

Monthly Current Affairs

July - 2020

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POLITY

1. Disabled are entitled to same benefits of SC/ST quota:

Supreme Court

Context:

- According to the recent decision of the Supreme Court, persons with disabilities are entitled to the same benefits of SC/ST quota.

Background

- The decision by the Justice Nariman Bench came on a petition filed by Aryan Raj
- The college had denied Mr. Raj relaxation in minimum qualifying marks in the Painting and Applied Art course.
- The college insisted that disabled persons too need to meet the general qualifying standard of 40% in the aptitude test, whereas SC/ST candidates were given a relaxation to 35%.

Supreme Court Judgement:

- The Supreme Court, in a significant decision, confirmed that persons with disabilities are also socially backward and entitled to the same benefits of relaxation as Scheduled Caste and Scheduled Tribe candidates in public employment and education.
- A three-judge Bench led by Justice Rohinton Nariman upheld a 2012 judgment of the Delhi High Court in Anamol Bhandari (minor) through his father/Natural Guardian v. Delhi Technological University.

* "In Anamol Bhandari, the High Court has correctly held that people suffering from disabilities are also socially backward, and are therefore, at the very least, entitled to the same benefits as given to the Scheduled Caste/Scheduled Tribe candidates," the Supreme Court held in the judgment.

- Setting aside the college decision, the Supreme Court noted that Scheduled Caste/Scheduled Tribe candidates require 35% to pass in the aptitude test, the same shall apply so far as the disabled are concerned in future.
- Therefore, it took the view that when SC/ST candidates get a relaxation of a certain percentage of marks to qualify for admission, the same relaxation shall apply to disabled candidates too.

Counter Argument- Disabled should not be equated with SC/ST

- This judgment tends to equate physical or mental disability with the social disability and experience of untouchability suffered by marginalised sections for centuries.

- For instance, the social background of disabled persons from a traditionally privileged community may give them an advantage over those suffering from historical social disability. However, this may not always be the case.

Stats prove their Backwardness

The Delhi High Court had cited the abysmally low literacy and employment rates among persons with disabilities.

- There is the issue of low literacy and employment rates among persons with disabilities.
- As per the 2001 Census, Considering educational indicators, illiteracy among the disabled was much higher than the general population figure. The share of disabled children out of school was quite higher than other major social categories. The 2001 Census put the illiteracy rate among the disabled at 51%.
- According to a study, only 34 lakh of the about 1.34 crore people with disabilities (PwDs) in the employable age have a job in India.

Significance

- Through this judgment, the Supreme Court has recognised the difficulties faced by the disabled in accessing education or employment, regardless of their social status. People suffering from disability have always been an under-privileged and under-represented section.

Conclusion

- It is important that this judgment is fully given effect so that this significant segment of the population is not left out of social and economic advancement.

2. Domestic Workers- No help for the helps

Context:

- The nationwide lockdown and issues of Covid-19 has aggravated the plight of domestic workers in India, and has highlighted lack of adequate rights.

Background

- In India, domestic work has traditionally been positioned at the bottom of the occupational structure with low social status and institutional ignorance.
- The lack of political and legal recognition has left domestic workers structurally and procedurally vulnerable to the conditions of poverty and at the mercy of their employers, exposing them to potential harassment, discrimination, and exploitation.

- With the stifling of economic activity brought on by the prolonged nationwide lockdown, Indian domestic workers are now being confronted with increased hardships and financial challenges. The COVID-19 pandemic has made evident the precarious nature of their marginalization and the urgent need to address the situation.

Concerns

- The Domestic workers are being persuaded by their employers to continue working and are being threatened of possible replacement if they do not.
- Unable to travel, many domestic workers have been relieved of their jobs without adequate payment and there are others who have received pay-cuts for the subsequent months
- Considering that these workers have limited to no savings or financial backing, the possibility of their lives being severely affected by the domino effect of rising unemployment and a lack of income stands extremely high.
- Moreover, since domestic work falls under the category of unregistered and unregulated work, these workers — in most instances — have been unable to access government relief packages that are being provided to deal with the current crisis.
- Adding to the problems of income loss and lack of social security is the prospect of domestic workers having to face harassment and eviction from their rented accommodations. This could either be due to their inability to pay rent or due to the social stigma attached with these workers that labels them as potential carriers of the virus.

Legal Framework:

- The government in 2014 started working to codify and simplify 44 existing labour laws into four codes.
- One of the codes, the Code on Wages Bill, has been cleared. But the other three codes are yet to be passed by Parliament.
- The Code on Social Security, 2019, introduced in the Lok Sabha but not yet passed, will subsume eight laws, including the unorganised Workers' Social Security Act, 2008.
- A national policy for domestic workers, which can be a safety net, is still in its draft state.
- A Central Government Act for the welfare of unorganised sector workers is implemented more in the breach across the country.
- While there are some legal instruments that give them a degree of protection, such as the Unorganised Social Security Act, 2008 and the Sexual Harassment against Women at Workplace Act, 2013, there is no comprehensive legislation to address the special needs of the sector.

- * The existing laws are largely ineffective in their enforcement and thus fail to guarantee basic rights to domestic workers or address their grievances

Way forward:

- There is a need to include all domestic workers, irrespective of the category, in the social security net.
- Laws to ensure their rights such as minimum wages, regulating the number of working hours, mandating regular holidays as well as addressing physical and sexual harassment must be formalised.
- They must be provided immediate income and livelihood support.

Conclusion:

- COVID-19 is going to result in a new normal in many ways, it presents an opportunity and challenge – to enhance the value of the work of care and domestic work, address its deeply gendered nature, and reflect on ensuring their basic rights.

3. High Court for Puducherry

Context:

- The article argues the case for a separate High Court for Puducherry.

Background:

- Puducherry was a former French colony. Fifteen years after India gained independence; this small French colony was liberated on August 16, 1962 and merged with India.
- Initially, the jurisdiction of the Madras High Court was extended to it.

Details:

- Previously, there have been demands for a separate High Court or at least a Bench of the Madras High Court.
 - * In 2017, the Puducherry legislature unanimously resolved to have its own High Court. In April 2017, the Pondicherry Bar Association passed a resolution seeking the establishment of the High Court.
 - * The state administration has also previously stressed the need for a Bench of the Madras High Court at Puducherry on the lines of the one set up in Madurai.

Arguments in favour of a High Court at Puducherry:

Cost considerations:

- The Puducherry government spends large sums of money towards expenses of the large High Court. Puducherry with not much of a population is having to share disproportionately high expenses with Tamil Nadu.

- This amount can be reduced to less than a quarter of the amount spent with a much smaller High Court for Puducherry.
 - * According to the Constitution, when a common High Court is established for more than one State, administrative expenses have to be paid only from the consolidated fund of the 'State' in which the principal seat of the High Court is situated.
 - * According to the Constitution, administrative expenses of a High Court at the Union Territory shall be drawn from the 'Consolidated Fund of India'.

Speedy disposal of cases:

- The judge to population ratio at Puducherry can be increased if a separate High Court with four to five judges is established. This can ensure quick action on the pendency of cases.
 - * In the All India Judges Association and Others vs Union Of India (Uoi) And Ors., the Supreme Court had observed the significance of increasing the judge strength from the existing ratio of 10.5 or 13 per 10 lakh people to 50 judges for 10 lakh people.
 - * Similar observations were also mentioned in the Law Commission of India Report titled 'Arrears and Backlog: Creating Additional Judicial (wo) manpower', in 2014.
 - * As of 2016, the ratio is only 12 judges for one million population.

Access to justice:

- Given the fact that people from Puducherry have to travel to Chennai for appeals at High Court, this leads to considerable expenses and time requirement. This reduces access to justice for the people.
- A High Court at Puducherry would help make access to justice easier for the people.

Aiding Statehood demand:

- A High Court for Puducherry will strengthen voices seeking Statehood.
 - * The Constitution enabled the establishment of a legislature and Council of Ministers for certain Union Territories with the intent of providing them Statehood gradually. Out of the seven Union Territories originally placed under Article 239A, all except Puducherry were granted Statehood by 1989.
 - * Most Union Territories under 239A at least had Benches of High Courts when they attained Statehood. Tripura, Manipur, Meghalaya had Benches of the Gauhati High Court before they got their own High Courts.

Constitutionally permissible:

- The provisions under the Indian Constitution permit Puducherry to have its own High Court under Article 241.
- High Courts for Union territories are defined under Article 241 of the Constitution of India, which states that Parliament may by law constitute a High Court for a Union territory or declare any court in any such territory to be a High Court for all or any of the purposes of this Constitution.

Check on the executive:

- The presence of the Constitutional Court in the capital city acts as a check on the executive and legislature.

Bench of the High Court v/s separate High Court:

- The popular notion that the establishment of a Bench of High Court is easier and economical as compared to setting up a separate High Court is not true. The article argues that even a bench of the Madras High Court as against a separate High Court at Puducherry is unfavourable based on the following arguments.
 - * In case of a bench of the Madras High Court, Puducherry will still have to share the expenses of such a large High Court.
 - * Judges might not prefer shuttling between Benches at Chennai, Puducherry and Madurai frequently.
 - * There has always been a history of protests against the setting up of a regional bench of existing High Courts. The demand for a Bench of the High Court has always been met with stiff resistance from the Bar practising in the Court having jurisdiction.

Conclusion:

- The Puducherry Government could form a committee to prepare a comprehensive report and a draft Bill backing its proposal and forward it to the Central Government.
- The administration can highlight the need to streamline expenses, the case volume and constitutional rights as arguments for a separate High Court.

4. Padmanabhaswamy Temple Case (The fusion of the divine and the dynastic)

Context:

- The Supreme Court has upheld the right of the Travancore royal family to manage the property of deity at Sree Padmanabha Swamy Temple in Thiruvananthapuram

Question before the Court

- The central legal question was whether Utradam Thirunal Marthanda Varma, the younger brother of Chithira Thirunal Balarama Varma (the last Ruler of Travancore), could claim to be the "Ruler of Travancore" after the death of the ruler in 1991.

Who had the ownership, control and management of the Padmanabhaswamy temple before 1991?

- All the temples which were under the control and management of the erstwhile Princely States of Travancore and Cochin were under the control of the Travancore and Cochin Devaswom Boards before 1947.
- However, as per the Instrument of Accession signed between the princely states and the Government of India, since 1949, the administration of the Padmanabhaswamy Temple was "vested in trust" in the Ruler of Travancore.
- The state of Kerala was carved out in 1956 but the temple continued to be managed by the erstwhile royals.

Death of Balrama Varma

- In 1971, privy purses to the former royals were abolished through a constitutional amendment (Twenty Sixth Amendment) stripping their entitlements and privileges. The move was upheld in court in 1993 and the last ruler of Travancore who died during the pendency of this case continued to manage the affairs of the temple till then.
- In 1991, when the last ruler's brother took over the temple management, it created a furore among devotees who moved the courts leading to a long-drawn legal battle.
- The government joined in; supporting the claims of the petitioner that Marthanda Varma had no legal right to claim the control or management of the temple.

Is the temple the property of the royal family?

- No. The character of the temple was always recognised as a public institution governed by a statute.
- The argument of the royal family is that the temple management would vest with them for perpetuity, as per custom.

Shebait (Dharmakarta in TN and Andhra Pradesh)

- The expression "shebait" (Commonly used in Bengal) is derived from "sewa" which means "service". Shebait, in literal sense, means one who renders sewa to the idol or a deity.
 - * A Shebait is any person who serves and supports the deity and works as a manager
 - * The properties like the temple or any other land or property which is vested with the deity are managed by the Shebait.

What did the SC say?

- The SC has set aside a 2011 verdict of the Kerala HC which had asked the state government to set up a trust to take control of the temple.
- The High Court (HC) had ruled that the successor to the erstwhile royals could not claim to be in control of the Sree Padmanabhaswamy Temple as per the amendment of the definition of 'Ruler' in Article 366 (22).
- The Supreme Court has laid down that the shebaitship is vested in the founder and unless the founder himself has disposed of the shebaitship in a particular manner or there is some usage or custom or circumstances showing a different mode of devolution, the shebaitship, like any other species of heritable property follows the line of inheritance from the founder; and it is not open to the court to lay down a new rule of succession or alter the rule of succession.
- The Supreme Court has overturned to return trusteeship and overall control back to the royal family, but with caveats that the royal family itself proposed: a five-member administrative committee and a three-member advisory committee, both under the guidance of the royal family.

Administrative Committee

- The administrative committee is to have five members, one of whom will be nominated by the trustee, and another will be the chief tanthri (head priest) of the temple.
- But its chairperson will be a district judge from Thiruvananthapuram.
- The other two members are nominees of the Kerala government and the Union culture ministry.
- Thus, three of its five members are government nominees.

Advisory Committee

- The advisory committee will be headed by a former high court judge nominated by the Chief Justice of the Kerala High Court, a chartered accountant and a nominee of the royal family.

Significance

- A secular country should not be giving the State, or its nominees, any role in the running of temples.

5. Plea Bargaining**Plea bargaining**

- It refers to a person charged with a criminal offence negotiating with the prosecution for a lesser punishment than what is provided in law by pleading guilty to a less serious offence.
- It primarily involves pre-trial negotiations between the accused and the prosecutor.
- It may involve bargaining on the charge or in the

quantum of sentence.

Important Recommendations

- The 154th Report of the Law Commission was first to recommend the 'plea bargaining' in Indian Criminal Justice System.
 - * It defined Plea Bargaining as an alternative method which should be introduced to deal with huge arrears of criminal cases in Indian courts.
- The Malimath Committee recommended for the plea bargaining system in India.
 - * The committee said that it would facilitate the expedite disposal of criminal cases and reduce the burden of the courts.
 - * Moreover, the Malimath Committee pointed out the success of plea bargaining system in the USA to show the importance of Plea Bargaining.
 - * 1. The concept of Plea bargaining was started in USA but now has gained international recognition.

In what circumstances is it allowed?

- In the U.S. and other countries it is the who prosecutor plays a key role in bargaining with the suspected offender
- The Indian code makes plea bargaining a process that can be initiated only by the accused; further, the accused will have to apply to the court for invoking the benefit of bargaining.

Cases for which the practice is allowed are limited. It allows plea bargaining for cases:

- Where the maximum punishment is imprisonment for 7 years;
 - * It is thus not applicable to offenses punishable with death or imprisonment for life or of an imprisonment for a term exceeding to seven years.
- The offence should not have been committed by the accused against a woman or a child below the age of 14 years.
- The accused should not have been covered under Section 2(k) of the Juvenile Justice (Care and Protection of Children) Act, 2000.
- The accused should not have earlier been convicted for the same offence.
- The offence should not affect the socio-economic condition of the country.

What offences affect the socio-economic condition of the country

- Some of the examples include
 - * Dowry Prohibition Act, 1961.
 - * The Commission of Sati Prevention Act, 1987.
 - * The Indecent Representation of Women

(Prohibition) Act, 1986.

- * The Immoral Traffic (Prevention) Act, 1956.
- * Protection of Women from Domestic Violence Act, 2005.

How does it work?

- The applicant should approach the court with a petition and affidavit stating that it is a voluntary preference and that he has understood the nature and extent of punishment provided in law for the offence.
 - * Courts are particular about the voluntary nature of the exercise, as poverty, ignorance and prosecution pressure should not lead to someone pleading guilty of offences that may not have been committed.
- The court would then issue notice to the prosecutor and the complainant or victim, if any, for a hearing.
- The voluntary nature of the application must be ascertained by the judge in an in-camera hearing at which the other side should not be present.
- Thereafter, the court may permit the prosecutor, the investigating officer and the victim to hold a meeting for a "satisfactory disposition of the case". The outcome may involve payment of compensation and other expenses to the victim by the accused
- Once mutual satisfaction is reached, the court shall formalise the arrangement by way of a report signed by all the parties and the presiding officer. The accused may be sentenced to a prison term that is half the minimum period fixed for the offence.

Significance

- The practice would ensure speedy trial, end uncertainty over the outcome of criminal cases, save litigation costs and relieve the parties of anxiety.
 - * A trial is usually requires a much longer wait and causes much more stress than taking a plea bargain.
 - * Some people plead guilty especially to routine, minor first offences without engaging a lawyer. If they waited to go to trial, they would have to find a good lawyer and spend both time and money preparing for trial.
- Prolonged incarceration of undertrials without any progress in the case for years and overcrowding of prisons were also other factors that may be cited in support of reducing pendency of cases and decongesting prisons through plea bargaining.

