashtra

Significance

- The performance of cities under the Star Rating Protocol is crucial as it carries significant weightage when it comes to their final assessment in Swachh Survekshan."

2. Unified Mobile Application for New-age Governance (UMANG)

- It provides a single platform for all Indian Citizens to access pan India e-Gov services ranging from Central to Local Government bodies and other citizen centric services.
- UMANG intends to provide major services offered by Central and State Government departments, Local bodies and other utility services from private organizations. It provides a unified approach where citizens can install one application to avail multiple government services.
- UMANG is a Digital India initiative of Ministry of Electronics and Information Technology (MeitY).

Key features

- UMANG provides seamless integration with popular customer centric services like Aadhaar and Digilocker.
- It provides a unified approach where you can install one application to avail multiple government services.
- UMANG supports 12 major Indian languages in addition to English.

Context

- Services hosted on the web site of India Meteorological Department (IMD) have been on boarded to the UMANG application.

Details

- Current Weather – Current temperature, humidity, wind speed, direction for 150 cities are updated 8 times a day.
- Nowcast – Three hourly warnings of localized weather phenomena and their intensity is issued for about 800 stations, and districts of India by State Meteorological Centres of IMD.
- City Forecast – Past 24 hours and 7 day forecast of weather conditions around 450 cities in India are given.
- Rainfall Information– All India district Rainfall information daily, weekly, monthly and cumulative series are available.
- Tourism Forecast – Past 24 hours and 7 day forecast of weather conditions of around 100 Tourist cities in India are provided.
- Warnings – Alerts are issued to warn citizens of approaching dangerous weather. It is colour coded in Red, Orange and yellow.
- Cyclone – Cyclone warnings and alerts provides the track of cyclonic storms along with likely time and point of crossing of coast.

3. It's time to give IRS officers their due

Context:

- A group of 50 IRS officers thought it their duty to help the government in this hour of crisis.
- They prepared a report titled 'Fiscal Options and Response to Covid-19 Epidemic', or FORCE, and submitted it to the government.
- The IRS Association's Twitter handle and website carried the report.
- In order to tide over the financial crisis, the report suggested raising the highest slab rate to 40% for income above ₹1 crore or re-introducing the wealth tax for those with wealth of ₹5 crore or more; providing an additional one-time cess of 4% on taxable income of ₹10 lakh and above for COVID-19 relief; providing tax relief for sectors hit hard by COVID-19; and re-introducing the inheritance tax.
- The CBDT has initiated inquiry against 50 IRS officers of the Income Tax (IT) Department who have penned an unsolicited report on revenue mobilisation to fund COVID-19 relief measures and made it public without permission.

Concerns:

- The Ministry of Finance is always headed by an Indian Administrative Service (IAS) officer.
- The Revenue Secretary, the Expenditure Secretary and the Finance Secretary are all drawn from the IAS despite the fact that they have little experience in handling the economy. Starting as local administrators they later hold top posts in the Ministry of Finance.
- On the other hand, the CBDT is managed by IRS officers with rich field experience.
- There were suggestions time and again that the Chairman of the CBDT should be of the rank of Secretary to the Government of India.
 - * The government raised the status of the Chairman to that of a Special Secretary and not a full-fledged Secretary.
- At the time of the Budget, it is an IAS officer who accompanies the Finance Minister for the press briefing.
 - * The IRS officer is totally invisible, despite the Budget being the handiwork of hard-working IRS officers.
- Senior IRS officers know the intricacies of taxation, whether national or international. On the other hand, IAS officers know little about base erosion and profit sharing, transfer pricing, etc. And yet, Revenue Administration is not in the hands of an IRS officer, but an IAS officer.
- The result is that the income tax law is a mess.
- Thus the tax publishers are not able to bring out a proper single volume of income tax law and that the blame for this squarely rests on the IAS officers who are above the IRS officers.

Conclusion:

- The present controversy has reignited the debate on the generalist versus the specialist.
- The IAS maybe the 'steel frame of India', the steel frame has been rusting for quite some time and the IRS should be given their due and be allowed to play a normal role.
- It is argued that the Fiscal Options and Response to Covid-19 Epidemic (FORCE) report is sound and that the IRS officers who wrote it deserve admiration and not admonition.

MISCELLANEOUS

1. African Swine Fever (ASF) and Classical Swine Fever (CSF)

- African swine fever (ASF) and classical swine fever (CSF) are highly contagious viral diseases that affect pigs. They are clinically similar, and cannot be definitively distinguished from each other in the field. Laboratory testing is required to confirm a diagnosis.
- Although the diseases appear similar, they are caused by completely unrelated viruses.

CSF

- It is often known as 'hog cholera' and is caused by a virus from the pestivirus genus of the Flaviviridae family.
- The agent causing CSF is a small, positive single-stranded, enveloped RNA virus.
- It is closely related to the virus that causes bovine viral diarrhoea (mucosal disease) in cattle and border disease (hairy shaker disease) in sheep.

ASF

- The virus belongs to the Asfivirus genus of the Asfarviridae family.
- The ASF virus (ASFV) is a large enveloped double-stranded Deoxyribonucleic Acid (DNA) virus and the only DNA arbovirus (arthropod borne) known so far.
- It is caused by a virus that is unrelated to the classical swine fever virus and has a more complex genetic structure.

ASF as well as CSF are viral diseases affecting pigs exclusively

- Both ASF and CSF affect pigs only, and do not infect humans and other livestock.

Spread

- The virus is spread from infected or carrier pigs via discharges from the nose, mouth, urine and faeces or infected semen and it is highly contagious.
- The virus survives in frozen carcasses for long periods of time.

2. Cordyceps Militaris

Context

- Bodoland University has developed a fungal powder to help people boost their immunity to COVID-19.
- The powder is from a parasitic but rare "super mushroom" called Cordyceps militaris.

Cordyceps

- Cordyceps militaris is an entomopathogenic fungus, meaning it parasitizes insects.

- The earth has more than 400 species of Cordyceps
- It is known for its anti-ageing, anti-viral, energy and immunity-boosting effects.

Details

- Paper pouches, each containing 150 mg of the super mushroom powder, were made by the University.
- It will be given once a week for making the system strong enough to resist viral attacks.

3. GARUD Portal

Context:

- The Civil Aviation Ministry and the Directorate General of Civil Aviation (DGCA) have launched the GARUD Portal for providing fast track conditional exemptions to government agencies for COVID-19 related RPAS (Remotely Piloted Aircraft System)/drone operations.

Details:

- GARUD is an acronym for 'Government Authorisation for Relief Using Drones'.
- The portal was designed, developed, beta-tested, and launched by the National Informatics Centre (NIC), New Delhi.
- The DCGA has issued rules according to which many geographical areas are restricted for RPA operations.
 - * These includes regions within 5 km distance from the perimeter of airports at the major metro cities, other prohibited areas like military installations/facilities, ecologically-sensitive areas, etc.

4. Pulitzer Prize

- The Pulitzer Prize is an award for achievements in newspaper, magazine and online journalism, literature, and musical composition in the United States.
- It was established in 1917 by provisions in the will of American (Hungarian-born) Joseph Pulitzer who had made his fortune as a newspaper publisher.
- It is administered by Columbia University in New York City.
- Prizes are awarded yearly in twenty-one categories.
- In twenty of the categories, each winner receives a certificate and a US\$15,000 cash award.
- The winner in the public service category of the journalism competition is awarded a gold medal.

Context:

- Three Indian photographers win the Pulitzer Prize.

5. United Nations Military Gender Advocate of the year Award

Context:

- Major Suman Gawani of the Indian Army, who served as a peacekeeper with the United Nations Mission in South Sudan (UNMISS) in 2019, has won the prestigious United Nations Military Gender Advocate of the year Award

Details

- Major Suman Gawani, was conferred with this award for her contribution to the United Nations' anti-sexual violence campaign.
- She was deployed in South Sudan under the UN Mission.
 - Gawani mentored more than 230 UN Military Observers on sexual violence stemming from conflict and ensured that women were part of the Mission's team sites.
 - Gawani also provided training to South Sudanese government forces and assisted them in launching their action plan on conflict-related sexual violence.

6. SC relief for firms unable to pay full wages during lockdown

Context:

- Supreme Court's observation of the Home Ministry orders.

Background:

- The Ministry of Home Affairs (MHA) had issued an order mandating the industry, shops and commercial establishments, to pay their workers without any deductions in the name of COVID-19. The order directed the payment of full wages.

Petitions against the MHA order:

- This order was challenged by several companies.
 - They challenged the constitutional validity of the order arguing that the blanket directive to pay full salaries against no work was arbitrary and violative of Article 14 (Right to Equality) of the Constitution.
 - They argued that there is an obligation to pay when work is actually done and there is no obligation if no work is done and that the employer has a right to not pay if no work is done.

SC observations:

- The Supreme Court has asked the government not to resort to any coercive action against any private companies who had not paid their workers full wages during the lockdown in accordance with the previous government order.

- The court has opined that the payment of full wages, as directed by the Ministry of Home Affairs (MHA) order may not be viable for small and private enterprises, which are tottering on the brink of insolvency due to the lockdown.

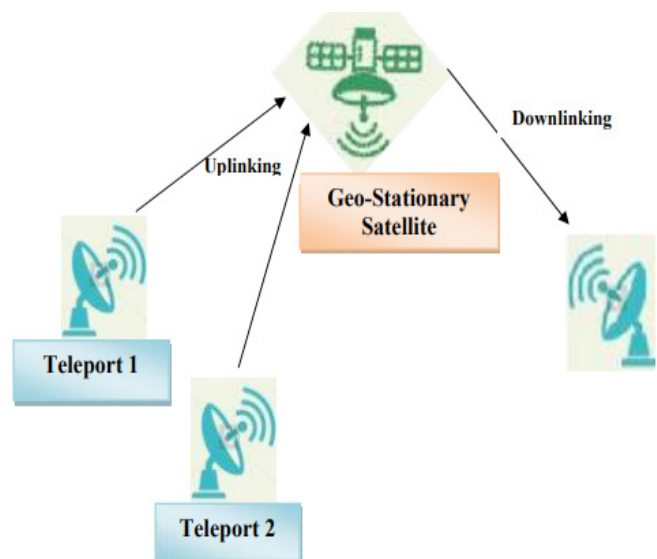
7. Centre drafts new rules for satellite TV channels

Context:

- The Information and Broadcasting Ministry has issued draft guidelines to overhaul its nine year-old uplink and downlink policy for private satellite TV channels.

Uplinking and downlinking

- In satellite TV broadcasting, signals of TV channels are transmitted from an earth station to the Geostationary Satellite (uplinking) located in the space.
 - The signals of TV channels are uplinked to satellite through a teleport.
- The signals are collected on earth by receiver using a dish antenna (downlinking).



The need for new guidelines

- According to I&B ministry, there was a need to review and amend the existing guidelines, as it was last issued by the ministry in 2011.
- This need was felt because of challenges emerging from
 - "fast evolving broadcasting technology"
 - "changes in the market scenarios"
 - Other operational developments in the broadcasting sector.

- * There was also a need for creating a conducive environment for ease of business on a “sound regulatory framework”.
- It has drafted the new guidelines after consulting with the stakeholders.

Security Clearance

- The new rules permit a company or Limited Liability Partnership (LLP) to launch a teleport, hub or uplink a channel.
- The clearance is granted by the Home Ministry.
- Once a channel is granted security clearance, it will be valid for 10 years, but can be revoked if the home ministry sees repeated violations

These violations include:

- “Delay or non-intimation to the Ministry about change in the shareholding pattern of the company”;
- “appointment of a Director without prior permission of the Ministry”;
- * “non-removal of a Director who has been denied security clearance”
- “Showing dual logo/logo or name not permitted by the Ministry”

Penalty

Any channel or teleport found uplinking content not adhering to the Programme and Advertising Code under the Cable TV Act, will be liable for penal action

- ranging from warning to be communicated to the channel,
- prohibition to broadcast up to 10 days
- to suspension or revocation of permission,

Live Telecasting

- As of now, the channels registered under the 'news' category can live-telecast events.
- * But the rest needs a written "temporary uplinking" permission from the ministry and local administration, even to telecast live events such as reality shows.
- According to the new draft, such non-news channels can live telecast an event (other than in the nature of news and current affairs) after registering itself online on 'Broadcast Seva, a ministry portal, at least five days before the event.
- * The Broadcast Seva (BS) Portal provides a single point facility to the various stakeholders and applicants to make their applications for various permission, registrations, licences, etc. issued by Ministry of Information and Broadcasting (MIB) for broadcast related activities
- * The decision as to whether or not the event being uplinked live is of the nature of news and current affairs will be of the central government, and shall be binding on the channel

Earlier they had to wait for days for a written permission. This is done away with.

- This would facilitate the live telecast of many sporting events, award functions, socio-religious and cultural programmes that are not qualified as news.

Concerns

- There are concerns about “too much reference to the Ministry of Home Affairs”. This leaves a lot of discretionary powers with the MHA.
- New directors in the company are from within the employees, and unless the MHA gives security clearance to the person, he or she cannot take up the job
 - * There are times when the security clearance process takes a long time.
- The draft guidelines are also quiet on the time to be taken by the government to issue a licence to a private satellite television channel, leaving the decision to the political dispensation of the day.
- The guidelines also specify that channels which do not remain operational for 60 days should inform the I&B ministry, along with reasons about why it has remained non-operational, failing which, it would receive a warning.
 - * In case the channel continues to be non-operational for over 90 days, it would invite suspension or cancellation of permission.

PRACTICE QUESTIONS

1. Which of the following statement/s is/are correct?

1. India is the largest producer of Saffron in the world.
2. Saffron cultivation in India is limited to only Jammu and Kashmir.
3. Kashmir saffron is the only saffron in the world grown at an altitude of 1,600 m to 1,800 m above mean sea level.

Options:

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

2. Which of the following statement/s is/are correct?

1. The Rebate of State and Central Taxes and Levies scheme is directed at incentivizing exports from India.
2. The Rebate of State and Central Taxes and Levies scheme is applicable for the export of garments and made-ups only.

Options:

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

3. Which of the following statement/s is/are correct with respect to the One Nation One Ration card scheme?

1. It is being implemented under the Ministry of Home affairs.
2. It is applicable throughout India.

Options:

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

4. Which of the following are the features of the Mahatma Gandhi National Rural Employment Guarantee Act scheme?:

1. Providing at least 150 days of wage employment in a financial year to willing adults in rural areas.
2. Only people from BPL households are eligible for benefit under the scheme.
3. Employment is to be provided within 5 km of an applicant's residence.

4. If work is not provided within 15 days of applying, applicants are entitled to an unemployment allowance.

5. Social Audit of MGNREGA works is mandatory.

Options:

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

5. Which of the following countries border Venezuela?

1. Colombia
2. Brazil
3. Ecuador
4. Suriname
5. Guyana
6. French Guiana
7. Panama

Options:

- A. 1, 2 and 5 only
- B. 3, 4, 5 and 7 only
- C. 1, 2 and 6 only
- D. 2, 5 and 7 only

6. Which of the following statement/s is/are correct?

1. The US Commission of International Religious Freedom (USCIRF) was created by the American International Religious Freedom Act of 1998.
2. The US Commission of International Religious Freedom (USCIRF) recommendations are binding on the U.S. administration.