Arguments against Plea Bargaining in India

- The cons regarding plea bargain are that it may hamper with victim's right to fair trial, involvement of coercion by the investigating agencies and corruption in the process.
 - * As India is infamous for the custodial torture by police. In such scenario, the concept of Plea

Bargaining is more likely to aggravate the situation.

- Plea bargaining undercuts the requirement of proof beyond reasonable doubt and that plea negotiation is substantially more likely than trial to result in the conviction of innocent. Plea bargaining results in unjust sentencing.
- Plea bargaining clearly works against the system as it provides an easy way out to the accused.

What about victims? How will victim view, plea bargains?

- The plea bargaining law mandates the Court to pay compensation to victims of crime once the plea bargaining process is complete and then hears the parties on quantum of punishment and possibility of probation.
- The rights of the victim are better upheld as they can bargain over the Court's decisions.
- Earlier, the victim had to satisfy himself with, what the Court decides. Plea bargaining also spares the victim from the anxiety of having to give evidence in the Court, and the unpleasantness of hearing all the details of the crime analyzed at length in public.

Do courts have reservations?

- Earlier judgments of various courts in cases in which the accused enter a 'guilty' plea with a view to getting lesser sentences indicate that the judiciary may have reservations.
- The Gujarat High Court, in *State of Gujarat V. Natwar Harchanji Thakor* (2005), has held, "the very object of law is to provide easy, cheap and expeditious justice by resolution of disputes, including the trial of criminal cases and considering the present realistic profile of the pendency and delay in disposal in the administration of law and justice, fundamental reforms are inevitable. There should not be anything static."
- Some verdicts disapprove of bargaining with offenders, and point out that lenient sentences could be considered as part of the circumstances of the case after a regular trial.

Conclusion

- Plea bargaining is beneficial to the accused and victim of a crime. Therefore enough safeguards are required to be placed to stop possible abuse of this process.

Context:

- Members of the Tablighi Jamaat belonging to different countries have obtained release from court cases by means of plea bargaining.
- Accused of violating visa conditions by attending a religious congregation in Delhi, these foreign nationals have walked free after pleading guilty to

minor offences and paying the fines imposed by the court.

6. Protesting is a fundamental right: UN

Context:

- A UN committee has reaffirmed that protesting peacefully, online or in person, is a fundamental human right.

Details:

- The independent experts on the Human Rights Committee published a fresh interpretation of the right of peaceful assembly.
- The committee is tasked with monitoring how countries implement the International Covenant on Civil and Political Rights (ICCPR), which under Article 21 guarantees the right to peaceful assembly.
- It is a fundamental human right for individuals to join a peaceful assembly to express themselves, to celebrate, or to air grievances
- The right belongs to everyone, without exception.
 - * It includes children, foreign nationals, women, migrant workers, asylum-seekers and refugees, can exercise the right of peaceful assembly.
- It stressed that peaceful protesters have the right to wear masks or hoods to cover their face.

What should the Government do?

- Governments must "not prohibit, restrict, block or disrupt assemblies without compelling justification"
- It has to facilitate peaceful assemblies and to protect participants from possible abuse by members of the public.
- Governments should not collect personal data to harass or intimidate participants
- The committee also emphasised that journalists and human rights observers have a right to monitor and document any assembly, including those that are violent and unlawful.

7. In the name of 'cooperative federalism'

- The article points out that States are not getting what they should have as per the 14th Finance Commission report.

Centre-state relations:

- Federalism refers to relations between the Centre and states of the Union of India.
- It has been a trend in Indian political history that so long as the central and state governments were ruled by the same political party, the cooperative framework worked very well.
- But when different political parties are in power in the centre and the states and more recently when

coalition governments are in power, there are signs of stresses and tensions in intergovernmental relations between the Centre and the States.

- In the period ranging between 1980 and 1989, tussle for the rights of States was focused on Article 356. (Using pliant Governors, regional party governments were politically destabilised).
- Little was done to implement the report of the R.S. Sarkaria Commission on Centre-State relations.

Details:

- At present, fault line in the Centre-State relation is largely over the way the report of the 14th Finance Commission is being implemented.
- While this began well before COVID-19, the pandemic and its economic disruption have brought things to an edge.
- The 14th Finance Commission report was accepted in 2015 with the promise that it would devolve more finances to the States. As part of the process, States would have new responsibilities, especially in the social sector.
- Two years later, the introduction of the Goods and Services Tax (GST) regime was also justified as a grand bargain that would eventually leave all States better off.

Issues:

- In reality, tax devolution to States has been consistently below 14th Finance Commission projections.
 - * One reason for this has been the economic slowdown, caused primarily by the Central government, and lower-than-expected GST collections.
 - * The shortfall in GST collection for 2018-2019 was 22% when compared to projections. Payments have been delayed as well.
- The Centre has imposed a series of cesses, which are not part of the divisible pool and not shared with the States.
- The nature of public spending in India has undergone a massive shift.
 - * In 2014-2015, States undertook programmes and projects spending 46% more than the Central Government; today the figure is 64%.
 - * Despite this, the Centre's fiscal deficit exceeds the consolidated State deficit by 14%.
- In the backdrop of the COVID-19 crisis, States are being required to spend more to help common citizens and save livelihoods. The Centre is providing almost negligible support.
- Following the pandemic, the Ministry of Finance has asked all Union Ministries to cut expenditure.
 - * The immediate impact is being felt by States, and grants-in-aid are drying up.

- * Crucial rural development programmes have come to a standstill.

• Fiscal Responsibility and Budget Management (FRBM) Act

- * Due to the pandemic, the fiscal deficit for States, collectively, is inevitably going to breach the projection of 2.04%.
- * As per provisions of the FRBM Act, the GSDP can actually accommodate a fiscal deficit of 3%.
- * 1. While States have respected the limit for years, post-pandemic, this limit will be crossed.
- * The FRBM has an "escape clause" that allows for a one-time relaxation of the fiscal deficit threshold up to 0.5% in a time of exigency. The escape clause has been utilised by the Centre but it has proven insufficient in addressing the current crisis.
- * The Centre has gone in for subjective interpretation, imposing conditions that are outside the scope of the FRBM.

Way forward:

- There is a wide consensus among fiscal policymakers that the rigidity of the FRBM has to be revisited.
- It should allow for greater flexibility and consultation as to when and how the "escape clause" can be applied.

8. Re-enfranchise the forgotten voter

Context:

- The article discusses the difficulties faced by the migrant labourers in exercising their franchise and suggests policy measures to mitigate these challenges.

Background:

- In the light of the pandemic crisis, the Election Commission of India (ECI) has made it possible for senior citizens above the age of 65 to vote by postal ballot, given that they are at greater risk from exposure to the novel coronavirus. Previously, this option was available only to disabled citizens and those above 80 years.
- The article argues for a similar empowering approach towards migrant workers.

Details:

Voter turn-out:

- India currently has over 91.05 crore registered voters and in the 2019 general election, a record 67.4%, i.e., 61.36 crore voters, cast their vote.
- Almost one-third, amounting to a substantial 29.68 crore voters, did not cast their vote.
- National Election Study surveys have shown that

about 10% of registered voters refrain from voting due to a lack of interest in politics which implies that around 20 crore voters who want to vote are unable to do so.

- * This includes about three crores Non-Resident Indians (NRIs). Only about one lakh NRIs have registered to vote, presumably because voting requires their physical presence in India. Of them, about 25,000 voted in the 2019 elections.
- * A substantial proportion of the voters who are unable to vote would include the migrant labourers.

Migrant labourers in India:

- Internal migrant workers constitute about 13.9 crores as in the Economic Survey of 2017, which is nearly a third of India's labour force.
- They travel across India in search of economic livelihood, in the construction sector, as domestic workers, in brick kilns, mines, transportation, security, agriculture, etc.
- Many never intend to settle down and wish to return to their native villages and towns once their work is completed or the working season ends.
- Often they toil in exploitative low-wage jobs, lacking identity and proper living conditions, without access to welfare and unable to exercise their voting rights

Challenges:

- The migrant workers face enormous difficulties in exercising their franchise.
 - * Migrant workers become quasi-disenfranchised, forgotten voters because they cannot afford to return home on Election Day to choose their representatives.
 - * Internal migrant workers do not enroll as voters in their place of employment since they find proof of residence hard to provide.
- Since the migrant workers do not have a vote where they work, their concerns are easy to ignore in their host State. Sometimes, they are targeted for allegedly taking jobs away from the local population.
- This leads to a callous attitude towards the plight of migrants. The migrant labourers are considered mostly politically powerless.
 - * To enable NRIs to exercise their franchise, the government brought in legislation in the previous Lok Sabha to enable voting through authorised proxies. However, the proposed legislation has lapsed. The lack of such proposals for the internal poor migrants is evident.

Way forward:

Policy measure:

- Similar to the 'One Nation One Ration Card' scheme being ushered in to enable migrant workers and their

family members to access Public Distribution System benefits from any fair price shop in the country, there is the need to usher in 'One Nation One Voter ID' to ensure domestic ballot portability.

- Migrants should be able to physically vote in their city of work based on the address on their existing voter IDs and the duration of their temporary stay.

Implementation:

- To facilitate voting by migrant workers, the ECI could undertake substantial outreach measures using the network of District Collectorates.
- The COVID-19 crisis mobilized governments and non-governmental organisations to set up registers and portals to reach out to migrant workers. The data available through this can be utilized to register migrant workers.
- Given the developments in digital communications, it is technologically feasible to record and transfer votes to their respective constituencies without compromising the credibility of the election process.
- There are operative systems that enable a form of voter portability that can serve as a model for re-enfranchising migrant workers.
 - * Service voters (government employees) posted away from home can vote through the Electronically Transmitted Postal Ballot System (ETPBS).
 - * Classified service voters (e.g., military personnel) can vote through their proxies.
 - * The ECI has said that it is testing an Aadhaar-linked voter-ID based solution to enable electors to cast their votes digitally from anywhere in the country.

Conclusion:

- Voting must be viewed as a civic right. Well-thought-out initiatives that facilitate voting and remove obstacles to voters exercising their franchise must be emphasized on. Ensuring that every Indian voter can participate in elections is imperative to ensure a democratically inclusive India.
- The 'One Nation One Voter ID' approach would help empower the forgotten migrant voter. Once migrant workers get to exercise their franchise, there would also be a change in how they are treated.

9. Reform with caution

Context:

The Union Government has constituted a special five-member committee to recommend reforms in India's criminal laws.

- The 'Committee for the Reform of Criminal Laws' has been constituted under Ranbir Singh and several other members.
- The committee, through country-wide consultations

with law enforcement agencies, prosecutors, judiciary, advocates, academics, and civil society, including media organizations, is seeking suggestions for changes to the country's penal code.

Criminal Law in India

- It is governed by the Indian Penal Code of 1860, the Code of Criminal Procedure that was rewritten in 1973, and the Indian Evidence Act that dates back to 1872.

Recommendations from the past

- In 2003, the Justice V.S. Malimath Committee on reforms in the criminal justice system had come up with some far-reaching suggestions, some of which became part of changes in criminal law.

* However, it also attracted criticism over the suggestion that the standard of evidence be reduced from "beyond reasonable doubt" to "clear and convincing".

- In 2007, Madhav Menon Committee submitted its report suggesting various recommendations on reforms in the Criminal Justice System of India.
- The Justice Verma panel came up with a comprehensive and progressive report on reforms needed in laws concerning crimes against women in 2013 in barely one month, but its speed was due to the limited mandate it had.

Criticisms:

- Formation of the committee with an apparently short time frame and limited scope for public consultation has caused considerable disquiet among jurists, lawyers and those concerned with the state of criminal justice in the country.
- It is pointed out that the committee lacks in diversity, as there are no women, Dalits, religious minorities, Adivasis, LGBT persons, differently-abled persons, and grassroots workers from different parts of India.
- Yet another criticism against the Committee is that it has begun its work in the midst of a pandemic. This may not be the ideal time for wide consultations.

* Activists and lawyers functioning in the hinterland may be at a particular disadvantage in formulating their opinions.

- The panel's mandate is: "to recommend reforms in the criminal laws of the country in a principled, effective, and efficient manner which ensures the safety and security of the individual, the community and the nation; and which prioritizes the constitutional values of justice, dignity and the inherent worth of the individual." It is also not clear why the Law Commission has not been vested with this task.

Conclusion:

- There have been several attempts in recent decades to overhaul the body of criminal law
- However, comprehensive legal reform is something that requires careful consideration and a good deal of deliberation.

- The current laws governing crime, investigation and trial require meaningful reform.
- If at all criminal law is to be reformed, there should be a genuine attempt to reach a wide consensus on ways to speed up trials, protect witnesses, address the travails of victims, improve investigative mechanisms and, most importantly, eliminate torture.
- An impression should not gain ground that wide-ranging changes are sought to be made within a short time frame and based on limited inputs from the public.
- Reform is best achieved through a cautious and inclusive approach.

10. Cabinet decision binding on Governor

Context:

- Congress legislators backing Rajasthan chief minister Ashok Gehlot asked Governor to call a special assembly session for a floor test.
- The Governor asked the government to change the date of commencement recommended by the Cabinet and proposed a date after 21 days.

Governor's powers

- Is the Governor bound by the advice of the chief minister-led council of ministers when it comes to convening the assembly session and to what extent can the governor exercise his discretion?

Procedure

- In the case of parliament, after the cabinet or prime minister has decided that parliament should meet on a certain date, the Ministry of Parliamentary Affairs, a wing of the government of India dealing with the government business in the houses of parliament, writes to the speaker and enquires whether he is in agreement with the date.
- On the Speaker agreeing to the date, the file containing the decision of the cabinet is sent to the speaker's office for onward submission thereof to the president.
- The secretary general of the Lok Sabha sends the file to the office of the president along with an office note indicating the speaker's agreement to the date, as well as a draft order of summons to be signed by the president.
- The president's office sends the file back with the president's signature on the summons order either the same day or the next day at the latest.
- The secretary general, thereafter, sends individual summons to the members which includes the president's order, authenticated by the secretary general.
- In the States as per the normal procedure, once the Cabinet decides to call the session on a particular date that decision is conveyed to the Governor who signs the summons order and sends it back the same day or the next day.

- Thereafter, the summons is issued to individual members by the Assembly Secretary.

Constitutional Provisions

- Article 163 - Council of Ministers to aid and advise Governor
 - * (1) There shall be a council of Ministers with the chief Minister at the head to aid and advise the Governor in the exercise of his functions
- Article 174 - Sessions of the State Legislature, prorogation and dissolution
 - * (1) The Governor shall from time to time summon the House or each House of the Legislature of the State to meet at such time and place as he thinks fit
- These two articles have to be read together for the harmonious construction of the powers of the offices of Chief Minister and Governor.
 - * So, when the Chief Minister sends a written letter to the Governor after the cabinet's decision to summon the Assembly, it amounts to advice given by the Chief Minister, and the Governor is constitutionally mandated to follow and implement it.
- The cabinet is not even bound to state the agenda for the session to the governor.

Supreme Court's View

- In *Nabam Rebia and Baman Felix v. Deputy Speaker* (2016), the Supreme Court reaffirmed this position when it said, "In such view of the matter, we are satisfied in concluding that the Governor can summon and prorogue and dissolve the House only on the aid and advice of the Council of Ministers with the Chief Minister as the head. And not on his own".
- And what if the Governor does not sign the summons? In *Shamsher Singh v. State of Punjab* (1974), the Supreme Court said: "The Governor has no right to refuse to act on the advice of the Council of Ministries. Such a position is antithetical to the concept of 'responsible government'."

When Govt loses majority

- The Supreme Court has also said that the Governor can exercise his power without the aid and advice of council of ministers only when the government in power loses majority in a floor test
- "Only in a situation where the Government in power, on the holding of such floor test, is seen to have lost the confidence of the majority, it would be open to the Governor to exercise the powers vested with him under Article 174 at his own, and without any aid and advice,"

Important Commission recommendations

- The Sarkaria Commission report reiterates the observations made by the Punchhi Commission

- "As long as the Council of Ministers enjoys the confidence of the House, the aid and advice of the Council of Ministers headed by the Chief Minister is binding on the Governor, on the subject of summoning, proroguing or dissolving the House or Houses of the State Legislature".

In the current case

- The 19 rebel MLAs have not defected from the Congress Party and have repeatedly stated before the Rajasthan HC that they are merely expressing their dissent within the party and have not shifted to the BJP.

11. '54 nations not doing enough enough for fight slavery

Context:

- There was a report released by the Commonwealth Human Rights Initiative (CHRI) and an international anti-slavery organisation Walk Free, on the occasion of World Day against Trafficking in Persons.

Details

- According to this report Commonwealth countries account for about 40% of people living in conditions of modern slavery in the world and the 54 nations were found lacking in actions to eradicate modern slavery by 2030
- The report assessed the progress made by Commonwealth countries on the promises made in 2018 to end modern slavery by 2030 and achieve the Sustainable Development Goal of ending forced labour, human trafficking and child labour.

On India

- The report stated that India had fared the worst in terms of coordination, "with no national coordinating body or National Action Plan in place".
- India, has not ratified the International Labour Organisation's 2011 Domestic Workers Convention or the 2014 Forced Labour Protocol.

Domestic Workers Convention, 2011

- Domestic workers work for private households, often without clear terms of employment, unregistered and excluded from the scope of labour legislation.
- Deplorable working conditions, labour exploitation and human rights abuses are major problems facing domestic workers.
- Lack of legal protection increases domestic workers' vulnerability and makes it difficult for them to seek remedies. As a result, they are often paid less than workers in comparable occupations and work longer hours.
- It provides basic labour rights to domestic workers around the globe
- The main rights given to domestic workers as decent work are daily and weekly (at least 24 h) rest hours, entitlement to minimum wage

On forced Marriage

- The report found that one-third of the Commonwealth countries had criminalised forced marriage, while 23 had not criminalised commercial sexual exploitation of children.
- The report said India accounted for one-third of all child brides in the world.

12. Custodial Deaths**Context:**

- The death of a father-son duo allegedly in police custody in Tamil Nadu's Tuticorin district.

Details

- The father-son duo was allegedly thrashed by the police while in custody, leading to their deaths.
- In a swift response, the Madurai Bench of the Madras High Court, which took suo-moto cognisance of their deaths, has decided to monitor the progress of the statutory magisterial probe.

Concerns

- The fatal violence by the police is a reminder of the issue of police violence in India.

High number of custodial deaths:

- Despite several existing guidelines and laws, there are reports suggesting that across India there are as many as five custodial deaths a day.
- In the last three years, the National Human Rights Commission (NHRC), India, has received nearly 5,300 complaints of custodial deaths (police and prison), and the actual number of such deaths can be more.
- Even the 2015-2016 NHRC Annual Report notes that custodial violence and torture continue to be rampant in the country.

Unaccountability:

- Custodial violence represents the worst form of excesses by public servants entrusted with the duty of law enforcement. However, the legal process to investigate, prosecute and fix accountability in case of custodial deaths has been very slow.
 - * While government data recorded 1,727 deaths in police custody between 2000 and 2018, only 26 police officials were convicted.
- This could lead to a culture of impunity among the state actors where they can use their power and authority to settle even personal scores.

Use of torture

- Custodial deaths are often the result of the pervasive use of torture in India's police stations for extracting admissions of crime. This points to the lack of professionalism in investigative methods employed by the police.

Disregard for Judicial observations:

- Constitutional courts have tried to address the issue of police brutality for well over two decades.

Judicial interventions:

- In the *Munshi Singh Gautam and others v/s the State of Madhya Pradesh* case the judiciary noted that the dehumanizing torture, assault and death in custody which have assumed alarming proportions raise serious questions about the credibility of the rule of law and administration of the criminal justice system.
- The Supreme Court judgment in *D K Basu v. State of West Bengal* was a turning point in the evolving jurisprudence on custodial torture. In the *Joginder Kumar v/s. State of UP and D.K. Basu v/s. State of West Bengal* case the Judiciary laid down important guidelines to secure the right to life and a right to know in the context of any state action. These judicial guidelines were given statutory backing through the Code of Criminal Procedure (Amendment) Act, 2008.
- The Supreme Court, in the *Prakash Singh v. Union of India* case, pushed through new legislation for governing police forces to be passed by States across India. A key component of the new legislation was a robust setup for accountability that contemplated a grievance redress mechanism.
- Judicial concern with police violence is also witnessed in the judicial support for scientific investigations. The support for techniques such as narcoanalysis, ensuring video recording of investigations, passing orders for installing closed-circuit television cameras inside police stations, is based on the possibility of police employing physical force to obtain evidence. Through technology, the hope is to gradually delegitimize and dismantle a set of archaic practices reliant upon the use of force as a means to extract evidence.
- Though the definition of 'hurt' does not include mental torture, Indian courts through their judgments have included psychic torture, environmental coercion, tiring interrogative prolixity, and overbearing and intimidatory methods, among others, in the ambit of torture.
- The Court's decision in *Nilabati Behera v. State of Orissa* compels the state to pay compensation in case of custodial torture.

- The judiciary's approach of simply passing directions and guidelines has not been very effective.
- Despite criminal laws being struck down as unconstitutional, they continue to be enforced in various parts of the country by local police.

Lack of police reforms:

- The issue of police reform ranks very low in the scheme of things for governments. There is continued institutional apathy towards the issue of police reform. There was inordinate delay in implementing guidelines issued through the Prakash Singh case and still, several States remain in contempt of the Supreme Court's judgment.

Systemic failure:

- The practice of remanding accused persons to further custody (both the police and judicial), has become the norm instead of being an exception.
- The overworked magistrate, struggling with an ever-increasing number of cases, is very often in a rush to get done with the "remand case", rather than treat an arrested person with the care and consideration that he/she deserves and is entitled to.

Lack of domestic law

- Despite the high number of custodial deaths and cases of police torture India still does not have a domestic law that enables torture prosecution.
 - * Torture is not defined in the Indian Penal Code, but the definitions of 'hurt' and 'grievous hurt' are clearly laid down. Voluntarily causing hurt and grievous hurt to extort confession are dealt with in the Indian Penal Code.
 - * Under the Code of Criminal Procedure, a judicial magistrate inquires into every custodial death.

Failure to ratify the UN Convention against Torture

- India has not ratified the UN Convention against Torture and other Cruel, Inhuman or Degrading Treatment (CAT) thereby putting itself in the list of only 19 countries to have not adopted it.
- CAT was signed by India but is yet to be ratified.
 - * The 273rd Report of the Law Commission had recommended ratification of the UN Convention against Torture and other Cruel, Inhuman or Degrading Treatment (CAT).

Previous suggestions

Law Commission of India's advice

- The Law Commission of India had suggested that if a person dies in police custody, the burden should be on the police to show that they are not responsible for it.

National Police Commission (NPC) Recommendations

- The NPC had recommended that a judicial inquiry should be made mandatory in the case of death or grievous hurt caused while in police custody.

- The Judicial inquiry should be held by an Additional Session's Judge nominated for this purpose in every district by State Government in consultation with the High Court. He will be designated as the District Inquiry Authority (DIA) and be assisted by an assessor.
- The DIA shall send the report of the inquiry to the State Government.

Prevention of Torture Bill

- A fresh draft of the Prevention of Torture Bill was released in 2017.
- However there were concerns that that bill, apart from being vague, was also very harsh for the police to discharge its responsibilities without fear of prosecution and persecution.
 - * The bill proposed death penalty for custodial death accused and proposed registration of every complaint of torture as an FIR and blanket denial of anticipatory bail to an accused public servant.

Way forward

Better implementation of existing laws

- Instead of considering a new law to address the issue of police violence there is a need to further improve on the implementation of existing laws.
- The investigations and the prosecution process are prone to concerns and these aspects need to be reformed. An independent agency for a fair investigation could be considered.

Judicial role

- Rather than limiting itself to passing more guidelines, constitutional courts must seriously contend with the concrete cases that come their way and take a hard stand.
- Passing compensation claims or ensuring timely prosecutions in such cases could help break the sense of impunity.

Strengthening the magistrate

- The constitutional courts could reorient their guidelines to try and change the practices of magistrates, over whom they exercise powers of superintendence.
- The ordinary magistrate is the judicial actor wielding real power to realise a substantial change in police practices.
 - * It is the local magistrate before whom all arrested and detained persons must be produced within 24 hours, and thus becomes the point of first contact for a citizen with the constitutional rule of law.

Police reforms

- The need of the hour is to strike at the root cause of the problem and implement recommendations of various commissions to bring in necessary reforms.
- The police need to be trained better. The temptation to use third-degree methods must be replaced with scientific skills.

ECONOMY

1. Agarbatti manufacturing- GramodyogVikas Yojana

Context:

- GOI launches a programme for the benefit of artisans involved in the manufacturing of Agarbatti under the 'Gramodyog Vikas Yojana'.

Details:

- Under the pilot programme, each targeted cluster of artisans will be supported with about 50 Automatic Agarbatti making machines and 10 mixing machines.
- Accordingly, a total of 200 Automatic Agarbatti making machines and 40 mixing machines will be provided to the artisans.
- Also, the Khadi and Village Industries Commission (KVIC), a statutory organisation under the Ministry of Micro Small and Medium Enterprises (MSME), will provide training and assist artisans working in this area, with Agarbatti manufacturing machines.

Steps taken by the government to boost the indigenous production of 'Agarbatti':

- Placing the 'Agarbatti' item from "Free" trade to "Restricted" trade in the import policy.
- Enhancing the import duty from 10% to 25% on 'round bamboo sticks' used for the manufacturing of Agarbatti.

Significance

- The programme aims to enhance the production of 'Agarbatti' in the country and create sustainable employment for the traditional artisans, by providing them with regular employment and an increase in their wages.
- It is also expected to boost the domestic Agarbatti industry and reduce its imports.

2. Agriculture Infrastructure Fund

- The scheme shall provide a medium – long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through interest subvention and financial support.
- Under the scheme, Rs. One Lakh Crore will be provided by banks and financial institutions as loans to:
 - * Primary Agricultural Credit Societies (PACS)
 - * Marketing Cooperative Societies
 - * Farmer Producers Organizations (FPOs)
 - * Self Help Group (SHG)
 - * Farmers
 - * Joint Liability Groups (JLG)
 - * Multipurpose Cooperative Societies

- * Agri-entrepreneurs
- * Startups
- * Aggregation Infrastructure Providers
- * Central/State agency or Local Body sponsored Public Private Partnership Project

- Loans will be disbursed in four years starting with the sanction of Rs. 10,000 crore in the current year (2020) and Rs. 30,000 crore each in the next three financial years.
- All loans under this financing facility will have an interest subvention of 3% per annum up to a limit of Rs. 2 crore.
 - * This subvention will be available for a maximum period of seven years.
- Further, credit guarantee coverage will be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to Rs. 2 crore.
- The Project by way of facilitating formal credit to farm and farm processing-based activities is expected to create numerous job opportunities in rural areas.
- The Fund will be managed and monitored through an online Management Information System (MIS) platform.
 - * It will enable all the qualified entities to apply for a loan under the Fund.
 - * The online platform will also provide benefits such as transparency of interest rates offered by multiple banks, scheme details including interest subvention and credit guarantee offered, minimum documentation, faster approval process as also integration with other scheme benefits.

- The duration of the Scheme shall be from FY2020 to FY2029 (10 years).

Context:

- Cabinet approves Central Sector Scheme of financing facility under the 'Agriculture Infrastructure Fund'.

3. Aids to Navigation Bill 2020

Context:

- Shipping Ministry issues draft "Aids to Navigation Bill 2020" for public consultation.

Details:

- The draft bill is proposed to replace the almost nine decades old Lighthouse Act, 1927, to incorporate the global best practices, technological developments and India's international obligations in the field of Aids to Marine Navigation.

- The draft bill provides for empowering the Directorate General of Lighthouses and Lightships (DGLL) with additional power and functions such as vessel traffic service, wreck flagging, training and certification, implementation of other obligations under international conventions, where India is a signatory.
- It also provides for the identification and development of heritage lighthouses.
- The draft bill comprises a new schedule of offences, along with commensurate penalties for obstructing and damaging the aids to navigation, and non-compliance with directives issued by the Central Government and other bodies under the draft bill.

The need for a new law:

- With the advent of modern technologically improved aids to maritime navigation, the role of authorities regulating and operating maritime navigation has changed drastically.
- Therefore, the new law encompasses a major shift from lighthouses to modern aids of navigation.
- Once widely used, the number of operational lighthouses has declined due to the expense of maintenance and has become uneconomical since the advent of cheaper and often much more effective electronic navigational systems.

4. AIM-iCREST

- AIM-iCREST is an incubator capabilities enhancement programme for a robust ecosystem for creating high-performance start-ups.
- AIM has launched the programme in collaboration with the Bill & Melinda Gates Foundation and the Wadhvani Foundation.
- AIM-iCREST has been designed to enable the incubation ecosystem and act as a growth hack for AIM's Atal and established incubators across the country.
- Under the initiative, AIM's incubators are set to be upscaled and provided requisite support to foster the incubation enterprise economy, which will help them to significantly enhance their performance.
- It will also provide training to entrepreneurs through technology-driven platforms and processes.

Context:

- Atal Innovation Mission launches 'AIM-iCREST'.

About the Atal Innovation Mission (AIM):

- Atal Innovation Mission (AIM) is the Indian Government's flagship programme to foster a culture of entrepreneurship and innovation. It has the following sub-components:
 - * Atal Tinkering Labs
 - * Atal Incubation Centres
 - * Atal New India Challenge

- * Mentor of Change Program
- * Atal Community Innovation Centre
- * Atal Research & Innovation for Small Enterprises (ARISE)

5. Atal Innovation Mission- App Development

Context:

- NITI Aayog's Atal Innovation Mission launches ATL App Development Module for school students nationwide.

Details:

- The ATL App Development modules have been launched in collaboration with Indian homegrown startup Plezmo with an aim to hone the skills of school students and transforming them from App users to App makers in the times to come under AIM's flagship Atal Tinkering Labs
 - * More than 5100 ATLs are established in more than 660 districts across the country by the Atal Innovation Mission with more than 2 million students having access to the Tinkering Labs.
- The ATL App Development module is an online course and is completely free.
- Through 6 project-based learning modules and online mentoring sessions, young innovators can learn to build mobile Apps in various Indian languages and showcase their talent.
- Additionally, to build capacities and acumen for App Development within school teachers, periodic Teacher Training sessions will be conducted on the AIM App Development course.

6. Atmanirbhar Skilled Employee Employer Mapping (ASEEM)

Context:

- Ministry of Skill Development and Entrepreneurship launches AI-based ASEEM digital platform to bridge the demand-supply gap of skilled workforce across sectors.

About ASEEM digital platform:

- The ASEEM portal aims to help skilled people find sustainable livelihood opportunities.
- Apart from recruiting a skilled workforce that spurs business competitiveness and economic growth, the Artificial Intelligence-based platform has been envisioned to strengthen their career pathways by handholding them through their journeys to attain industry-relevant skills and explore emerging job opportunities, especially in the post COVID era.
- Besides identifying the major skills gap in the sectors and providing a review of global best practices, ASEEM will provide employers a platform to assess the availability of skilled workforce and formulate their hiring plans.

- It refers to all the data, trends and analytics which describe the workforce market and map demand of skilled workforce to supply.
- It will provide real-time granular information by identifying relevant skilling requirements and employment prospects.

Who developed ASEEM?

- ASEEM, also available as an App, is developed and managed by the National Skill Development Corporation (NSDC) in collaboration with Bengaluru-based company Betterplace, specialising in blue-collar employee management.

The portal consists of three IT-based interfaces:

- Employer Portal – Employer onboarding, Demand Aggregation, candidate selection
- Dashboard – Reports, Trends, analytics, and highlight gaps
- Candidate Application – Create & Track candidate profile, share job suggestion

ASEEM will be used as a match-making engine to map skilled workers with the jobs available

1. For employees/workers:

- The portal and App will have provision for registration and data upload for workers across job roles, sectors and geographies.
- The skilled workforce can register their profiles on the app and can search for employment opportunities in their neighbourhood. o

2. For employers:

- Through ASEEM, employers, agencies and job aggregators looking for skilled workforce in specific sectors will also have the required details at their fingertips.

3. For governments:

- It will enable policymakers to take a more objective view of various sectors.

7. Chartered Accountants' Day

- Chartered Accountants Day or CA Day is celebrated on July 1 in India annually to commemorate the establishment of the Institute of Chartered Accountants of India (ICAI) by the Indian Parliament in 1949.