Options:

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

7. Which of the following statement/s is/are correct?

1. The Indian diaspora comprises the largest share of the global migrant population.
2. The United Arab Emirates houses the largest number of Indian diaspora.
3. India is the largest recipient of inward remittances in the world.

Options:

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

8. Arrange the following tiger reserves from east to west?

- 1. Namdapha Tiger Reserve
- 2. Pakke Tiger Reserve
- 3. Manas Tiger Reserve
- 4. Buxa Tiger Reserve

Options:

- A. 1 - 2 - 3 - 4
- B. 2 - 1 - 3 - 4
- C. 4 - 3 - 2 - 1
- D. 1 - 2 - 4 - 3

9. Which of the following statement/s is/are correct?

- 1. The Suez Canal lies on the eastern part of the Sinai Peninsula.
 - 2. The Sinai Peninsula is bound by the Gulf of Suez on its eastern margin and by the Gulf of Aqba on its western margin.
- A. 1 only
 - B. 2 only
 - C. Both 1 and 2
 - D. Neither 1 nor 2

10. Which of the following Indian states share a border with Bangladesh?

- 1. West Bengal
- 2. Assam
- 3. Meghalaya
- 4. Tripura
- 5. Mizoram
- 6. Manipur

Options:

- A. 1, 2 and 3 only
- B. 1, 2, 3 and 4 only
- C. 1, 2, 3, 4 and 5 only
- D. 1, 2, 3, 4, 5 and 6

11. Which of the following statement/s is/are correct?

- 1. African Swine Fever is a hemorrhagic fever with high mortality rates in domestic pigs.
- 2. African Swine Fever does not cause disease in humans.
- 3. In April 2020, India reported the first African Swine Fever disease outbreak in the state of Assam and Arunachal Pradesh.

Options:

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

12. The Global Press Freedom Index is released by which of the following organizations?

- A. Amnesty International
- B. UNESCO
- C. Reporters without Borders
- D. United Nations Development Programme

13. Consider the following statements with respect to Sa-Dhan:

- 1. Sa-Dhan is an association of microfinance institutions (MFIs) recognized by the Reserve Bank of India (RBI).
- 2. It is the first association in the business of micro-lending to be given the self-regulatory organization (SRO) status by RBI.
- 3. Sa-Dhan is empowered to monitor MFIs and ensure the lenders are in compliance with the rules.

Choose the correct option:

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

14. Consider the following statements with respect to Rath Yatra:

- 1. The Puri Rath Yatra is also called the Gundicha Yatra.
- 2. Rath Yatra is included in the UNESCO's List of Intangible Cultural Heritage.

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

15. Consider the following statements:

1. The world's largest riverine island is on the Brahmaputra river.
2. The Brahmaputra river flows through the Kaziranga National Park (KNP).
3. Dibang and Lohit are Brahmaputra's left bank tributaries.

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

16. Consider the following statements:

1. INS Jalashwa is an amphibious transport dock indigenously developed by the Indian Navy.
2. It is the largest combat warship in the Indian Navy.
3. It can be used to operate vertical take-off and landing (VTOL) aircraft.

Which of the given statement/s is/are incorrect?

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

17. Consider the following statements with respect to Qutb Minar:

1. It is named after Qutub-ud-din-Aibak who laid the foundation of the monument.
2. It was completed by Firoz Shah Tughlaq.
3. It is a UNESCO World Heritage site.

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

18. Consider the following statements:

1. Operation Samudra Setu: INS Sunayna
2. Operation Vanilla: INS Airavat
3. Operation Nistar: INS Jalashwa

Which of the given pairs are correctly matched?

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

19. Consider the following statements:

1. A geosynchronous orbit synchronizes with the rotation of the Earth at any inclination.
2. Geostationary orbit lies on the same plane as the equator.
3. Geosynchronous satellites are particularly useful for telecommunications and remote sensing applications.

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

20. Consider the following statements:

1. Milan is the bilateral military exercise conducted between India and Maldives.
2. Recently, Operation Sanjeevani was conducted by the Indian Navy, delivering essential medicines to Maldives.
3. India is the largest trade partner of Maldives.

Which of the given statement/s is/are incorrect?

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

21. Consider the following statements:

1. Plasma makes up more than 55% of blood in the human body.
2. Plasma carries hormones, nutrients and proteins to different parts of the body.
3. Plasma lacks clotting factor.

Which of the following statement/s is/are incorrect?

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

22. Primary Deficit is:

- A. The surplus of Revenue Expenditure over Revenue Receipts.
- B. Fiscal Deficit net of Interest Payment.
- C. The excess of total expenditure over total receipts excluding borrowings.
- D. None of the above.

23. Consider the following statements with respect to Classical Swine Fever:

1. It is a contagious viral disease of domestic and wild pigs.
2. It is caused by the H1N1 virus strain.
3. The disease does not harm humans.

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

24. Consider the following statements with respect to National Health Authority (NHA):

1. National Health Authority is the apex body responsible for implementing Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY).
2. It is the successor of the National Health Agency.
3. It is governed by a Governing Board chaired by the Prime Minister.

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

25. Consider the following statements with respect to Luhman 16:

1. Luhman 16 is a binary star system.
2. It is a brown-dwarf system in the southern constellation Vela.
3. It is the second closest system to the Sun after Alpha Centauri.

Which of the given statement/s is/are correct?

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

26. Consider the following statements with respect to Sundarbans in India:

1. Indian Sundarbans was accorded the status of 'Wetland of International Importance' under the Ramsar Convention in 1992.
2. It is the 27th Ramsar Site in India.
3. It is a UNESCO world heritage site.

Which of the given statement/s is/are correct?

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

27. Consider the following statements regarding the Marginal Cost of Funds based Lending Rate (MCLR):

1. MCLR is the minimum lending rate below which a bank is not permitted to lend, except in some cases allowed by the RBI.
2. MCLR is an internal benchmark or reference rate for the bank.
3. MCLR replaced the base rate system.

Which of the given statement/s is/are correct?

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

28. Consider the following statements with respect to Styrene:

1. It is an organic compound and is produced naturally in some plants.
2. It is used in the manufacture of rubber and latex.
3. Short-term exposure to Styrene can result in respiratory problems.

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

29. Which of the following countries are not members of the Gulf Cooperation Council?

1. Oman
2. Yemen
3. UAE
4. Iraq
5. Saudi Arabia
6. Bahrain
7. Jordan
8. Qatar

Options:

- A. 1,3,5,6 and 8 only
- B. 1,2,3,5 and 6 only
- C. 2,4 and 7 only
- D. 2,4,7 and 8 only

30. Which of the following pair is wrongly matched?

- A. Lopinavir-ritonavir: HIV
- B. Ribavirin: hepatitis C virus
- C. Interferon beta-1b: Sclerosis
- D. BCG: Polio

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

31. Which of the following statement/s is/are correct?

1. Schedule 10 of the Indian Constitution deals with Anti-defection provisions.
2. The 52nd amendment in 1985 added the tenth schedule of the Indian Constitution.
3. The 91st amendment in 2003 strengthened the anti-defection provisions in India by prescribing disqualification of defectors and barring them from being appointed as ministers for a period.

Options:

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

32. The Patriot Missile system has been developed by which of the following country?

- A. United States of America
- B. Russia
- C. Israel
- D. China

33. Which of the following statement/s is/are correct?

1. The Sal forest tortoise is widely distributed over eastern and northern India and Southeast Asia.
2. Sal forest tortoise has been recently assessed as critically endangered.

Options:

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

34. Which of the following statement/s is/are correct with respect to Environment Impact Assessment (EIA)?

1. EIA comes under the provisions of Environment (Protection) Act, 1986.
2. EIA is compulsory for all industrial projects.
3. The environmental clearance for development projects based on EIA is given only by the Central government.