Institute of Chartered Accountants of India (ICAI)

- ICAI is India's national professional accounting body and also the second biggest accounting organization in the world.
- It is the sole licensing and regulatory body for the financial audit and accounting profession in India, and its recommendations are followed by everyone – from the National Financial Reporting Authority (NFRA) to companies and accounting organizations.
- The ICAI is a statutory body for regulating the accounting profession in India.

- It functions under the administrative control of the Ministry of Corporate Affairs, Government of India.
- The affairs of the ICAI are managed by a Council in accordance with the provisions of the Chartered Accountants Act, 1949 and the Chartered Accountants Regulations, 1988.

8. Community canteens 2.0

Context:

- The article analyzes the potential benefits of introducing a community canteen scheme.

Existing schemes:

- Given the fact that the lack of access to food during the lockdown period caused immense hardship to some sections of the society, the government has recently announced a three-month extension to the Pradhan Mantri Garib Kalyan Ann Yojana. The government would provide 5 kg of grains and 1 kg of chickpea monthly to about 800 million beneficiaries across the country.
- The implementation of the 'One Nation, One Ration' (ONOR) scheme has also helped improve access to subsidised grains for migrant workers.

Inadequate measures:

- The article argues that while the existing measures are welcome, they may fall short of reaching all sections of the vulnerable population.
- Most migrant workers do not live with families and many do not cook their meals and a significant number rely on roadside vendors and dhabas. Without access to cooking arrangement or fuel, only subsidised grains are not a sufficient solution to ensure nourishment.
- The announced measures would be insufficient to attract the migrant workers back to the urban areas as access to affordable food remains a major concern.

Community Canteens:

- The article argues for the implementation of the community canteen scheme.
 - * More than 10 States have run community canteens. Some notable examples include the Amma Canteens in Tamil Nadu and Indira Canteens in Karnataka. A major drawback of the existing community canteens is that these canteens rely on continuous government support for their sustenance as meals are usually priced unsustainably low at Rs. 5-10 per plate.
- The Central Government could extend initial capital support while the implementation at the State level should be led by urban local bodies or municipal corporations, in collaboration with private entities as service providers.

Arguments in favor of community canteens:

- A renewed approach to community canteens would not only help achieve nutritional security for migrant workers but would also create new jobs, save fiscal resources, support economic growth and promote sustainable diets and agriculture.

Nutritional security:

- Community canteens could be operationally self-sustainable by pricing the nutritious meals at Rs. 15-20 per plate. This would still be lower than what most dhabas and roadside vendors charge for a meal.
- Hence with an initial social investment of around Rs. 26,500 crore towards existing canteens and kitchens, it would be possible to serve three nourishing meals a day to the 30 million urban poor workers.
- The community canteens would also help bridge the nourishment gap among poor urban workers.

Saving fiscal resources:

- If all urban migrant workers rely on community canteens instead of ONOR, the initial investment in the community canteens pays back itself in less than six years, as it helps avoid the potential food subsidy outlay due to ONOR, leading to annual savings of about Rs. 4,500 crore thereafter.

Jobs and growth:

- Community canteens could also contribute to jobs and growth.
- The 60,000 canteens, each serving about 500 beneficiaries on average, would generate more than 1.2 million jobs to serve 90 million meals a day.

Sustainability:

- The government could leverage community canteens to shift diets and agriculture production towards more sustainable and sustainably harvested food crops.
- These canteens can incorporate low-cost yet nutritious and environmentally sustainable food items in the people's diet by bringing in coarse grains such as millets and sorghum into the dietary patterns.
- These canteens would create the demand signals for the farmers to diversify their crops and focus on sustainably harvested produce.

Conclusion:

- Providing access to nutritious, affordable and safe food for all should be a top priority for the administration and a renewed approach to community canteens could help the administration in this direction.

9. Fiscal Council

A fiscal council is a publicly-funded entity staffed by non-elected professionals mandated to provide nonpartisan oversight of fiscal performance and/or advice and guidance – from either a positive or normative perspective – on key aspects of fiscal policy

- A fiscal council, at its core, is a permanent agency with a mandate to independently assess the government's fiscal plans and projections against parameters of macroeconomic sustainability, and put out its findings in the public domain.

Argument made in support of a fiscal council

- The expectation is an open scrutiny will keep the government on the straight and narrow path of fiscal virtue and hold it to account for any default.
- The fiscal council could be a solution because it will give an independent and expert assessment of the government's fiscal stance, and thereby aid an informed debate in Parliament.
- In its role as a watchdog, it will prevent the government from gaming the fiscal rules through creative accounting.

Fiscal council's mandate:

- As per the model suggested by the FRBM Review Committee, the fiscal council's mandate will include, but not be restricted to,
 - * Making multi-year fiscal projections.
 - * Preparing fiscal sustainability analysis.
 - * Providing an independent assessment of the Central government's fiscal performance and compliance with fiscal rules.
 - * Recommending suitable changes to fiscal strategy to ensure consistency of the annual financial statement.
 - * Taking steps to improve quality of fiscal data.
 - * Producing an annual fiscal strategy report which will be released publicly.

Recommendations from various Committees in the past

- It was first recommended by the Thirteenth Finance Commission and was subsequently endorsed by the Fourteenth Finance Commission and then by the FRBM (Fiscal Responsibility and Budget Management) Review Committee headed by N.K. Singh.

International Examples

- According to the International Monetary Fund (IMF), about 50 countries around the world have established fiscal councils with varying degrees of success.
- The Canadian Parliament enacted in 2006 the Federal Accountability Act (FAA). Among other things, the FAA established the Parliamentary Budget Officer (PBO), modelled on the US Congressional Budget Office.
 - * The mandate of the PBO is to provide the legislature objective analysis of the nation's finances, the government's estimates, and trends in the economy and, upon request by a committee or parliamentarian, estimates of the cost of any proposal for matters over which the Parliament has jurisdiction.

- * The FAA provides for free and timely access to government data and information needed to fulfill the PBO's mandate. The PBO promotes value by relying on assistance from experts, accountability through dissemination of its products.
- Countries with independent fiscal councils tend to produce relatively more accurate budget forecasts and stick better to fiscal rules, research suggests

Arguments against a Fiscal Council:

- The government is required to submit to Parliament a 'Fiscal Policy Strategy Statement' (FPSS) to demonstrate the credibility of its fiscal stance. Yet, seldom are there in-depth discussions in Parliament on the government's fiscal stance. The problem clearly is the lack of demand for accountability.
 - * So, another instrumentality such as a fiscal council for the supply of accountability cannot be a solution.
- The fiscal council will give macroeconomic forecasts for the budget, and if the Ministry decides to differ it is required to explain why it has differed.
 - * It is argued that it better be left to the Finance Ministry to defend its numbers rather than forcing it to privilege the estimates of one specific agency.
- Forcing the Finance Ministry to use someone else's estimates will dilute its accountability.
 - * If the estimates go awry, it will simply shift the blame to the fiscal council.
- There is already an institutional mechanism by way of the Comptroller and Auditor General (CAG).

Context:

- In the current economic slowdown in the country owing to the COVID-19 pandemic and the consequent lockdown, economists opine that the government needs to borrow and spend more now in order to support vulnerable households and engineer an economic recovery.
- Many economists have faulted the government's fiscal stance, arguing that this is no time for restraint; the government should spend more to stimulate the economy by borrowing as may be necessary, but at the same time come out with a credible plan for fiscal consolidation post-COVID-19 in order to retain market confidence.

What is holding the government back from spending more?

- Borrowing would mean a steep rise in debt which will jeopardise medium-term growth prospects, an issue prominently flagged by all the rating agencies in their recent evaluations.
- It is the fear of market penalties that is holding the government back from borrowing and spending.

Conclusion:

- Experience and empirical evidence suggest that delegating macroeconomic forecasting to an independent fiscal council can indeed reduce forecasting bias and, therefore, the deficit bias that would otherwise follow.
- The government can signal its virtue by establishing some new institutional mechanism for enforcing fiscal discipline, such as for example a fiscal council.
- The best way forward is to start small and scale it up if it proves to be a positive experience.

10. GST e-invoice scheme:

- GST e-invoice is the introduction of the digital invoice for goods and services provided by the business firm generated at the government GST portal.
- It is a system in which B2B invoices are authenticated electronically by GSTN for further use on the common GST portal.
- All invoice information will be transferred from this portal to both the GST portal and e-way bill portal in real-time.
- Therefore, it will eliminate the need for manual data entry while filing ANX-1/GST returns as well as generation of part-A of the e-way bills, as the information is passed directly by the IRP to GST portal.

11. Guntur Chillies

- Guntur and its surrounding areas in the state of Andhra Pradesh are well known for chillies cultivation.
- The quality of this farm produce is internationally renowned for its uniqueness in taste and brand.
- Guntur chillies are exported to Canada, Asia and Europe.
- Guntur district is the main producer and exporter of most varieties of chillies and chilli powder from India to countries like Sri Lanka, Bangladesh, Middle East, South Korea, U.K. and USA & Latin America.
- Chillies have various colors and flavors because of the level of Capsaicin in them.
- Guntur chillies form an important part of curries and various popular dishes of Andhra Pradesh.
- The main trading place for Guntur chilli is called Guntur Mirchi Yard which is also Asia's largest dried red chilli market.
- The Guntur Sannam Chilli is a variety which has the Geographical Indication (GI) Tag.
 - * Guntur Sannam chilli requires a warm and humid climate for its growth and dry weather during the period of maturation.
 - * Sannam chilli belongs to the variety of Capsicum annum.
 - * This chilli has a thick skin and it is generally long (5 – 15 cm in length).

Key Fact

- Globally, India stands first in the production of chilli and in India, Andhra Pradesh leads in its production.
 - * Andhra Pradesh alone commands 46% of the chilli production in India.

Context:

- For the first time, the Indian Railways loads Special Parcel Train to Bangladesh carrying Dry Chillies from Reddipalem in Guntur District of Andhra Pradesh state.

12. Hydrogen-CNG (H-CNG)**Context:**

- The Ministry of Road Transport and Highways invites public suggestions on the inclusion of H-CNG as an automotive fuel.

What is H-CNG?

- H-CNG is a blend of hydrogen and CNG, the ideal hydrogen concentration being 18%.
- This blended gas provides the advantages of both CNG (compressed natural gas) and hydrogen.
- Tests conducted by the Automotive Research Association of India and the IOCL have found that compared to conventional CNG, use of H-CNG can reduce the emission of carbon monoxide up to 70%, besides enabling up to 5% savings in fuel.
- In 2018, the Environment Pollution Prevention and Control Authority (EPCA) had recommended to the Supreme Court that Delhi's buses switch to H-CNG from the current CNG being used as fuel.

13. Nano-based Agri-input and food products in India**Context:**

- The Centre released guidelines for evaluation of nano-based agri-input and food products in the country.
- The guidelines have been prepared jointly by
 - * Department of Biotechnology (DBT), Ministry of Science and Technology,
 - * Ministry of Agriculture and Farmers' Welfare,
 - * Food Safety and Standards Authority of India (FSSAI),
 - * Ministry of Health and Family Welfare through inter-ministerial efforts coordinated by the DBT.

Details

- These guidelines are aimed at assisting in making policy decisions by providing information on the existing regulations for nano-based products in agriculture and food and also to ensure quality, safety and efficacy of the targeted products.
- The present 'Guidelines' apply to Nano-Agri-Input Products (NAIPs) and Nano-Agri Products (NAPs).

* A NAIP is defined as an agricultural input preparation containing nanomaterials intended for external and internal applications (through soil, seed, foliar, and drip in crops as well as by other means) on crop for the purpose of agricultural farming.

* A NAP is defined as an agricultural preparation containing nanomaterials intended for consumption or applications in food/feed and their supplements as well as nutraceutical delivery

* NAIPs and NAPs are products in a submicroscopic form used in agriculture and allied sectors for achieving varied goals like pest and disease prevention, nutrition, growth regulation, efficient packaging and storage among others.

- These 'Guidelines' also apply to nanocomposites and sensors made from nanomaterials and those that require direct contact with crops, food and feed for data acquisitions. These guidelines provide assistance on specific requirements for NAIPs and NAPs.

Significance

- Use of chemical inputs in crops can be controlled, as use of nano-nutrients can reduce nutrient run-off into ground and surface water and can thus reduce environmental pollution.
- These guidelines would help policy makers and regulators to frame effective provisions for future novel nano-based products in the agri-input and food sectors of India.
- They will also encourage the Indian innovators and industries to develop and commercialize new nano-based formulations and products in these sectors

14. National Agricultural Higher Education Project (NAHEP)

- NAHEP has been formulated by Indian Council of Agricultural Research (ICAR)
- The project is proposed on 50:50 cost sharing basis between the World Bank and the Government of India
- Overall, the project aims to develop resources and mechanism for supporting infrastructure, faculty and student advancement, and providing means for better governance and management of agricultural universities, so that a holistic model can be developed to raise the standard of current agricultural education system that provides more jobs and is entrepreneurship oriented and on par with the global agriculture education standards.

15. National Fish Farmers Day

- National Fish Farmers Day is observed on 10th July every year in honour of scientists Dr. K. H. Alikunhi and Dr. H.L. Chaudhury.

* These two scientists had successfully demonstrated the technology of induced breeding (Hypophysation) in Indian Major Carps on 10th July 1957 at the erstwhile 'Pond Culture Division' of CIFRI at Cuttack, Odisha (presently Central Institute of Freshwater Aquaculture, CIFA, Bhubaneswar).

- The event aims to draw attention to changing the way the country manages fisheries resources to ensure sustainable stocks and healthy ecosystems.
- Every year, the event is celebrated by felicitating outstanding fish farmers, aquapreneurs & fisher folks in recognition of their accomplishments in the field and their contribution in the growth of the fisheries sector in the country.

* Fishermen and fish farmers across the nation participate in the event apart from officials, scientists, professionals, entrepreneurs and stakeholders.

16. National Logistics Law

Context:

- The commerce ministry is considering to replace the Multi-Modal Transportation of goods act with a full-fledged national logistics law with a view to promote growth of the sector.
- The union government is considering framing a law-- National Logistics Law Efficiency and Advance Predictability Act—to streamline the logistics eco-system in the country.

Multimodal transportation

- It refers to a combination of more than one mode of movement, such as rail, road or sea, for end-to-end delivery of goods.

What is Logistics?

- Logistics is the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services and related information from point of origin to point of consumption for the purpose of conforming the customer requirement.
- It encompasses activities like freight transportation, warehousing, material handling, protective packaging, inventory control, order processing, marketing, forecasting and customer service.

Why reform is a must?

- India's logistics sector is highly fragmented and the government aims to reduce the logistics cost from the present 14% of the Gross Domestic Product to less than 10%.
- As for as India is concerned, its infrastructure can be viewed as a major hindrance to the logistics business.
 - * The poor infrastructure and inefficient transport services result in inefficient movement of freight and delays resulting in enormous amount of time, and therefore money.

* Such inefficient and unreliable transport and logistics systems make the country's export less competitive.

- Higher logistics costs lead to higher export costs, which directly impacts the competitiveness of Indian goods in international markets.

Significance

- The move assumes significance as high logistics cost impacts the competitiveness of domestic goods in the international market.
- Effective implementation of the policy would help provide an impetus to trade, enhance export competitiveness, and improve India's ranking in the Logistics Performance Index.

17. NHAI to Rank Roads for Quality Service

Context:

- In its effort to improve the quality of roads, the National Highways Authority of India (NHAI), under the Ministry of Road Transport and Highways, has decided to undertake performance assessment and ranking of the highways in the country.

Details:

- The assessment audit and ranking of the National Highways are aimed to take corrective recourse, wherever needed, to improve the quality and provide a higher level of service to highway commuters.
- The assessment parameters are based on different international practices and studies for benchmarking highway performances in the Indian context.
- The criteria for the assessment have been broadly categorised in three main heads:
 - * Highway efficiency (45%)
 - * Highway safety (35%)
 - * User services (20%)
- Additionally, important parameters like operating speed, access control, time taken at toll plaza, road signages, road markings, accident rate, incident response time, crash barriers, illumination, availability of Advanced Traffic Management System (ATMS), functionality of structures, provision for grade-separated intersections, cleanliness, plantation, wayside amenities and customer satisfaction will also be considered while conducting the assessment.

Significance

- The score obtained by each Corridor in each of the parameters will provide feedback and corrective recourse for higher standards of operation, better safety and user experience to improve existing highways.
- This will also help in identifying and filling gaps of design, standards, practices, guidelines and contract agreements for other NHAI projects.

18. Open Credit Enablement Network (OCEN)

- The credit protocol infrastructure is known as Open Credit Enablement Network (OCEN).
- Indian Software Products Industry Round Table (ISPIRT) has developed the platform.
- It will mediate the interactions between loan service providers (usually fintechs and mainstream lenders) including all large banks and NBFCs. This will involve multiple banks and thousands of MSMEs.
- Meanwhile, private equity and venture capital players, angel investors, high net worth individuals and others also could be part of this exercise as investors.
- With this, credit is expected to become more accessible for a large number of entrepreneurs and small businesses in India.
- It is believed that this would lead to the democratisation of credit.

19. Port development- Making trade more digitised

Context:

- The article speaks about interventions that have positively developed the port sector but also factors gaps that need to be bridged

Background

- India's exports in April 2020 contracted by 60% year-on-year. There was a 37% fall in the units handled by the Jawaharlal Nehru Port in April 2020 as compared to April 2019.
- The steep decline in world trade lays bare the significance of a more digitised trading environment, with minimal manual touch points.
 - * Globally, therefore digitisation of procedures and lower human intervention are the two major pillars that drive trade across borders.
- With the pandemic, the slump in international trade is unpredictable. As countries slowly emerge out of this, new demand and supply chains will form, that will be located in countries that re-orient their existing trade structures.

Steps taken by India to digitize and simplify its procedures

India ratified Trade Facilitation Agreement of the World Trade Organization in April 2016 with reforms focused on infrastructural upgradation, digitisation and automation.

- Schemes which aimed at reducing the time and cost of clearance of goods includes
 - * Direct Port Entry and Direct Port Delivery
 - * Radio Frequency Identification system
 - * Single Window Interface for Facilitating Trade
- The Port Community System was aimed at seamlessly integrating all maritime trade-related stakeholders on a single platform.
- e-SANCHIT (e-Storage and computerised handling

of indirect tax documents) was aimed at reducing human intervention.

Impact of these initiatives

- These and other interventions speak of the government's focus on effective logistics and Smooth Export-Import (EXIM) procedures at Indian borders.
- This resulted in continuous improvement in India's Ease of Doing Business ranking, particularly in the 'trading across borders' parameter on which it ranked 68 in 2020.

Gaps to be filled

- While different interventions of the government have positively developed the port ecosystem, there are still some gaps that need to be bridged.
- Some of the delays in moving to a paperless trade ecosystem can be attributed to gaps in the effective implementation of digital platforms. The shortcomings in the functionality of the digital system and technical glitches result in limited use of the system.
- The lack of connectivity/message exchanges between different stakeholders' systems results in delayed cargo clearance.
 - * Multiple stakeholders in the logistics and trade ecosystem include customs brokers, shipping lines, freight forwarders, transport operators, port custodians, container freight stations and border management authorities.
- The lack of awareness, acceptability and adaptability of new initiatives among the users is a concern, due to issues with respect to training and capacity building amongst the users, restricting the optimal utilisation of digital platforms.
- There is also the issue of standardization and coordination of processes across ports.

Way forward:

- The present crisis presents an opportunity to develop new systems and enhance existing platforms.
 - * Measures to facilitate and expedite the clearance process to make it more automated, online and paperless should be promoted.
 - * There is a need to further augment the digital infrastructure in the trade ecosystem.
 - * Enhanced integration of systems and coordination between the different stakeholders with the sharing of input data between them on a real-time basis should be promoted.
- Promoting the use of a multi-stakeholder single platform like the Port Community System can streamline EXIM procedures.
- These efforts will be instrumental towards improving India's trading ecosystem and achieving the desired target of Ease of Doing Business (ranking under 50). The more digitised our trade facilitation infrastructure, the more immune we will be to future disruptions.

20. Railways opened doors for private players

Context:

- The Ministry of Railways has invited Request for Qualifications (RFQ) for private investors to operate train services over 100 origin-destination routes.
 - * RFQ is the first step of the process, in which it will be gauged who are the parties eligible, whether they have the technical know-how or not, etc. profiles of the companies will be scrutinized under this process.
 - * After the RFQ, there would be an RFP (Request for Proposal), which can be called the bidding process
- The list of routes has been prepared by the Indian Railways.
- The railways said that much of trains will be manufactured in India as a part of the 'Make in India' initiative and the private players will ensure the financing, operations and maintenance of the modern passenger trains.
- The trains should have a minimum of 16 coaches. They will be allowed to run at a maximum speed of 160 kmph.

Bibek Debroy Committee

- In 2015, the expert panel chaired by Bibek Debroy constituted by the Ministry of Railways, recommended that the way forward for the railways was "liberalisation and not privatisation" in order to allow entry of new operators "to encourage growth and improve services."
- It also made it clear that a regulatory mechanism was a prerequisite to promote healthy competition and protect the interests of all stakeholders.

Why Private Players?

- The objective of this initiative is to introduce modern technology rolling stock with reduced maintenance, reduced transit time, boost job creation, provide enhanced safety, provide world-class travel experience to passengers, and also reduce demand supply deficit in the passenger transportation sector
- The overall intension, however, is to introduce a new train travel experience for passengers who are used to travelling by aircraft and air-conditioned buses.
- From a passenger perspective, there is a need for more train services, particularly between big cities.
- The railway ministry has decided to attract 30000 crores of private sector investment which will be the first initiative of private investment for operating passengers' trains over the network of the Indian Railways.

Examples from the past

- The IRCTC, in which the government is the majority shareholder, was given pilot Tejas operations in the

New Delhi-Lucknow, and Mumbai-Ahmedabad sectors.

- These were the first trains allowed to be run by a 'non-Railway' operator.

Who will do what?

- Private operators can choose their technology and determine the fare.
 - * Private players will only get on-board services — entertainment, food, cleanliness, passenger amenities, fare collection
 - * In return, private operators will have to pay fixed haulage charges, energy charges on the basis of actual consumption, and a share of their gross revenue to the Railways
- But certain aspects like safety, time-tabling of trains etc. will stay with the railways
 - * Keeping the time-tabling with the Railways would be important to ensure that all the busy time slots are not taken by private players
 - * Private players will not get operations — driver, guard, safety certification, infrastructure will remain with railways

Why is the move significant for Indian Railways?

- For the Railways, one of the largest organisations in the country operating not just trains for passengers and freight, but also social institutions such as hospitals and schools, it represents a radical change.
- According to data maintained by the World Bank, in 2018 India had 68,443 route kilometres of railways. It is among the four largest rail networks in the world, along with the United States, China, and Russia, although every kilometre of track in India covers geographical area much less than Germany, Russia, China or Canada, indicating scope for expansion.
- An analysis of passenger and freight operations in the Railways, taken note of by the Economic Survey and the erstwhile Planning Commission, showed that a steady shift to other modes of travel for both categories was affecting economic growth: by as much as 4.5% of GDP-equivalent.
- It was estimated that a one rupee push in the railway sector would have a forward linkage effect of increasing output in other sectors by ₹2.50.
 - * A forward linkage is created when investment in a particular project encourages investment in subsequent stages of production.
- The Debroy committee also noted that passengers were willing to pay more, if they had guaranteed and better quality of travel and ease of access.
 - * The move to augment capacity virtually overnight through private capital in train operations pursues this line of reasoning.

Concerns

- Train services operated by Indian Railways cover several classes of passengers, meeting the social service obligation to connect remote locations, and adopting the philosophy of cross-subsidy for passengers in low-cost trains through higher freight tariffs.
- Private operators are not expected to shoulder the burden of universal service norms, and will focus on revenue. Even the first IRCTC-run trains have a higher cost of travel between Lucknow and Delhi than a Shatabdi train on the same route that almost matches it for speed.

Split responsibility

- In the envisaged structure, the responsibility of the private investor ends with investment in the procurement and maintenance of coaches. Train operation, safety and dealing with everyday problems rest with the Railways.
- In such a scenario when the coaches are owned by the investor but operated by the Railways and its staff, it would be difficult to fix responsibility. The envisaged structure as per the current provisions will lead to dual control and split responsibility.

Conflict situation:

- The sharing of existing depots and yard facilities between the Indian railways and the concessionaire might result in conflict and have repercussions in terms of maintenance and operation. This could also have a detrimental impact on the safety of operations.
- Provision of an independent regulator to resolve disagreement, discords and disputes will not solve day-to-day problems of dichotomy unless the basic issues are resolved.

Way forward

- The Rakesh Mohan committee report had pointed out that the international experience on privatising railways showed that it was “exceedingly difficult and controversial” — and keeping in mind the social welfare concerns, this should be treated as an opportunity to explore what will work, while keeping the flexibility to adjust the framework and fine-tune the rules and regulations.

PPP model of metro railway services:

- The government need not take a dual role of a facilitator as well as a participant and instead follow the PPP model employed in metro railway services.
 - * Under this model, the concessionaire is solely responsible for daily maintenance, operation, passenger amenities and staff issues. The State government steps in when it comes to land, power, permissions, law and order, etc.
 - * Fare determination is in consultation with the government.

Involving IRCTC:

- Instead of a private entrepreneur, the existing Indian Railway Catering and Tourism Corporation (IRCTC) can be utilized to realize the objectives sought under the current proposals. This would entail several advantages.
 - * As per the Eligibility Conditions specified in “Request for Qualification (RFQ)”, Public Undertakings such as the IRCTC are eligible to participate in tendering for this project. A government investment in the IRCTC, a government undertaking, will help the government retain control of the Indian Railways as a strategic resource for the nation and provide a vital public good.
 - * The eligibility condition also stipulates operation & maintenance experience in maintaining rolling stock. IRCTC has gained experience in running the Tejas Express trains. The IRCTC is well-suited for this role.
 - * There will be ‘unity of command’ in maintenance, operation and passenger services under the single administration of the Railways and its undertaking.

21. Rewa Solar Project**Context:**

- A 750 MW solar power project in Rewa district, Madhya Pradesh was inaugurated by the Prime Minister.

Details:

- It was developed by the Rewa Ultra Mega Solar Limited (RUMSL), a Joint Venture Company of Madhya Pradesh UrjaVikas Nigam Limited (MPUVN), and Solar Energy Corporation of India (SECI), a Central Public Sector Undertaking.
- Solar energy would play a major role in achieving self-reliance in energy, essential for an ‘Atmanirbhar Bharat’ (self-reliant India).
- It is in line with India’s commitment to attain the target of 175 GW of installed renewable energy capacity by 2022 including 100 GW of solar installed capacity.
- In 2014, the price of solar power was ₹7-8 per unit. Today, it is ₹2.15-2.30 per unit.

Significance

- This project will reduce carbon emission equivalent to approximately 15 lakh tons of CO₂ per year.
- The Rewa Project has been acknowledged in India and abroad for its robust project structuring and innovations.
- Its payment security mechanism for reducing risks to power developers has been recommended as a model to other States by the Ministry of New and Renewable Energy (MNRE).

- The project is also the first renewable energy project to supply to an institutional customer outside the State, i.e. Delhi Metro, which will get 24% of energy from the project with the remaining 76% being supplied to the State DISCOMs of Madhya Pradesh.

Concerns:

- India's installed base of this green power source is about 35 gigawatts (GW), and its projected addition of capacity until 2024 is estimated to be of the order of 50 GW. Viewed against the stated goal of installing 100 GW of solar power by 2022, there could be a sharp deficit in solar power.
- There is a lack of a domestic solar manufacturing sector that can deliver increasing volumes of quality photovoltaic cells, modules and associated equipment.
- Experts have raised concerns over the lack of appropriate official policies to meet the high ambitions set for the solar energy sector.
- The low domestic cell manufacturing capacity at 3.1 GW/year (for 2019) has resulted in heavy reliance on China for solar energy-related equipment.

Way forward:

Strategic status:

- India should consider making solar energy a strategic sector, giving it as much importance as defence. This would ensure appropriate policy measures for the growth of this critical sector.

Appropriate policy measures:

- There is a need for integrated policies for the sector fully supported by States.
- India's solar strategy should look at tapping the best available technology and resources globally and providing impetus to domestic manufacturing.
- The government should introduce measures to aid competitive domestic manufacturing. The industry must get help to set up facilities and avail low-cost financing and be able to invest in intellectual property

Innovation:

- A forward-looking programme should also look at emerging trends in deploying solar innovatively. These include newer technologies such as aesthetic photovoltaic window and roof tiles for buildings, multi-role urban structures, and greater use of residential and commercial buildings to deploy more panels.
- This would open up new avenues for growth in the sector, which would facilitate employment and growth opportunities in India.

Global leadership:

- As the architect of the International Solar Alliance, India needs to show leadership to advance the manufacture and absorption of solar photovoltaic infrastructure in low- and middle-income countries.

22. Rubber Act

Context:

- Concerns among the rubber farmers that the Centre might repeal the Rubber Act of 1947.

Rubber Board

- It is a statutory body constituted by the Government of India, under the Rubber Act 1947
- It functions under the administrative control of Ministry of Commerce and Industry.
- The Board's headquarters is located at Kottayam in Kerala
- The Board will promote such measures as it thinks fit for the development of the rubber industry

Functions

- Undertaking, assisting or encouraging scientific, technological and economic research in Rubber sector
- The supply of technical advice to rubber growers
- Improving the marketing of rubber
- To advise the Central Government on all matters relating to the development of the rubber industry, including the import and export of rubber;

Concerns

- Withdrawal of the Act would empower the Centre to disband the board and end the present system of rubber farming
- With the repeal of the Rubber Act, there will be no restrictions or oversight on prices, trade, exports and imports.
- Without the Rubber Board, which falls under the purview of the Rubber Act, there will be no research, subsidies, an extension of agriculture and technical assistance in the rubber sector.

Problems of rubber Industry

- The trade policy reforms initiated since 1991-92 and the consequent exposure to foreign competition through the multilateral and Regional Trade Agreement routes has reduced the profits
- The poor return and high labour cost has forced many of the growers, 75 per cent small and marginal farmers, to keep away from tapping
 - * Scarcity of tappers and high level of absenteeism, diversion of farmland to other non-farm activities, and the depleting size of holdings are other factors behind the decline in production.
- The tyre industry consumes 65-70 per cent of the rubber produced in the country. The unrestricted massive imports by tyre companies have also pushed down domestic demand
- The volatility of NR prices and the fluctuations in farm income have hit the conventional farm management practices including replanting.

Key Facts

- Kerala State alone produces about 90 percent of the total production in the country.

23. United Nations High-level Political Forum (HLPF) on Sustainable Development, 2020**Context:**

- NITI Aayog presents India's second Voluntary National Review at UN's High-Level Political Forum.

Details:

- The NITI Aayog presented India's second Voluntary National Review (VNR) at the United Nations High-level Political Forum (HLPF) on Sustainable Development, 2020.
- The India VNR 2020 report is titled "Decade of Action: Taking SDGs from Global to Local".

About the India VNR 2020 Report:

- The report is titled "Decade of Action: Taking SDGs from Global to Local".
- The report is a comprehensive account of the adoption and implementation of the 2030 Agenda in India.
- Apart from presenting a review of progress on the 17 SDGs, the report discusses at length the policy and enabling environment, India's approach to localising SDGs, and strengthening means of implementation.

About the United Nations HLPF:

- The HLPF meets annually in July for eight days under the auspices of the Economic and Social Council (ECOSOC) of the United Nations.
- The VNRs presented by Member States at the HLPF are a critical component of the review of progress and implementation of the 2030 Agenda and the SDGs.
- The establishment of the United Nations High-level Political Forum on Sustainable Development (HLPF) was mandated in 2012 by the outcome document of the United Nations Conference on Sustainable Development (Rio+20), "The Future We Want".
- The first meeting of the HLPF was in 2013. It replaced the Commission on Sustainable Development, which had met annually since 1993.
- The HLPF is the main United Nations platform on sustainable development and it has a central role in the follow-up and review of the 2030 Agenda for Sustainable Development the Sustainable Development Goals (SDGs) at the global level.
- The theme of the HLPF 2020 is "Accelerated action and transformative pathways: realizing the decade of action and delivery for sustainable development".

24. Vallarpadam Terminal**Context:**

- The Minister of State for Shipping reviewed the development activities of the Vallarpadam Terminal of Cochin Port.

About the Vallarpadam Terminal:

- The Vallarpadam Terminal of the Cochin Port is envisaged as the first trans-shipment port of India.
- It is officially known as the Kochi International Container Trans-shipment Terminal (ICTT).
- The trans-shipment facility on an Indian port is being developed to ensure that Indian cargo trans-ship through Indian ports.
- Trans-shipment Hub is the terminal at the port which handles containers, stores them temporarily and transfers them to other ships for the onward destination.
- The Vallarpadam Terminal is located strategically on the Indian coastline.