Options:

35. The places Kalapani and Susta are often in news with respect to which of the following countries?

- A. Bangladesh
- B. Bhutan
- C. Nepal
- D. Myanmar

36. Which of the following statement/s is/are correct?

1. 2016 is the warmest year on record for Earth.
2. Apart from the earth's warming trend, the global temperatures in 2016 were majorly influenced by strong El Nino conditions that prevailed at the beginning of 2016.

Options:

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

37. Which of the following statement/s is/are correct with respect to Pangong Tso lake?

1. It lies in the western Ladakh region of India.
2. It is the origin for the Shyok river.

Options:

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

38. Which of the following statement/s is/are correct?

1. ELISA is a commonly used analytical biochemistry assay.
2. ELISA has been used in HIV diagnosis.
3. ELISA finds application in the food industry.

Options:

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

39. Which of the following pairs is incorrectly matched?

- A. Halakki: Karnataka
- B. Cholanakkans: Telangana
- C. Todas: Tamil Nadu
- D. Chenchu: Andhra Pradesh

40. Which of the following statement/s is/are correct?

- 1. League of Nations was formed in the aftermath of World War I.
- 2. It was headquartered at Geneva.

Options:

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

41. Consider the following statements:

- 1. Article 23 of the Indian Constitution provides for the right against forced labour.
- 2. Article 42 of the Indian Constitution that deals with ensuring just human conditions of work is legally enforceable by law.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

42. Consider the following statements with respect to Rajya Sabha:

- 1. It is a permanent body.
- 2. Rajya Sabha came into being in 1952.
- 3. Dr.Sarvepalli Radhakrishnan was the first Chairman of the Rajya Sabha.
- 4. A no-confidence motion against the Union Government can be initiated only in the Rajya Sabha.

Which of the given statement/s is/are incorrect?

- A. 1 and 4 only
- B. 2 and 3 only
- C. 4 only
- D. 1 and 3 only

43. Which of the following pairs are correctly matched?

- 1. Nathu la – Sikkim
- 2. Lipulekh Pass – Himachal Pradesh

3. Jelep la – Arunachal Pradesh

Options:

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

44. Consider the following statements with respect to “Kalapani region”:

- 1. It is manned by the Indo-Tibetan Border Police (ITBP).
- 2. River Mahakali flows through the region.
- 3. China has ongoing claims to the Kalapani territory.

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

45. Arrange the following from North to South:

- 1. Tso Kar
- 2. Tso Moriri
- 3. Kiagar Tso
- 4. Pangong Tso

Choose the correct option:

- A. 4, 1, 3, 2
- B. 4, 3, 1, 2
- C. 1, 2, 3, 4
- D. 2, 3, 1, 4

46. Consider the following statements with respect to Global Nutrition Survey:

- 1. Global Nutrition Survey is published by the World Health Organisation.
- 2. It assesses progress in meeting Global Nutrition Targets established by the World Health Assembly.
- 3. The first Global Nutrition Survey was published in 1949.

Which of the given statement/s is/are incorrect?

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

47. Consider the following statements:

1. The joint sitting of the Parliament is called and presided over by the Rajya Sabha Chairman.
2. The Parliament of India has never held Joint Sittings.
3. Constitution Amendment Bill and Money Bill cannot be referred to a joint sitting of the Parliament.

Which of the given statement/s is/are correct?

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

48. Consider the following statements:

1. India shares the longest border with China, followed by Bangladesh.
2. Line of Actual Control (LAC) runs from the eastern limit of Bhutan to a point near the Talu Pass.
3. Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh touch the Indian boundary with China.

Which of the given statement/s is/are correct?

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

49. Which of the following is/are correctly matched?

1. Sohrai Khovar painting – Telangana
2. Telia Ruma – Jharkhand
3. Devanahalli Pomelo – Karnataka

Options:

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

50. Which of the following Indian states share a border with Nepal?

1. Bihar
2. Uttar Pradesh
3. Uttarakhand
4. West Bengal
5. Sikkim

Options:

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

51. Consider the following statements with respect to PM CARES Fund:

1. Prime Minister is the ex-officio Chairman of the PM CARES Fund.
2. Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.
3. The fund consists entirely of voluntary contributions from individuals or organizations and does not get any budgetary support.
4. It is exempt from the Foreign Contribution (Regulation) Act, 2010.

Which of the given statement/s is/are correct?

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

52. Consider the following statements with respect to Polavaram Project:

1. Polavaram Project is a multi-purpose irrigation project across the Godavari River.
2. It was accorded national status in 2014.
3. Its reservoir backwater spreads into parts of Chhattisgarh and Odisha.

Which of the given statement/s is/are incorrect?

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

53. "Shishu", "Kishor", "Tarun" categories are associated with which of the following schemes?

- A. Pradhan Mantri MUDRA Yojana (PMMY)
- B. Janani Shishu Suraksha Karyakram (JSSK)
- C. Rashtriya Bal Swasthya Karyakram (RBSK)
- D. Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

54. Consider the following statements:

1. DNA and RNA are both nucleic acids.
2. While DNA is a double-stranded molecule consisting of a long chain of nucleotides, RNA is a single-strand helix having shorter chains of nucleotides.
3. Both DNA and RNA contain Adenine, Guanine and Cytosine.

Which of the given statement/s is/are incorrect?

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

55. Consider the following statements:

1. Pangong Tso is a salt water lake in the Himalayas.
2. It is the first trans-boundary wetland in South Asia, identified as a wetland of international importance under the Ramsar Convention.

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

56. Consider the following statements:

1. Reverse Transcription is the process in cells by which an enzyme makes a copy of DNA from RNA.
2. Reverse Transcriptase is found in HIV retrovirus.
3. Reverse transcription polymerase chain reaction (RT-PCR) is a laboratory technique used to make many copies of specific genetic sequence for analysis.

Which of the given statement/s is/are correct?

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

57. Which of the following would qualify as advantages of Contract farming?

1. Farmers can have improved access to technology, credit, marketing channels and information.
2. Farmers can have an assured market for their produce.
3. It reduces the risk of price fluctuations for both the seller and the buyer.
4. It ensures a consistent supply of agricultural produce with quality, at the right time and lesser cost for the buyers.

Options:

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

58. Which of the following statement/s is/are correct?

1. NABARD was established on the recommendations of B.Sivaramman Committee.
2. NABARD is a statutory body.
3. The Government of India and Reserve Bank of India hold equal shares in NABARD.

Options:

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

59. Which of the following factors affect Monsoon arrival in India?

1. Western Disturbances
2. Cyclones in the Bay of Bengal
3. Summer temperatures over North India
4. Jet streams
5. Cross-equatorial flow of winds

Options:

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

60. The Ship 'Sachet' recently inducted into service is a:

- A. Offshore patrol vessel of the Indian Coast Guard
- B. Interceptor boats of the Indian Coast Guard
- C. Frigate of the Indian Navy
- D. Guided Missile destroyer of the Indian Navy

61. Which of the following statement/s is/are correct?

1. The Department of Military Affairs is headed by the Chief of the Defence Staff.
2. The Defence Planning Committee is headed by the National Security Adviser (NSA).

Options:

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

62. Which of the following country is not part of the RCEP negotiations?

- A. Australia
- B. Japan
- C. US
- D. South Korea

63. Which of the following statement/s is/are correct with respect to India's Intended Nationally Determined Contribution (INDC)?

- 1. India aims to reduce its emission intensity by 33-35% by 2030 below 2015 levels.
- 2. India aims to have an installed renewable energy capacity of 175 GW by 2030.

Options:

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

64. Which of the following statement/s is/are correct?

- 1. The Commonwealth of Nations was formally constituted by the London Declaration in 1949.
- 2. India is not a member country of the Commonwealth of Nations.