It successfully fulfils all the criteria which are needed to develop it as a trans-shipment hub which include:

- It is the best positioned Indian port with regard to proximity to International sea routes;
- It is located at the least average nautical distance from all Indian feeder ports;
- It entails connectivity which has multiple weekly feeder connections to all ports on the west & east coasts of India, from Mundra to Kolkata;
- It has proximity to key hinterland markets of India;
- It has the infrastructure to manage large ships and the capacity to scale it up as per requirement.

Significance

- The Vallarpadam Terminal of Cochin Port is proposed to be developed as the most preferred gateway for South India and the leading trans-shipment hub of South Asia.

25. Vriksharopan Abhiyan

- It is organised by the Coal Ministry.
- It is a large-scale plantation drive involving all coal/lignite PSUs.
- Going Green is the key thrust area of the coal sector involving maximization of green cover through ecological reclamation of mined-out areas and overburden dumps, plantation in and around mines and avenue plantation at suitable places.

26. World Youth Skills Day

Context:

- The World Youth Skills Day (WYSD) is observed on 15th July every year.

About WYSD:

- Designated by the United Nations General Assembly in 2014, the World Youth Skills Day is an opportunity for young people, Technical and Vocational Education and Training (TVET) institutions, and public and private sector stakeholders to acknowledge and celebrate the importance of equipping young people with skills for employment, decent work and entrepreneurship.
- The aim of WYSD is to recognize the strategic importance of equipping young people with skills for employment, decent work and entrepreneurship, and to highlight the crucial role of skilled youth in addressing current and future global challenges.
- The virtual event marking WYSD 2020 is organized by the Permanent Missions of Sri Lanka and Portugal to the UN, the Office of the Secretary-General's Envoy on Youth, UNESCO and ILO.
- Several virtual events focused on the theme of "Skills for a Resilient Youth" will take place.
- In India, this day also marks the fifth anniversary of the launch of the Skill India Mission

27. Rolling back the induced livelihood shock

Context:

- The article discusses the lockdown-induced livelihood shock and its impact on the poor and vulnerable sections.

Poverty estimation in India:

- India's poverty line has been based on unrealistically low thresholds leading to conservative poverty numbers. Irregular updating of official poverty lines and unavailability of data on consumption expenditure from National Sample Surveys in recent years have added to the ambiguity around poverty estimation in India.
- According to the household consumption expenditure reported in the Periodic Labour Force Survey (PLFS), 2017-18 and applying State-specific poverty lines (used by the erstwhile Planning Commission in 2011 based on the Tendulkar Committee recommendations, adjusted with current price indices), about 42% or around 56 crore people were 'officially' poor before the lockdown was announced.

Concerns:

Livelihood shock:

- The pandemic and the stringently enforced lockdown have had a devastating impact on India's labour class.
- There have been reports of a massive scale of falling

incomes and loss of means of livelihood. The livelihood shock to such a large proportion of the population is unprecedented in the nation's history.

- There could be severe implications with increasing hunger-related deaths and destitution, leading to social unrest and crime.

Increase in poverty:

- Around 20 crore people were within a narrow band of 20% above the poverty line implying that these people were only a few hundred rupees over the poverty line threshold. A modest dip in earnings — and hence a fall in consumption spending — would push a majority of them into poverty and hunger.
- The lockdown seems to have pushed such vulnerable sections into poverty.
 - * The extrapolation of the PLFS data extrapolated for the year 2020 suggests that about an additional 40 crore people were pushed below the poverty line due to the lockdown.
 - * Around 12 crores of this lockdown-induced newly poor are in urban areas and another 28 crore people in rural areas.

Poverty deepening:

- Those who were already poor are going to suffer a further worsening in their quality of life, a phenomenon known as poverty deepening.
- Even before the lockdown, around 16% of the population had per capita consumption expenditure of about a third of the poverty line.
- The lockdown would have pushed the already poor to extreme poverty.

Destabilization of the urban economy:

- Massive reverse migration flows out of the urban informal sector will hinder the economic recovery in the post-lockdown scenario.

Inadequate state responses:

- The article notes that the formal responses of the state to address the economic impact of the pandemic have been mostly inadequate and poorly conceived.
 - * The second economic stimulus package announces only a token increase of the National Rural Employment Guarantee Act (NREGA) wage by Rs. 20 (Rs. 182 to Rs. 202).
 - * The demand for work is anticipated to increase by 25% with the reverse migration-fuelled increase in rural labour supply. The additional grant made to the MGNREGS seems insufficient.

Policy failure:

- The article argues that the neo-liberal growth that India has experienced since the 1990s has been largely through the exploitation of the laboring class. The economy grew by paying less to workers and allowing surplus to accumulate in the hands

of the owners of the means of production, with the expectation that this would be reinvested.

- This model seems to have made the laboring class increasingly vulnerable, weakening their collective bargaining power, pushing them away from their native towns out of desperation, forcing them to accept any wage that is offered to them, making them live in conditions which take away their sense of dignity, and curtailing any social security benefit that could help them survive in times of difficulties.

Way forward:

- The article argues for specific policy measures to reverse the lockdown-created shock and stop it from snowballing into chronic poverty.

Rural specific schemes:

- A revamped, expanded NREGA needs to be made the fulcrum of the government's rural interventions.
- The revamped scheme would require providing 90 million workers guaranteed employment of 20 days of work/month for at least the next six months. This would entail an additional financial stimulus of Rs. 1.6-lakh crore.

Focussing on equity:

- Recent experience with respect to government schemes shows the inherent challenge of the exclusion of marginalised communities at the lowest strata of the hierarchy.
- Though universalisation of the Public Distribution System may be an ideal objective, there is a need for better equity focus in the implementation of such schemes.
- This would involve identification of the most vulnerable and including them into the programme before expanding it to the relatively better-off.

Stabilizing urban economy:

- Given the magnitude of the destabilisation in the urban economy, an urban employment guarantee programme becomes a dire necessity to stabilise the urban economy.
- A 'direct' employment programme implemented through municipal corporations could be introduced to guarantee 20 days of work. The wages could be fixed with a 30% premium over prevalent MNREGA benchmark average wage in the State.
- This programme can be used to develop key social infrastructure in urban areas including slum development, drinking water supply, toilet construction, parks and common areas, urban afforestation and social forestry. Such public works programmes can make a major difference in both the condition of public utilities and absorbing the spurt in demand for work in towns and smaller cities.

Reorienting policies:

- There is a need to alter the course of economic progress and reorient development programmes based on equity and sustainable development.

28. Grid Parity:

- Grid parity occurs when an alternative energy source can generate power at a levelized cost of electricity that is less than or equal to the price of power from the electricity grid.
- Reaching grid parity is considered to be the point at which an energy source becomes a contender for widespread development without subsidies or government support.

29. Indian Stamp Act, 1899 and Rules- Amendments

Context:

- The Amendments in the Indian Stamp Act, 1899 brought through the Finance Act, 2019.

Details:

- The amendments to the Act and Rules will enable states to collect stamp duty on securities market instruments at one place by one agency (through Stock Exchange or Clearing Corporation authorized by it or by the Depository) on one Instrument.
- This was done in order to facilitate ease of doing business and to bring in uniformity of the stamp duty on securities across States and thereby build a pan-India securities market.
- A mechanism for appropriately sharing the stamp duty with relevant State Governments has also been developed which is based on the state of domicile of the buyer.

The need for the amendments:

- * The present system of collection of stamp duty on securities market transactions led to multiple rates for the same instrument, resulting in jurisdictional disputes and multiple incidences of duty, thereby raising the transaction costs in the securities market and hurting capital formation.

Potential impact:

- * This rationalized and harmonized system through a centralized collection mechanism is expected to ensure minimized cost of collection and enhance revenue productivity.
- * Further, this system will help develop equity markets and equity culture across the length and breadth of the country, ushering in balanced regional development.

30. RBI moots comprehensive norms for sale of loans

Context:

- The Reserve Bank of India (RBI) has proposed a comprehensive set of norms for sale of loans by banks which could be either standard or sub-standard or non-performing assets (NPAs).

Details:

- This is a part of the overall exercise to deepen the market for lending.
- Observing that loan sales are carried out by lenders for reasons ranging from strategic sales to rebalancing their exposures or as a means to achieve resolution of stressed assets by extinguishing the exposures, the RBI said, "A dynamic secondary market for bank loans will also ensure proper discovery of credit risk pricing associated with each exposure, and will be useful as a leading indicator for impending stress, if any, provided that the volumes are sufficiently large."
- The revision in guidelines is an attempt to align the regulatory framework with the Basel guidelines on securitisation that have come into force effective January 1, 2018.
- At present, the guidelines for sale of loan exposures, both standard as well as stressed exposures, are spread across various circulars of the RBI.
- The move is aimed at building a robust secondary market for bank loans that could ensure proper price discovery and can be used as an indicator for impending stress.
- These guidelines will be applicable to commercial banks, all financial institutions, non-banking finance companies and small finance banks.
- The directions will be applicable to all loan sales, including sale of loans to special purpose entities for the purpose of securitisation.

Draft Norms for sale of loans by banks:

- The price discovery process has been deregulated to be as per the lenders' policy.
- Standard assets would be allowed to be sold by lenders through assignment, novation or a loan participation contract.
- The stressed assets, however, would be allowed to be sold only through assignment or novation. That is, stressed assets may be sold to any entity that is permitted to take on loan exposures by its statutory or regulatory framework.
- As per the draft norms, one of the key changes relates to differential treatment for Residential Mortgage Backed Securities (RMBS) compared to other securitisations in respect of prescriptions regarding minimum holding period (MHP), minimum retention requirements (MRR) and reset of credit enhancements.

Minimum Retention Requirements:

- It is also proposed to do away with the requirement of Minimum Retention Requirement (MRR) for sale of loans by lenders.
 - * MRR was introduced in order to ensure that the originator bank/NBFC has a continued interest in the securitised assets.

Minimum Holding Period:

- RBI is also planning to do away with the minimum holding period (MHP) for sale of loans.
 - * The bank guidelines and NBFC guidelines had each set out the minimum number of instalments that must have been received in respect of loans (categorised by maturity) before they can be securitised. This is the minimum holding period.
 - * As per the draft guidelines, the MHP (the minimum period for which an originator must hold the exposures before they can be transferred to a purchasing entity) will not be applicable to loans with tenor up to 24 months extended to individuals for agricultural activities where both interest and principal are due only on maturity.

Changes in definition of Securitisation:

- Significant changes have been proposed in securitisation norms which are aimed at development of a strong and robust market for such transactions.
 - * Securitisation is the conversion of an asset, especially a loan, into marketable securities, typically for the purpose of raising cash by selling them to other investors.
 - * Only transactions that result in multiple tranches of securities being issued reflecting different credit risks will be treated as securitisation transactions, and accordingly covered under these revised norms.
 - * The definition of securitisation has been modified to allow single asset securitisations.
 - * Securitisation of exposures purchased from other lenders has been allowed, according to the revised guidelines.
- The norm has prescribed a special case of securitisation, called Simple, Transparent and Comparable (STC) securitisations with clearly defined criteria and preferential capital treatment.

Auction based method for price discovery:

- In order to bring down the vintage of bad loans sold by lenders as well as to enable faster debt aggregation by Asset Reconstruction Companies (ARCs), lenders shall put in place board approved policy on adoption of an auction based method for price discovery.

- In particular, once bids are received, the lender shall first invite the ARC, if any, or in the absence of such an ARC, any other financial institution, if any, which has already acquired highest significant stake to match the highest bid.
- The RBI said the commitment of the ARC to redeem the securities shall be unconditional and not linked to the realisation of the assets.

31. **Special Liquidity Scheme for NBFCs and HFCs**

Context:

With a view to improving the liquidity position of NBFCs and HFCs, the Union Finance Minister had announced in March 2020 the launch of a Special Liquidity Scheme of Rs. 30,000 crore.

Details:

- The scheme is being launched through a Special Purpose Vehicle in the form of SLS Trust set up by SBI Capital Markets Limited (SBICAP).
- RBI will provide funds for the Scheme by subscribing to government-guaranteed special securities issued by the Trust.
- The total amount of such securities issued outstanding shall not exceed Rs. 30,000 crores at any point in time.
- The Government of India will provide an unconditional and irrevocable guarantee to the special securities issued by the Trust.
- Any NBFC including Microfinance Institutions registered with RBI (excluding those registered as Core Investment Companies) and any HFC registered with the National Housing Bank (NHB) complying with the following broad conditions will be eligible to raise funding from the said facility:
 - * Compliance with RBI regulations on Capital adequacy
 - * Net NPA is less than 6% as on 31.03.2019
 - * Net profit in at least one of the two preceding financial years
 - * Rated as investment grade by a rating agency
 - * Is not reported under SMA-1 or SMA-2 category by any bank for their borrowing during the period one year prior to 01.08.2018
- The Scheme will remain open for 3 months for making subscriptions by the Trust.
- The period of lending (CPs/NCDs of NBFCs/HFCs for a short duration of up to 90 days) by the Trust shall be for a period of up to 90 days.
- The financing would be used by the NFBCs/HFCs only to repay existing liabilities and not to expand assets.
- Further, those market participants who are looking to exit their standard investments with a residual maturity of 90 days may also approach the SLS Trust.

- This facility is a part of the Government of India and RBI's efforts to alleviate the concerns of the market participants on the availability of funds to the sector.

32. **Consumer Protection Act, 2019**

The new Consumer Protection Act was passed by Parliament in 2019. It replaces the Consumer Protection Act, 1986.

Need for the new act:

- The Digital Age has ushered in a new era of commerce and digital branding, as well as a new set of customer expectations. Digitisation has provided easy access, a large variety of choices, convenient payment mechanisms, improved services and shopping as per convenience. However, there are also associated challenges related to consumer protection.
- To help address the new set of challenges faced by consumers in the digital age, the Indian Parliament passed the landmark Consumer Protection Bill, 2019 which aims to provide timely and effective administration and settlement of consumer disputes.

Details:

- Consumer Protection Act, 2019 is a law to protect the interests of the consumers. This Act provides safety to consumers regarding defective products, dissatisfactory services, and unfair trade practices.
- The basic aim of the Consumer Protection Act, 2019 is to save the rights of the consumers by establishing authorities for timely and effective administration and settlement of consumers' disputes.

Rights of the consumers:

- Consumers have the right to information on various aspects of goods and services. This could be information about the quantity, quality, purity, potency, price, and standard of goods or services.
- To be protected from hazardous goods and services. Right to protection against goods and services that can be dangerous to life and property.
- To be protected from unfair or restrictive trade practices.
- Consumers have the right to access a variety of goods and services at competitive prices.
- Consumers should have the right to redressal.

Salient Provisions of Consumer Protection Act

New definition of consumer:

- The new Act has widened the definition of 'consumer'.

Definition of consumer:

- As per the Act, a person is called a consumer who avails the services and buys any good for self-use. Worth to mention that if a person buys any good or avails any service for resale or commercial purposes, he/she is not considered a consumer. This definition covers all types of transactions i.e. offline and online through teleshopping, direct selling or multi-level marketing.

Central Consumer Protection Authority:

- The Act proposes the establishment of the Central Consumer Protection Authority (CCPA) as a regulatory authority.
- The CCPA will protect, promote and enforce the rights of consumers and regulate cases related to unfair trade practices, misleading advertisements, and violation of consumer rights.
- CCPA would be given wide-ranging powers.
 - * The CCPA will have the right to take suo-moto actions, recall products, order reimbursement of the price of goods/services, cancel licenses, impose penalties and file class action suits.
 - * The CCPA will have an investigation wing to conduct independent inquiry or investigation into consumer law violations.

Consumer Disputes Redressal Commission:

- The Act has the provision of the establishment of Consumer Disputes Redressal Commissions (CDRCs) at the national, state and district levels to entertain consumer complaints.
- As per the notified Rules, the State Commissions will furnish information to the Central Government on a quarterly basis on vacancies, disposal, the pendency of cases and other matters.
- The CDRCs will entertain complaints related to:
 - * Overcharging or deceptive charging
 - * Unfair or restrictive trade practices
 - * Sale of hazardous goods and services which may be hazardous to life.
 - * Sale of defective goods or services
- As per the Consumer Disputes Redressal Commission Rules, there will be no fee for filing cases up to Rs. 5 lakh.

E-Filing of Complaints:

- The new Act provides flexibility to the consumer to file complaints with the jurisdictional consumer forum located at the place of residence or work of the consumer. This is unlike the earlier condition where the consumer had to file a complaint at the place of purchase or where the seller has its registered office address.
- The new Act also contains enabling provisions for consumers to file complaints electronically and for hearing and/or examining parties through video-conferencing.
- Consumers will also not need to hire a lawyer to represent their cases.

Product Liability & Penal Consequences:

- The Act has introduced the concept of product liability.

- * A manufacturer or product service provider or product seller will now be responsible to compensate for injury or damage caused by defective products or deficiency in services.

- This provision brings within its scope, the product manufacturer, product service provider and product seller, for any claim for compensation. The term 'product seller' would also include e-commerce platforms.

Penalties for Misleading Advertisement:

- The CCPA may impose a penalty on a manufacturer or an endorser, for a false or misleading advertisement. The CCPA may also sentence them to imprisonment.

Provision for Alternate Dispute Resolution:

- The new Act provides for mediation as an Alternate Dispute Resolution mechanism. For mediation, there will be a strict timeline fixed in the rules.
- As per the recently notified rules, a complaint will be referred by a Consumer Commission for mediation, wherever scope for early settlement exists and parties agree for it. The mediation will be held in the Mediation Cells to be established under the aegis of the Consumer Commissions. There will be no appeal against settlement through mediation.

Unfair Trade Practices:

- The new Act has armed the authorities to take action against unfair trade practices too.
- The Act introduces a broad definition of Unfair Trade Practices, which also includes the sharing of personal information given by the consumer in confidence unless such disclosure is made in accordance with the provisions of any other law.

The Central Consumer Protection Council:

- The Consumer Protection Act empowers the Central Government to establish a Central Consumer Protection Council. It will act as an advisory body on consumer issues.
 - * As per the notified Central Consumer Protection Council Rules, the Central Consumer Protection Council would be headed by the Union Minister of Consumer Affairs, Food and Public Distribution with the Minister of State as Vice Chairperson and 34 other members from different fields.
 - * The Council, which has a three-year tenure, will have a Minister-in-charge of consumer affairs from two States from each region – North, South, East, West, and NER. There is also a provision for having working groups from amongst the members for specific tasks.

Applicability:

- This Act is applicable to all the products and services, until or unless any product or service is especially debarred out of the scope of this Act by the Central Government.

Significance of the Act:**Empowering the consumers:**

- The new Act will empower consumers and help them in protecting their rights through its various rules and provisions. The new Act will help in safeguarding consumer interests and rights.
 - * Consumer-driven businesses such as retail, e-commerce would need to have robust policies dealing with consumer redressal in place.
 - * The new Act will also push the consumer-driven businesses to take extra precautions against unfair trade practices and unethical business practices.

Inclusion of e-commerce sector:

- The earlier Act did not specifically include e-commerce transactions, and this lacuna has been addressed by the new Act.
 - * E-commerce has been witnessing tremendous growth in recent times. The Indian e-commerce market is expected to grow to US\$ 200 billion by 2026.
- The Act also enables regulations to be notified on e-commerce and direct selling with a focus on the protection of interest of consumers. This would involve rules for the prevention of unfair trade practices by e-commerce platforms.
 - * As per the notified rules, every e-commerce entity is required to provide information relating to return, refund, exchange, warranty and guarantee, delivery and shipment, modes of payment, grievance redressal mechanism, payment methods, the security of payment methods, charge-back options, etc. including country of origin which are necessary for enabling the consumer to make an informed decision at the pre-purchase stage on its platform.
 - * The e-commerce platforms will have to acknowledge the receipt of any consumer complaint within forty-eight hours and redress the complaint within one month from the date of receipt under this Act. This will bring e-commerce companies under the ambit of a structured consumer redressal mechanism.
 - * E-commerce entities that do not comply will face penal action.

Time-bound redressal:

- A large number of pending consumer complaints in consumer courts have been common across the country. The new Act by simplifying the resolution process can help solve the consumer grievances speedily.

- A main feature of the Act is that under this, the cases are decided in a limited time period.

Responsible endorsement:

- The new Act fixes liability on endorsers considering that there have been numerous instances in the recent past where consumers have fallen prey to unfair trade practices under the influence of celebrities acting as brand ambassadors.
- This will make all stakeholders – brands, agencies, celebrities, influencers and e-commerce players – a lot more responsible. The new Act would force the endorser to take the onus and exercise due diligence to verify the veracity of the claims made in the advertisement to refute liability claims.

Upholding consumer interests:

- For the first time, there will be an exclusive law dealing with Product Liability.
- Product liability provision will deter manufacturers and service providers from delivering defective products or deficient services.
- The new legislation empowers the National Consumers Dispute Redressal Committee as well as the State Commission to declare null and void any terms of a contract while purchasing a product. This will go a long way in protecting consumers, who are often subject to contract conditions that favour a seller or manufacturer.

Alternate dispute redressal mechanism:

- The provision of Mediation will make the process of dispute adjudication simpler and quicker.
- This will provide a better mechanism to dispose of consumer complaints in a speedy manner and will help in the disposal of a large number of pending cases in consumer courts across the nation.

Simplified process for grievance redressal:

- The new Act would ease the overall process of consumer grievance redressal and dispute resolution process. This will help reduce inconvenience and harassment for the consumers.
- The enhanced pecuniary jurisdiction and provisions providing statutory recognition to mediation processes, enabling filing of complaints from any jurisdiction and for hearing parties through video-conferencing will increase accessibility to judicial forums and afford crucial protection in times when international e-commerce giants are expanding their base.

Concerns:

State regulation:

- As part of the Consumer Protection Act, 2019, the Ministry of Consumer Affairs will compile a code of conduct for advertisers and agencies, a move designed to curb unfair practices and misleading claims. The planned code will detail penalties for advertisers and their agencies and publishers if misleading advertising and false claims are found.
- There have been concerns that this approach would mark a move from self-regulation to a more federated oversight.

Implementational challenges:

- The existing vacancies at the district commission level would undermine the effective implementation of the new Act.

Lack of differentiated approach:

- As per the proposed rules for the e-commerce businesses, companies are not allowed to “manipulate the price” of goods and services offered on their platforms to gain unreasonable profit or discriminate between consumers of the same class or make any arbitrary classification of consumers affecting their rights under the Act.
- The clause on manipulation of price by e-commerce companies appears irrelevant as sometimes, the e-commerce companies would want to reduce the price to enhance sales volume. For a country with market size of around \$25 billion, the guidelines should have taken a deeper view of the e-commerce ecosystem, covering all prevailing business models between consumers, marketplaces and sellers

- * Digital offerings such as online books/online games/online gaming services would come under the purview of the expanded equalisation levy.

- The new levy is in line with digital tax enactments observed in some countries.

Details:

- The 2% equalisation levy was introduced in the 2020-21 Budget and came into effect from April 1, 2020.
- The ‘equalisation tax’ is designed to provide a level playing field for resident marketplaces or providers who are subject to Indian income taxes.
- Providers subject to the tax obligations include non-resident who owns, operates, or manages a digital or electronic facility or platform for online sales of goods, online provision of services, or both.
- The provider is liable to the tax if they are providing their own goods or service, and if facilitating the sales on their electronic platforms of other sellers.
- The tax applies to e-commerce transactions on websites such as Amazon.com. Google in particular has been worried as the tax applies to advertising revenue earned overseas if those ads target customers in India.
- The levy is seen as aimed at taxing foreign companies which have a significant local client base in India but were billing them through their offshore units, effectively escaping the country’s tax system.
- As per law, late-payment would attract interest at the rate of 1% per month or part of the month. Non-payment could result in a penalty equal to the amount of equalisation levy, along with interest.

Concerns:

Practical difficulties:

- Tax experts point out the many practical difficulties in the proposed system.
- Even transactions between non-residents are covered and this according to tax experts would be an extraterritorial overreach along with practical difficulty in implementation.

Ambiguity:

- According to tax experts, the Finance Ministry’s move has led to a lot of ambiguity leading to confusion and the possibility of increased litigation.
- Many companies are not paying the equalisation levy as there is still considerable confusion and lack of clarity on the applicability of the same.

Wide coverage:

- The levy has several issues that primarily include very wide coverage and even non-e-commerce companies could be covered.

33. Equalization Levy on E-commerce.**Background:**

- Equalization Levy was introduced in India in 2016, with the intention of taxing the digital transactions i.e. the income accruing to foreign companies from India.
- Equalization Levy is a direct tax, which is withheld at the time of payment by the service recipient. The two conditions to be met to be liable to the levy:
 - * The payment should be made to a non-resident service provider;
 - * The annual payment made to one service provider exceeds Rs. 1,00,000 in one financial year.
- In line with the government’s move to impose a 6% equalisation levy on online advertisement services by non-resident entities, the scope of equalization levy had been expanded to online sale of goods and provision of services too. The Finance Ministry has imposed an equalisation levy of 2% on e-commerce supplies and services from April 1, 2020.

- There are concerns that the way the provisions of the new tax were worded, one could also interpret the same to bring sale of physical goods as also services enjoyed offline within the purview of the equalisation levy.
 - * This could end up taxing transactions where the medium is only the Internet. Many businesses negotiate supply and service agreements online and use electronic means for confirming contracts but the delivery of goods and/or services was largely offline. This could affect the businesses of such enterprises.

Effect on digital services sector:

- Ambiguity could affect the flow of FDI and investment into the digital services sector.

Way forward:

- There should be a distinction between digital goods/digital services on one hand and goods and services supplied using the digital medium as a mode of delivery or for transacting.
- The government needs to provide clarity to help avoid litigation on this matter.
- There is the need to balance between the competing needs of protecting the domestic market for domestic companies while also encouraging FDI into India.

INTERNATIONAL RELATIONS

1. China doubles down on claims on eastern Bhutan boundary

Context:

- China has reiterated its stand that it has a border dispute with Bhutan in the eastern sector
- Beijing's claim is significant as the area in question borders Arunachal Pradesh, which China claims as part of south Tibet.

Dividing line

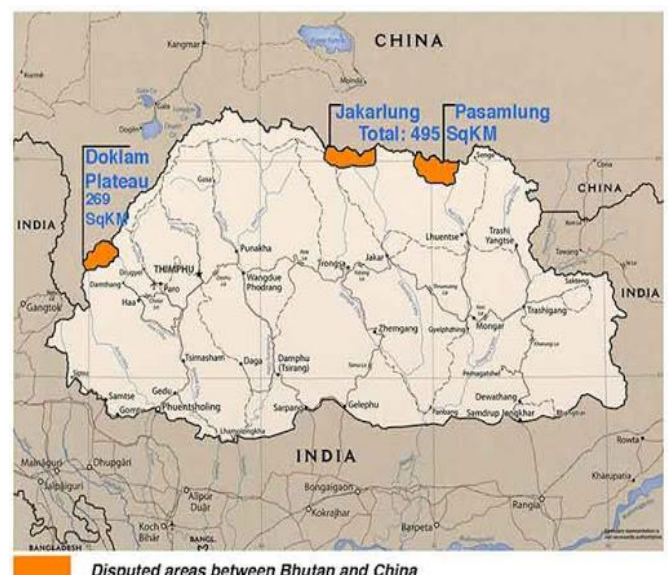
A brief overview of the boundary dispute between China and Bhutan

- Bhutan and China have no formal diplomatic relations but have held 24 rounds of boundary talks between 1984 and 2016
- Talks concentrated on north and west Bhutan regions
- Eastern Bhutan not part of the talks
- Sakteng sanctuary is situated close to the border with Arunachal Pradesh
- In June 2020, China attempted to stop UNDP-GEF funding for Sakteng by claiming it was disputed, but was overruled



Background

- China's signal came through its attempt in June 2020 to get the Global Environment Facility (GEF) of the UNDP to stop funding activities in Bhutan's Sakteng sanctuary in eastern Bhutan on grounds that it was "disputed territory."
 - * Set up in 1992, GEF is a global body to finance projects in the environment sector.
- So far, the talks have been about three specific areas, including Jakarlung and Pasamlung in the north, and the Chumbi Valley, where Doklam is situated, in west Bhutan.



- Bhutan objected to the Chinese claim, and the GEF council passed the project for funding. The GEF, according to sources, rejected the Chinese claim and approved the project.
 - * Bhutan said, "Bhutan totally rejects the claim made by the Council Member of China. Sakteng Wildlife Sanctuary is an integral and sovereign territory of Bhutan and at no point during the boundary discussions between Bhutan and China has it featured as a disputed area."
- This has caused a boundary dispute between the two countries for the first time.
- The Sakteng sanctuary has in the past, too, received such grants, including in 2018-2019 for a project on preventing soil erosion, without any objection from China.

Concerns

- The purported eastern sector dispute over the Sakteng Wildlife Sanctuary, in geographic terms, would be the single largest tranche of disputed territory across all sectors in the China-Bhutan context, representing about 11 percent of the territory currently administered by the Bhutanese government.
 - * The ludicrous claim to more than 10 percent of sovereign Bhutanese territory may be primarily intended to coerce Thimphu into making concessions in other areas, such as Doklam, on terms favorable to China.
- Given the ongoing Sino-Indian tensions in the western sector of their border in Ladakh, the timing of the revelation of this "new" dispute with Bhutan will likely be seen as coercive by India.
 - * Given the special relationship between India and Bhutan, as well, Chinese pressure on Bhutan may be designed to test the relationship between New Delhi and Thimphu.

2. India-EU (Virtual) Summit

Context:

- The 15th Summit between India and the European Union (EU) was held in a virtual format on 15th July 2020.
- India was represented by Prime Minister Narendra Modi. The EU was represented by the presidents of the European Commission and the European Council.

Key Stats

- The EU is also one of the largest investors in India with a cumulative investment of over \$91 billion.

Objective:

- The leaders decided to strengthen the EU-India Strategic Partnership, based on shared principles and values of democracy, freedom, rule of law, and respect for human rights, aiming at delivering concrete benefits for the people in the EU and India.

Outcome

- The leaders deliberated on a number of topics and issued a joint statement which touched upon a number of subjects such as:
 - * Promotion of effective multilateralism with the UN and the WTO.
 - * Bolstering cooperation in international fora to reinforce international security, strengthen preparedness and response for global health emergencies, enhance global economic stability and inclusive growth, implement the Sustainable Development Goals and protect the climate and the environment.
 - * Mutual synergies in the field of healthcare.
 - * Trade and investment relations.
 - * Tackling climate change and environmental degradation.
 - * Sustainable modernisation.
 - * Harnessing human-centric digitization – personal data protection and privacy.
 - * Global peace and security, disarmament and non-proliferation and combating terrorism in all its forms and manifestations, including its financing and countering radicalization.
 - * Human rights.
- The leaders adopted the "EU-India Strategic Partnership: A Roadmap to 2025" to guide cooperation between the EU and India over the next five years.
- They welcomed the signing of the Euratom-India Agreement on research and development cooperation in the peaceful uses of nuclear energy.
- They also adopted a Joint Declaration on Resource Efficiency and Circular Economy and welcomed the upcoming renewal of the EU-India Science and Technology Agreement for another five years.

Concerns

- A free trade deal that India and the European Union have been planning since 2007 remained elusive at the Summit.

3. India's membership of the United Nations Security Council (UNSC) as a non-permanent member.

Context:

- United Nations General Assembly vote for United Nations Security Council (UNSC) non-permanent membership.

Background:

UNSC:

- The Security Council consists of five permanent members (China, France, Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America) and 10 non-permanent members elected by the General Assembly for a term of two years.

Election procedure:

- The General Assembly elects each year, five non-permanent members of the Security Council.
- The non-permanent members of the Council should be elected according to the following pattern:
 - * Five from African and Asian States;
 - * One from Eastern European States;
 - * Two from Latin American States;
 - * Two from Western European and other States.
- A retiring member is not eligible for immediate re-election. The election is held by secret ballot and there are no nominations. The non-permanent members of the Security Council are elected by a two-thirds majority.

Details:**India's membership:**

- India is guaranteed a place in the UNSC as it is the sole candidate for Asia-Pacific (55-nation grouping) and is also expected to sail through with the 129 votes (two-thirds of the 193-member General Assembly) required for the seat.
- This will be the eighth time India will occupy a non-permanent UNSC seat, with its last stint in 2011-2012.