Options:

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

65. Which of the following statements is/are correct with respect to the National Legal Services Authority of India (NALSA)?

- 1. It is a statutory body.
- 2. It organizes the Lok Adalats for speedy resolution of cases.
- 3. The Chief Justice of India is the executive Chairman of NALSA.

Options:

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

66. Which of the following are the advantages of the Direct Seeding of Rice (DSR) technology being propounded in Punjab?

- 1. Less time consuming
- 2. Less labour intensive
- 3. Lesser weed problem
- 4. Lesser water requirements
- 5. Crops mature earlier
- 6. Aids groundwater recharge

Options:

- A. 1, 2 and 4 only
- B. 1, 2 and 3 only
- C. 1, 2, 5 and 6 only
- D. 1, 2, 3, 4, 5 and 6

67. The severe cyclonic storm 'AMPHAN' is associated with which of the following regions?

- A. East coast of India
- B. West coast of India
- C. South east Asia
- D. West Asian region

68. The National Executive Committee (NEC) of the National Disaster Management Authority (NDMA) is chaired by

- A. Union Home Minister
- B. Prime Minister
- C. Union Home Secretary
- D. Cabinet Secretary

69. Consider the following statements with respect to River Galwan:

- 1. The River flows through India and Pakistan.
- 2. It is a tributary of River Shyok.

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

70. Consider the following statements:

- 1. Saharias of Madhya Pradesh are classified as Particularly Vulnerable Tribal Groups (PVTGs).
- 2. The highest number of PVTGs is found in Madhya Pradesh.
- 3. Some of the PVTGs are distributed in more than one State.

Which of the given statement/s is/are incorrect?

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

71. Consider the following statements with respect to National Board for Wildlife (NBWL):

1. NBWL is a statutory organization constituted under the Wildlife Protection Act, 1972 with an advisory role.
2. No alternation of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.
3. The NBWL is chaired by the Environment Minister.

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

72. Cyclone Amphan is named by:

- A. India
- B. Thailand
- C. Bangladesh
- D. Oman

73. Consider the following statements:

1. More cyclones are formed in the Bay of Bengal than in the Arabian Sea.
2. Tropical cyclones are characterised by a low-pressure centre.
3. The most dangerous and destructive part of a tropical cyclone is the eyewall.

Which of the given statement/s is/are correct?

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

74. 'Cerberus' recently seen in news is a:

- A. Trojan
- B. Ransomware
- C. Denial of service malware
- D. Worm

75. Consider the following statements with respect to Olive Ridley Turtle:

1. They are classified as vulnerable in the IUCN Red List.
2. They are classified under Schedule 1 in the Wildlife Protection Act, 1972.
3. Hope Island of Coringa Wildlife Sanctuary in Andhra Pradesh is one of the major breeding grounds for these turtles.

Which of the given statement/s is/are incorrect?

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

76. Consider the following pairs:

1. Hatiya Island : Bangladesh
2. Sagar Island: India
3. Bhashan Char Island : Myanmar

Which of these is/are correctly matched?

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

77. 'Kunduz', frequently seen in the news, is in which country?

- A. Israel
- B. Iran
- C. Afghanistan
- D. Kyrgyzstan

78. Consider the following statements with respect to "Horn of Africa":

1. Djibouti, Eritrea, Ethiopia and Somalia form the Horn of Africa.
2. It lies along the southern side of the Red Sea.
3. Horn of Africa extends into the Gulf of Aden, Somali Sea.

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

79. Consider the following statements with respect to River Luni:

1. River Luni originates in the Pushkar valley of the Aravalli Range.
2. The Dantiwada dam and Sipu dam are built on the Luni River.
3. Jojari is its only right-bank tributary.

Which of the given statement/s is/are correct?

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

80. Consider the following pairs:

1. Durand Line: Afghanistan – India
2. Radcliffe Line: Afghanistan – Pakistan
3. Line of Control: India – Pakistan
4. Line of Actual Control: India – China

Which of the given pairs are correctly matched?

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

81. Consider the following statements:

1. India is the largest producer of coffee in the world.
2. India exports both Robusta and Arabica varieties of coffee.
3. India is the only country in the world where the entire coffee cultivation is grown under shade, hand-picked and sun dried.

Which of the given statement/s is/are correct?

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

82. "Operation Juniper" refers to:

- A. Operation launched to repatriate Indian citizens stranded in Maldives in the backdrop of the COVID-19 pandemic.
- B. Operation launched by Indian Navy to help cyclone-hit Madagascar.
- C. Operation launched by Indian Army to stop Chinese from constructing a road in Doklam that would have given them access to Indian Territory.
- D. Operation launched by India to assist the victims of the 2018 Sulawesi earthquake and tsunami in Indonesia.

83. Consider the following statements:

1. Sonic boom is a continuous sound which is emitted by the aircraft all the while it is travelling at a supersonic speed.
2. A sonic boom is said to occur when an object travels through the air faster than the speed of sound and creates shock waves.

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

84. Consider the following statements:

1. Central Bureau of Narcotics (CBN) issues statutory licences to cultivate opium.
2. India is the only country which legally produces opium gum.
3. India is a signatory to the UN Convention on Narcotic Drugs 1961.

Which of the given statement/s is/are correct?

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

85. The Treaty of Sugauli of 1816 was signed between the East India Company and which other of the following?

- A. Marathas
- B. Kingdom of Nepal
- C. Rajputs
- D. Kingdom of Myanmar

86. Which of the following health conditions are considered under Metabolic syndrome?

1. High blood pressure
2. Abdominal obesity
3. Elevated triglycerides
4. Low HDL cholesterol
5. High blood sugar

Options:

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

87. Which of the following statement/s is/are correct with respect to the Open skies Treaty?

1. It is a treaty involving only Russia and the U.S.
2. It envisages the right to freedom of passage of domestic flights over each other's territories without prior approval.

Options:

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

88. The term Dongfeng-41 is associated with:

- A. Nuclear submarine
- B. Intercontinental ballistic missile
- C. Aircraft carrier
- D. Heavy lift cryogenic engine

89. Arrange the following cities from east to west?

1. Beijing
2. Xian
3. Urumqi
4. Kuala Lumpur
5. Hanoi

Options:

- A. 1-2-5-4-3
- B. 1-5-2-3-4
- C. 1-2-5-3-4
- D. 1-4-5-2-3

90. Which of the following statement/s is/are correct?

1. Acute Encephalitis Syndrome is always a viral infection.
2. Japanese Encephalitis has no available vaccine.

Options:

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

91. Arrange the following places from North to south?

1. Pangong Tso
2. Galwan Nalah
3. Demchok

Options:

- A. 1-2-3
- B. 1-3-2
- C. 2-1-3
- D. 2-3-1

92. Which of the following statement/s is/are correct?

1. Brazil shares its borders with 6 other countries.
2. Brazil is the largest country in South America both area-wise and population-wise.

Options:

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

93. Which of the following statement/s is/are correct?

1. Somalia shares its land borders with two countries.
2. Somalia is bound by the Gulf of Aden to the north.

Options:

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

94. The Dehing Patkai Elephant Reserve is located in which of the following states?

- A. Assam
- B. West Bengal
- C. Meghalaya
- D. Manipur

95. Which of the following statement/s is/are correct?

1. The Nallamalla Hills are spread over the states of Telangana and Andhra Pradesh.
2. The Nallamalla hills run in a nearly north-south alignment, parallel to the Coromandel Coast between the rivers, Krishna and Pennar.

Options:

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

96. Which of the following statement/s is/are incorrect?

1. The Jama Masjid in Delhi was built by the Mughal Emperor Akbar.
2. The Badshahi Masjid in Lahore was built by the Mughal Emperor Shah Jahan.

Options:

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

97. Consider the following statements with respect to Purandara Dasa:

1. He is a contemporary of Kanakadasa.
2. Kaginele AdiKeshava was his pen name.
3. He is known as the "Pitamaha of Carnatic Music".

Which of the given statement/s is/are correct?

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

98. Consider the following statements with respect to National Disaster Response Fund (NDRF):

1. It comes under the Public Accounts of the Government of India under "Reserve Funds not bearing interest".
2. National Calamity Contingency Fund (NCCF) was renamed as National Disaster Response Fund (NDRF) with the enactment of the Disaster Management Act.
3. A National Calamity Contingency Duty is levied to finance the NDRF.

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

99. Consider the following statements with respect to International Labour Organisation:

1. It was established by the Treaty of Versailles in 1919.
2. It is the only tripartite U.N. agency.
3. It received the Nobel Peace Prize in 1969.
4. India is a founding member of the ILO and also a permanent member of the ILO Governing Body since 1922.

Which of the given statement/s is/are correct?

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

100. Which of the following countries form the Quadrilateral Security Dialogue (QSD) or Quad?

1. United States
2. China
3. Japan
4. Russia
5. Australia
6. India

Choose the correct option:

- A. 1, 3, 5 and 6 only
- B. 1, 3, 4 and 5 only
- C. 2, 4, 5 and 6 only
- D. 1, 4, 5 and 6 only

101. Consider the following statements with respect to Financial Stability and Development Council:

1. It is chaired by the RBI Governor.
2. The heads of RBI, SEBI, Pension Fund Regulatory and Development Authority (PFRDA), IRDA & FMC are its members.
3. No funds are separately allocated to the Council for undertaking its activities.

Which of the given statement/s is/are incorrect?

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

102. Which of the following Locusts are found in India?

1. Desert Locust
2. Migratory Locust
3. Bombay Locust
4. Tree Locust
5. Red Locust
6. Brown Locust

Choose the correct option:

- A. 1, 3, 4 and 5 only
- B. 1, 2, 3 and 4 only
- C. 2, 3, 4, 5 and 6 only
- D. 1, 2, 3, 4, 5, 6

103. Which of the following is/are the recommendation/s of Shekatkar Committee?

1. Creation of the post of the Chief of Defence Staff (CDS).
2. The Government Owned Contractor Operated (GOCO) model for its base workshops and ordnance depots.
3. India's defence budget should be in the range of 2.5 to 3 per cent of the GDP.

Choose the correct option:

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

104. "Bug Bounty" programme has been launched by the government to:

- A. Kill and contain the locust swarm upsurge
- B. Find vulnerability in the AarogyaSetu app or suggest improvements to its source code
- C. Protect the computers at the Kundankulam Nuclear Power Plant (KKNPP) from malwares
- D. Keep a check on cyber-threats in India during the COVID-19 pandemic

105. Consider the following statements:

1. Fifth Schedule of the Constitution deals with the administration and control of Scheduled Areas as well as of Scheduled Tribes residing in the States of Assam, Meghalaya, Tripura and Mizoram.
2. The power to decide whether any central or state legislation implies over the state having scheduled areas, lies in the hands of the Governor.
3. Governor can also repeal or amend any regulations w.r.t to the state having scheduled areas but only with the assent of the President of India.

Which of the given statement/s is/are incorrect?

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

106. Consider the following statements with respect to Dibru-Saikhowa National Park:

1. It was designated a Biosphere Reserve in 2019.
2. It is bound by the Brahmaputra and Lohit Rivers in the North.
3. The National Park is located in Arunachal Pradesh.

Which of the given statement/s is/are correct?

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

107. Consider the following statements w.r.t LCA Tejas:

1. It is an indigenous aircraft designed by the Aeronautical Development Agency (ADA) and being produced by the Hindustan Aeronautics Limited (HAL).
2. It is the smallest and lightest Multi-Role Supersonic Fighter Aircraft of its class.
3. It can carry a range of air-to-air, air-to-surface, precision-guided and standoff weaponry.

Which of the given statement/s is/are correct?

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

108. Consider the following statements:

1. Focus on reducing maternal, newborn and child mortality is covered under Sustainable Development Goal 3.
2. Reproductive, Maternal, Newborn Child plus Adolescent Health (RMNCH+A) was launched by India for reducing maternal and child morbidity and mortality.
3. India's National Health Policy Target is to reduce Under 5 Mortality Rate to 16 deaths per 1000 live births by 2025.

Which of the given statement/s is/are correct?

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

109. Bimal Jalan panel was appointed-

- A. To look into the faster resolution of stressed assets
- B. To review the Regulatory and Supervisory Framework for Core Investment Companies (CICs)
- C. For strengthening digital payments ecosystem
- D. To review the Economic Capital Framework of the Central Bank

110. Consider the following statements about Indian Rhinoceros:

1. Its IUCN status is Critically Endangered.

2. India has two populations containing more than 100 rhinos in Kaziranga National Park and Chitwan National Park (CNP) in Assam.

Which of the above statement/s is/are correct?

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

111. With reference to FDI investments in India, which of following statement/s is/are incorrect?

- 1. Foreign direct investment (FDI) in India grew by 13% in the 2019-20 financial year.
- 2. Singapore is the top source nation in FY20.
- 3. The sectors which attracted maximum foreign inflows during 2019-20 include first computer software and hardware, followed by telecommunications, and then services.

Options:

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

112. Which of the following is/are correctly matched with respect to location of the passes?

- 1. Zoji La –Ladakh
- 2. Nathu La – Sikkim
- 3. Bomdi La –Arunachal Pradesh

Options:

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

113. Which of the following statement/s is/are correct?

- 1. Dredging activity is a routine necessity in waterways for movement of ships and boats.
- 2. Dredging is also performed to reduce the exposure of fish, wildlife, and people to contaminants.

Options:

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

114. The term “D10” club is associated with which of the following?

- A. The group of countries working towards demilitarization of the Kurds inhabited region in West Asia.
- B. The non-governmental grouping from 10 countries aiming to ensure that the Paris climate deal terms are successfully implemented.
- C. The group of countries working towards ensuring the speedy development of COVID-19 vaccine.
- D. A group of 10 democratic countries for partnership on 5G technology

115. The central government’s ‘Swamitva yojana’ deals with:

- A. Empowering Panchayats
- B. Rural land ownership records
- C. Skill development programme
- D. Refinancing MSMEs

116. Which of the following statement/s is/are incorrect with respect to the National Career Service project?

- 1. It is a project under the Ministry of Electronics.
- 2. It involves revamping the existing nation-wide set-up of Employment Exchanges into IT-enabled Career Centers.

Options:

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

117. Which of the following statement/s is/are correct?

- 1. The State Election Commissioner is appointed by the Governor.
- 2. The conditions of service and tenure of office of the State Election Commissioner shall be such as the Governor may determine.
- 3. The State Election Commissioner shall not be removed from his office except in like manner and on the like ground as a Judge of a High Court.

Options:

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

118. Which of the following statement/s is/are correct?

1. The decision of the Central Information Commission can be challenged in the Supreme Court.
2. The Central Information Commission shall consist of the Chief Information Commissioner and not more than 2 Central Information Commissioners.
3. Chief Information Commissioner shall hold office for a term of three years and shall not be eligible for reappointment.

Options:

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

119. Which of the following pairs of glacier and the state/UT is wrongly matched?

- A. Lonak glacier: Ladakh
- B. Kangto glacier: Arunachal Pradesh
- C. Zemu glacier: Sikkim
- D. Pindari glacier: Uttarakhand

120. Arrange the following battles fought by the British in chronological order:

1. First Anglo-Mysore battle
2. First Anglo-Maratha battle
3. First Anglo-Afghan battle
4. Anglo-Nepalese war

Options:

- A. 1, 2, 4, 3
- B. 1, 2, 3, 4
- C. 2, 1, 3, 4
- D. 2, 1, 4, 3

ANSWER KEYS

1	C
2	C
3	D
4	C
5	A
6	A
7	C
8	A
9	D
10	C
11	C
12	C
13	A
14	A
15	D
16	D
17	B
18	C
19	D
20	C

21	B
22	B
23	D
24	C
25	A
26	B
27	D
28	D
29	C
30	D
31	C
32	A
33	C
34	A
35	C
36	C
37	D
38	C
39	B
40	C

41	A
42	C
43	D
44	B
45	A
46	A
47	C
48	D
49	C
50	D
51	A
52	D
53	A
54	D
55	B
56	C
57	D
58	C
59	B
60	A

61	C
62	C
63	D
64	A
65	A
66	D
67	A
68	C
69	B
70	C
71	B
72	B
73	D
74	A
75	D
76	A
77	C
78	D
79	C
80	A

81	A
82	C
83	D
84	C
85	B
86	C
87	D
88	B
89	A
90	D
91	C
92	B
93	B
94	A
95	C
96	C
97	C
98	C
99	D
100	A

101	A
102	B
103	D
104	B
105	A
106	B
107	D
108	A
109	D
110	D
111	C
112	C
113	C
114	D
115	B
116	A
117	C
118	D
119	A
120	A

MAINS PRACTICE QUESTIONS

1. Discuss the major provisions of the Mahatma Gandhi National Rural Employment Guarantee (MGNREGA) scheme. Analyze the significance of the scheme in the Indian context and the implementation concerns associated with the scheme. (15 marks, 250 words)
2. Discuss the framework of the Geographical Indication (GI) system and analyze the significance of such a system. (10 marks, 150 words)
3. In the light of the current COVID-19 pandemic, discuss the concerns associated with India's Diaspora and its effect on India. Suggest both short and long term measures necessary in this regard. (10 marks, 150 words)
4. Compare and contrast the RT-PCR testing method and the antibody testing method. Discuss the need to use both methods in a complementary manner. (10 marks, 150 words)
5. The so-called "silent epidemics", despite their high impact on health status, receive very low attention. Analyze the reasons for such a scenario and discuss the concerns associated with such an approach in the light of the COVID-19 crisis. (15 marks, 250 words)
6. Discuss the contributions of the member nations of BRICS in the fight against the COVID-19 pandemic and the potential of a co-ordinated effort among the BRICS member nations. (10 marks, 150 words)
7. The possibility that the implementational effect of a scheme may diverge hugely from the intended purpose of the scheme should necessitate the need for timely evaluations and corrections. Examine the statement with respect to the governmental schemes in general and the Members of Parliament Local Area Development Scheme in particular. (15 marks, 250 words)
8. Discuss the significance of the Food Corporation of India (FCI) and the concerns associated with its functioning. Suggest necessary changes in the functioning of the FCI to make it effective and relevant in the current context. (15 marks, 250 words)
9. Given the many benefits of a virtual judiciary system, there is a need to adopt such a system at least in specific areas like tax and revenue related cases. Comment. (10 marks, 150 words)
10. The COVID-19 pandemic, by drastically affecting economies and lives, has challenged the very tenets of economics that have dominated public policy in the recent past and has necessitated the need for structural shifts and redesign of economies, businesses and lives. Comment. (15 marks, 250 words)
11. The Economic Crisis due to the COVID-19 pandemic has drawn attention to the role of the government. Discuss the issues faced by the Government of India while designing a stimulus package and suggest the way forward. (15 Marks, 250 Words).
12. In the present crisis brought out by the pandemic, India is uniquely positioned to help resuscitate multilateralism. Discuss how the COVID-19 crisis provides an opportunity for India to assume leadership in strengthening constructive transnational cooperation. (15 Marks, 250 Words).
13. What are the provisions and laws in India that deal with the storage of hazardous chemicals in plants? Does the leakage of styrene in a manufacturing unit in Vishakhapatnam highlight the need for better framework to address Chemical Disaster risks? Analyse. (15 Marks, 250 Words).
14. Discuss the steps taken by India for management of its water resources in response to the challenges posed by climate change. Suggest measures for sustainable water resource planning. (15 Marks, 250 Words).
15. The China-U.S contention has opened up opportunities and space for other powers. Examine the opportunities this geo-political scenario opens up for India. (15 Marks, 250 Words).
16. Discuss the implications of practises such as Female Genital Mutilation (FGM) on human rights and dignity of women. Why and how should such practices be prevented? (15 Marks. 250 Words).
17. Discuss the significance of the Environment Impact Assessment (EIA) process in the Indian context. Also discuss the concerns associated with it. (10 marks, 150 words)

18. In the light of the new guidelines issued by the Bureau of Police Research and Development (BPRD) with respect to fake news and videos, discuss the threat posed by Fake news and videos and analyze the steps needed to address this grave challenge. (10 marks, 150 words)
19. In the light of the Supreme Court issuing directions for the virtual functioning of courts during the lockdown, discuss the challenges to the adoption of the e-court system in the Indian context. Suggest suitable measures to ensure the access to judiciary in the post lockdown phase. (15 marks, 250 words)
20. The COVID-19 pandemic will only hasten and deepen the recent geopolitical trend lines in international relations. Comment. (15 marks, 250 words)
21. In the light of several state governments altering labour laws, discuss the concerns associated with such a move. Also examine the rationale for such changes and the necessary safeguards in place. (15 marks, 250 words)
22. Discuss the significance of the Rajya Sabha as a second house of the Indian Parliament. (10 marks, 150 words)
23. In the light of the Central Government issuing guidelines to the state governments over the management of the COVID-19 pandemic under the Disaster management Act, there have been concerns raised over the undermining of the federalism principle. Examine. (10 marks, 150 words)
24. Evaluate and compare the centralized approach and state-led efforts in the handling of the COVID-19 pandemic in India. Suggest a suitable way forward for a more effective response. (15 marks, 250 words)
25. Discuss the reasons for the current precarious condition of the state finances and the concerns associated with it. Suggest suitable measures to reduce the fiscal pressures on the states. (10 marks, 150 words)
26. Suspending the labour laws in the name of boosting economic activity will create a fertile ground for the exploitation of the working class. Critically comment. (15 Marks, 250 words).
27. Limited career progress for IRS officers has reignited the debate on the generalist versus the specialist. Discuss if India's civil services need a revamp. (15 Marks, 250 Words)
28. What is "One Nation, One Ration Card" scheme? Discuss the benefits emanating from the scheme and associated challenges. (15 Marks, 250 Words).
29. Discuss the role of UN-ESCAP and cooperation among the countries in the Asia-Pacific region in mitigating the risks posed by unsustainable resource management and diminished biodiversity in the seas of the region. (15 Marks, 250 Words)
30. In the light of the recent Supreme Court judgment with respect to the NEET exam, evaluate the advantages and concerns associated with a uniform entrance examination like NEET. (15 marks, 250 words)
31. Discuss the provisions of Article 30 of the Indian Constitution. Analyze the arguments both in favour of more autonomy of the Minority institutes as well as the need for regulation of such institutes. (10 marks, 150 words)
32. Apart from immediate support and relief in the form of cash transfers, loan waivers, and compensation for unsold produce, long-term investments and reforms in the agricultural sector are extremely important. Analyze this statement in the context of the provisions for the agricultural sector under the Atmanirbhar Bharat Abhiyan. (15 marks, 250 words)
33. The recently unveiled policy changes in the defence sector and Mineral sector under the Atmanirbhar Bharat Abhiyan hold immense potential in helping revive India's economy. Comment. (10 marks, 150 words)
34. In the light of the farm sector reforms announced under the Atmanirbhar Bharat package, discuss the significance of the reforms and the possible concerns due to the changes proposed. (15 marks, 250 words)
35. Under compulsion of reviving the economy, the state governments are amending and relaxing labour laws. Analyze the government's arguments for the changes being made and also the concerns expressed by the stakeholders. (10 marks, 150 words)
36. In the light of the health sector not receiving much attention under the Atmanirbhar Bharat Abhiyan stimulus package, discuss the challenges in the Indian health sector and suggest suitable measures to mitigate the risks involved. (15 marks, 250 words)

37. Analyze the reasons for the increasing financial vulnerability of the DISCOMs and evaluate the likely impact of the proposed reforms in the Electricity Act 2020. (15 marks, 250 words)
38. The Atmanirbhar Bharat Abhiyan stimulus package focuses more on supply side provisions than on demand side provisions. Comment. (10 marks, 150 words)
39. The Pakistani state's deliberate policy of creating and fostering terrorist groups in order to engage in low intensity warfare with its neighbours has also created big concerns for itself. Comment. Also evaluate the global risks of such a policy. (15 marks, 250 words)
40. Given the Pakistani establishment's doctrine of bleeding India with a thousand cuts by using insurgents and waging a covert war against India, analyze what should be India's response to effectively counter this threat. (15 marks, 250 words)
41. Discuss the key initiatives and measures taken by the Government to make India self-reliant in the defence sector. (10 Marks, 150 Words)
42. Strict implementation of guidelines with greater flexibility, adaptability and resilience will be key to ensure effectiveness of the next-generation workforce. Elaborate. (10 Marks, 150 Words)
43. Discuss in detail the key areas of dispute between India and China. What are the existing mechanisms to control the face-off? How should the Asian powers amicably settle the border dispute? (15 Marks, 250 Words)
44. What is a Tropical Cyclone? Explain how it is formed and the favourable conditions required. Discuss the strategies to mitigate the effects of tropical cyclones. (15 Marks, 250 Words)
45. Monetary policy incentives should be complemented with Fiscal stimulus. Discuss in the light of RBI's move to reduce the Repo rate by 40 bps to tackle the economic fallout due to Covid-19 Pandemic. (10 Marks, 150 Words)
46. Central bank-issued digital currencies have gained momentum with the China's digital currency experiment. Should countries speed up the development of such currencies? Critically Analyze. (15 Marks, 250 Words)
47. In the light of the recent border skirmishes between India and China, analyze the causative factors for the border stand-offs. Evaluate the ongoing boundary negotiations and the prospect of a resolution of the border dispute. (15 marks, 250 words)
48. The deteriorating ties between India and Nepal despite the close linguistic, marital, religious and cultural ties between the two countries are a cause of concern for India's neighbourhood first policy. Comment. (10 marks, 150 words)
49. Discuss the concerns with respect to the APMC act and evaluate the recently announced reforms for the APMC act under Atmanirbhar Bharat Abhiyan package. (10 marks, 150 words)
50. The COVID-19 crisis has brought to light the issue of the migrant labourers in India and the post-COVID phase will require drastic changes in the migration policies. Comment. (10 marks, 150 words)
51. Technology and data are becoming inherently geopolitical. Evaluate the concerns associated with such a development. (10 marks, 150 words)
52. AtmaNirbhar Bharat Abhiyan economic stimulus package effectively addresses both the supply and demand side of the economy. Comment. (10 marks, 150 words)
53. The key ingredient for self-reliance is the need for indigenous endeavour in Research and Development in niche technologies. Evaluate India's performance so far in this domain and suggest a suitable way forward. (15 marks, 250 words)
54. There is an urgent need to revamp procedural law at subordinate courts and at the apex level to make them more efficient. Comment. (10 marks, 150 words)
55. Locust invasion can wreak havoc on the lives of thousands of farmers. Discuss the necessary measures to combat the pest attack to avert losses. (10 Marks, 150 Words)
56. What are the recent policy changes introduced by the Govt. of India to help farmers get better prices for their agricultural produce? (10 Marks, 150 Words)

57. What measures should the Government initiate to woo firms planning to move operations from China to India? (10 Marks, 150 Words)
58. The COVID-19 pandemic is a massive challenge but it may create fresh opportunities to bring India and Africa closer together. Discuss. (15 Marks, 250 Words)
59. In the light of recent proposal in the U.S. for greater legislative and executive control over social media, examine the arguments both in favour of and against this proposal. (10 Marks, 150 Words).
60. India and Australia can collaborate on the strategic front to counterbalance China's rise in the Indian Ocean and the Pacific Ocean. Elaborate. (10 Marks, 150 Words).
61. Enumerate the factors affecting Indian monsoon. Analyze the possible effect of climate change on the Indian monsoons and the concerns associated with it. (15 marks, 250 words)
62. In the light of the locust infestations in India, discuss the causative factors for the unusually large locust infestation in 2020 and the concerns associated with it for India. (10 marks, 150 words)

INTERVIEW TRANSCRIPT

Candidate Details:

- Name: Suresh Kumar
- AIR: 556 (CSE-2017)
- Optional: Geography

Personal Details:

- Education: B.Tech, Mechanical Engineering, National Institute of Technology, Raipur
- Home town: Parsada (Korba), Chhattisgarh
- Hobbies: Watching movies, spending time with children, travelling

Work-experience

- 3.5 years in NTPC Ltd.
- 2 years in Central Water Commission
- Indian Railways Traffic Service (CSE-2016)

Chairman of the Interview Board: Air Marshal A. S. Bhonsle (Retd.)

Air Marshal A. S. Bhonsle (Retd.):

- Air Marshal Ajit Bhonsle was commissioned into the Indian Air Force in 1978.
- He is an alumnus of Bhonsala Military School, National Defence Academy, Defence Services Staff College, College of Defence Management and National Institute of Defence Studies, Japan.
- He holds the degrees of M.Sc. Defence Studies from University of Madras, Masters in Business Management from IGNOU and Osmania University, and M.Phil from Tokyo.
- Prior to joining UPSC, he held the Office of Chief of HQ, Integrated Defence Staff (IDS) and also as Deputy Chief of Joint Operations, Doctrines, Organization & Training. During this period, Air Marshal Bhonsle oversaw capacity building of the Armed Forces through the formulation of Defence Procurement Procedures to encourage 'Make in India' in the Defence Sector.
- Air Marshal Bhonsle has participated in the Sri Lanka Indian Peace Keeping Force Operations, Siachen operations and Kargil operations and has 5200 hours of flying experience.

QUESTIONS ASKED BY THE INTERVIEW BOARD**Related to Hometown**

- Tell us something about your native place.
- How did you manage to come out from a remote village and the challenges associated with it?
- What do you know about custodial deaths in the jails of Chhattisgarh and what needs to be done?

Previous Employment

- You have worked in very crucial sectors; how do you think this will help in civil service?
- Gender sensitivity in your previous jobs.
- Give some data of water availability in India.
- Do you think that Central Water Commission (CWC) is doing a good job?
- Water sector challenges in India.

Economy Based

- What is Telgo Train?
- What reforms should be introduced in the Railway sector?
- Banking fraud, reasons and solutions.
- How to confiscate the assets of a person?
- Letter of Understanding vs Letter of Credit.
- Questions on Financial Resolution and Deposit Insurance Bill.
- Demonetisation - effect on economy.

Governance Related Questions

- Necessity of linking Aadhar with social sector programmes.
- Data protection issue with Aadhar.
- Mechanism of maintaining transparency in India.
- How will you ensure a corruption-free society?

International Relations

- How do you see the international relations of India with neighbouring countries considering the water disputes?

General Questions

- Why do you want to join civil service? Why don't you continue in your graduation field? Social service can be done from private sector too.