India's agenda:

- India will highlight international terrorism, United Nations reforms and Security Council expansion, streamlining the world body's peacekeeping operations and technology initiatives during its upcoming tenure as a non-permanent member of the United Nations Security Council (UNSC) in 2021-22.
- India's overall objective during this tenure in the UN Security Council will be the achievement of O.R.M.S: a New Orientation for a Reformed Multilateral System to set right the challenge of "Unreformed and under-representative" global institutions.
- Counter-terrorism will be one of India's highest priorities as a non-permanent member of the UN Security Council.
 - * The 9/11 terrorist attack was expected to change the outlook towards terrorism but that never materialised because of vested interests and traditional positions. The UN did not succeed in either defining terrorism or in adopting the Comprehensive Convention on International Terrorism.

Significance for India:

- India will have a higher profile at the UN for the next two years as the non-permanent members have a collective veto over every resolution in the Council.
 - * Permanent members can prevent the adoption of resolutions by themselves, but they need at least nine votes to get a resolution passed.

- India will also have a rare peep into the consultations chamber of the UNSC, which is closed to non-members of the Council.
- India's election as a non-permanent member has ignited the hope that its quest for permanent membership of the Council may succeed.

Challenges:**Strategic aspects:**

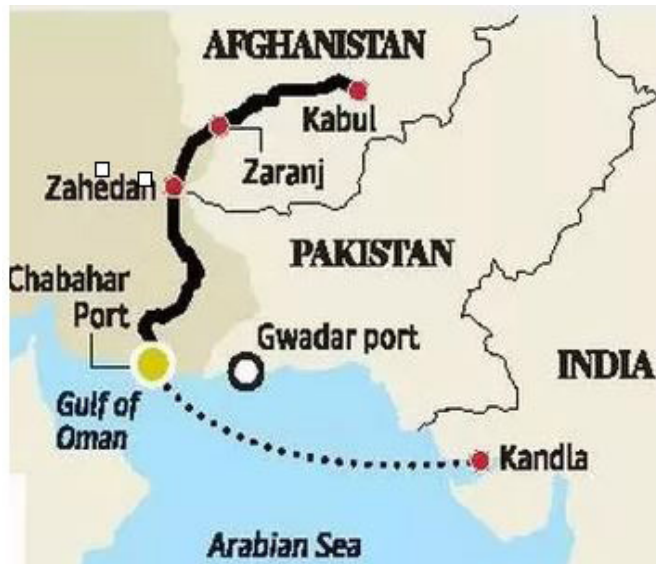
- India will get involved in many issues in which it may not have any direct interest.
- Since India does not have a veto, it shall have to proceed cautiously not to offend anyone, lest they should go against it when a matter of vital interest for the country comes up in the Council.

Permanent membership:

- The debate on extending the permanent membership has thrown up many ideas, but till today, none of the proposals has the possibility of securing a two-thirds majority of the General Assembly and the votes of the five permanent members.
- The permanent members are being adamant about protecting their privileged positions and also a majority of the UN members are against the privileges of the permanent members, particularly the veto being extended to new members. The opposition to the expansion is not India-specific.

4. Iran ties need quiet diplomacy**Background**

- Iran's Chabahar port is the only deep seaport and India's gateway to Central Asia. The port was inaugurated in 2017, it not only side-stepped Pakistan but also counter-balanced the Chinese-controlled Gwadar port.
 - * India had an ambitious plan – offload shipments in Chabahar, load them on trucks and trains, send them to Zahedan in Iran, go further to Zaranj in Afghanistan and take the goods to the central Asian republics.
- For this plan to be successful, India needed to develop better connectivity to the port – enter the Chabahar-Zahedan railway line, the 628-km-long track connecting the port to Zahedan.
- The project was part of a trilateral agreement between India, Afghanistan and Iran and India's plans to build an alternate trade route to Afghanistan and Central Asia.
- Indian government-owned Indian Railways Construction Ltd (IRCON) was tasked to finance the project costing up to \$1.6 billion and to provide services, superstructure work.



Context:

- India's involvement in the Chabahar-Zahedan railway project in Iran may have run into trouble.
- Iran has decided to go it alone on the rail line from Chabahar port to Zahedan — the project that was slated to be carried out with Indian assistance.

Reason for the cancellation of the project

- Iran said that India was delaying funding and other associated aspects.
 - * The delays were also over contract disagreements.
- The project was being stalled because of US sanctions on Iran.
 - * India was given a waiver from U.S. sanctions to continue cooperation on Chabahar as it contributed to Afghanistan's development.
 - * Despite the waiver, the project has suffered delays because of the time taken by the U.S. Treasury to actually clear the import of heavy equipment such as rail-mounted gantry cranes, mobile harbour cranes, etc.
 - * Thus, finding suppliers and partners continued to remain a challenge as banks too were reluctant to provide loans.
- India's dilemma also stems from the fact that robust support from the US is essential when it is locked in a border stand-off with China.

Funding

- The project is expected to complete in less than two years by March 2022 as the Iranian Railways is going to work without Indian assistance.
- The cost of the project is estimated at approximately \$400 million, from the Iranian National Development Fund.

Impact on India

- It is a diplomatic loss to India. It is a sign of Iran losing confidence in India.
- The development of the port, and the link overland through Iran to the Afghan border, was supposed to be India's answer to Pakistan's denial of the trading route through Wagah to Khyber pass into Afghanistan and beyond, to Central Asia.
 - * It now seems like a big roadblock in India's strategic ambitions in Central Asia.
- It loses its influence in the trade corridor and it is a setback for India's bigger plan since the railroad was supposed to be a transit corridor to Afghanistan after connecting Chabahar to Zahedan, the railroad was to be linked to Zaranj in Afghanistan.
 - * Also, it was India's Border Roads Organisation that helped build the 218 km Route 606 in Afghanistan, known otherwise as the Delaram-Zaranj highway that cut road travel time between Afghanistan and Iran.

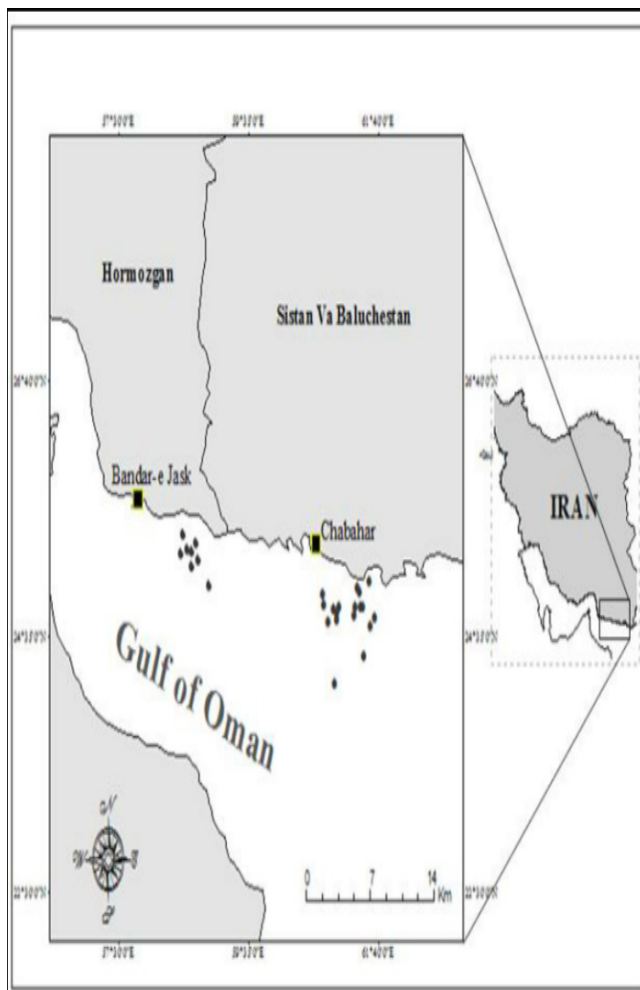
China's Strategic Partnership Deal

- Beijing is set to gain from this Chabahar development. The development comes at a time when China is finalising a \$400 billion deal with Iran. Not surprising given the two countries have a common enemy – the United States.
 - * Once the agreement is in place, China might look to have a major controlling role at Chabahar port, similar to its role at Pakistan's Gwadar port, along with access to its duty-free zone and an oil refinery nearby.
- China will also invest \$120 billion into Iran's transport and manufacturing infrastructure, thus giving it inroads into major sectors in Iran including banking, telecommunications, ports and railways.
- Beijing is also concluding a security and military partnership with Tehran. It calls for "joint training and exercises, joint research and weapons development and intelligence sharing" to fight "the lopsided battle with terrorism, drug and human trafficking and cross-border crimes".
- Initial reports in Iran have suggested China will deploy 5,000 security personnel to protect its projects in Iran. Some reports suggest Kish Island in the Persian Gulf, located at the mouth of the Strait of Hormuz, may be "sold" to China. Iranian officials have denied this.
- Iran is already a signatory of China's Belt and Road Initiative (BRI).

India's loss is China's gain

- Firstly, it will ensure a tighter grip over Iran which is a country with a population of 80 million and 60 percent people under 30.

- Secondly, Chabahar's loss is Gwadar's gain. The two ports are just 172 km away. Gwadar already has better connectivity, and China is unlikely to be shy of promoting it as the go-to port for trading with Central Asia.
- Thirdly, by kicking India out of a project in Iran, China gets to poison one more of India's allies and China gets to carve its way into trying to influence the affairs in Chabahar.
- Fourthly, the Iran-China deal impinges on India's "strategic ties" with Iran and the use of Chabahar port. Bandar-e-Jask lies to the west of Chabahar & right before the Straits of Hormuz. China would thus extend its control along the Pakistan-Iran coast.
 - * If China gets access to the Iranian city of Jask (supposed entrance to the Persian Gulf), it would give China a strong hand in the sea route for most of the world's oil.



Cautious Approach towards China

- Iran may well be considering a long-term partnership with China, but Iranian negotiators are wary of growing Chinese mercantilist tendencies.

Advantage India

- It is true that China has a greater capacity to resist U.S. sanctions compared to India but Iran realises the advantage of working with its only partner that enjoys a sanctions waiver from the U.S. for Chabahar since it provides connectivity for land-locked Afghanistan.
- Iran and India also share an antipathy to a Taliban takeover in Afghanistan. This is why Iran would like to keep the door open.
 - * Iranian officials confirmed that India could join later and the MoU between IRCON and Iran's Rail Ministry was still in place.

Way forward

- There are numerous tales of Indian cooperation projects in Nepal, Bangladesh, Sri Lanka, Myanmar, etc. suffering delays and cost overruns that only make it easier for China to expand its footprint in India's neighbourhood.
 - * For instance, the Pancheshwar Dam project in Nepal has been hanging fire since 1991. Prime Minister Narendra Modi promised to speed it up when he visited Kathmandu in August 2014, but little progress was made.
 - * A still to be completed trilateral highway between India, Myanmar and Thailand has been overshadowed by a Chinese-built highway that has boosted China-Myanmar border trade.
- India needs to improve its implementation record of infrastructure projects that it has taken up in its neighbourhood.

Conclusion

- New Delhi cannot take its allies for granted especially when Beijing is expanding its horizons of control.
- The key is to continue to remain politically engaged with Iran so that there is a better appreciation of each other's sensitivities and compulsions.
- The Chabahar project is important for India's regional goals, and for its relations with Iran. Therefore, India needs to act quickly.

5. Italian Marines Case (Enrica Lexie incident)

Context:

- The Permanent Court of Arbitration at The Hague has said that India is entitled to get compensation in the Italian Marines case but can't prosecute them; they will not be tried in India, and will face criminal proceedings in Italy.

Background

- Known as the Enrica Lexie incident, it took place in 2012, when the Italian oil tanker Enrica Lexie, traveling off the coast of Kerala was approached by an Indian fishing vessel.
- Two Italian marines onboard fired what Italy contends were warning shots at the ship. Two Indian fishermen, from Kerala, were killed.

- India says the vessel was fired at without notice.
- Italy had approached the International Tribunal for the Law of the Sea, an arbitral tribunal under the International Court of Justice in 2015, and the matter was heard by the Permanent Court of Arbitration in July 2019.

Major bone of contention between India and Italy

- India argued that it had jurisdiction over the case as the fishermen killed were Indian, and hence the case must be tried as per Indian laws.
- Italy had argued that the shooting took place outside Indian territorial waters (a claim challenged by India) and its marines were on-board a ship with an Italian flag. Hence, Italy argued, it enjoys the jurisdiction.
 - * The Italian contention was also that they were in international waters and acted to protect an Italian oil tanker as part of an anti-piracy mission.

NIA takes over the case

- The National Investigating Agency (NIA) had invoked the Suppression of Unlawful Acts against Safety of Maritime Navigation and Fixed Platforms on Continental Shelf Act, 2002 to assume jurisdiction over the case after the Home Ministry asked it to prosecute the marines.
- The Suppression of Unlawful Act carries the maximum punishment of death penalty.
- However, the Italian Government had objected to the Home Ministry's sanction to the NIA to prosecute the marines along with other counts under the IPC.

Case strained Italy-India relations

The marines spent years in detainment in India on charges of murder before being allowed to go back to Italy.

- One marine returned to Italy for medical reasons in 2014 while the second went back in 2016, also for medical reasons.
- The case had strained relations between India and Italy to the extent that Rome had threatened to withdraw its ambassador from New Delhi.
- It also caused a diplomatic furor as the Suppression Act provided for the death penalty. The EU threatened to impose trade sanctions. Ultimately, it took time for these charges to be dropped.

Ruling

- The Permanent Court of Arbitration (PCA) in The Hague admitted that both India and Italy had concurrent jurisdiction in the matter but concluded that the marines' immunity precluded India's jurisdiction.

In favor of India

- PCA rejected a key argument by Italy that India, by leading the Italian vessel into its territory and arresting the marines, violated its obligation to cooperate with

measures to suppress piracy under Article 100 of UNCLOS.

- Acknowledging the breach of freedom of navigation, it said, "As a result of the breach, India is entitled to payment of compensation in connection with loss of life, physical harm, material damage to property and moral harm suffered by the captain and other crew members of the Indian fishing boat St. Anthony."

In favor of Italy

- The Arbitral Tribunal has agreed on the Italian position that the marines, being members of the Italian armed forces in the official exercise of their duties, cannot be tried by Indian courts.
- The tribunal ruled that the Italian marines enjoyed diplomatic immunity as Italian state officials under the United Nations Convention on the Law of Sea.
- Taking note of the "commitment expressed by Italy" to resume its criminal investigation into the incident, the tribunal said India must cease to exercise its jurisdiction.

Conclusion

- The PCA's award, which is final and has been accepted by India, is a huge setback for the expectation that the two marines would face a criminal trial in India. In the end, Italy succeeded in taking the matter out of India's hands.
- The takeaway for India should be the lessons, in the legal and diplomatic domains that can be drawn from the experience.

Article 100 - Duty to cooperate in the repression of piracy

- All States shall cooperate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State.

6. Hagia Sophia

- It is the sixth century Byzantine structure in Istanbul
- It was an Eastern Orthodox patriarchal cathedral for about 900 years, an imperial mosque for 482 years
 - * In the 1930s, Mustafa Kemal Ataturk, the founder of the Republic of Turkey, shut down the mosque and turned it into a museum in an attempt to make the country more secular.
- Hagia Sophia, a UNESCO World Heritage site, has been one of the most visited monuments in Turkey, and an emblem of Christian-Muslim co-existence.
- It is now being turned into a mosque by Turkish President Recep Tayyip Erdogan.

7. Kuwait's Draft Expat Bill

Context:

- Kuwait is considering the expat quota bill. The bill

intends to put a quota on the number of expat workers in the country.

Details of the Bill

- Currently there are more than 33 lakh foreign workers in Kuwait amount to around 70 percent of its population.
 - * According to the bill this needs to be reduced to 30 percent, and the draft law seeks to do this in a gradual manner.
- This is to reduce the percentage of foreigners in the country, whose numbers surpass the local population in the country.
- The draft expat quota bill states that workers from India should not exceed 15 percent of the total population.
- It also calls for reducing the number of Egyptians, who form the second largest expatriate community, to 10 per cent of Kuwait's total population.

Why so many Indian workers in the Gulf region?

- Expat workers flocked to Gulf countries to build and run those economies following the oil boom in the 1960s and '70s.
- They were welcomed mainly because the local population lacked the necessary skills, or the will, to meet the needs of the new economy.
- The Subcontinent was a major beneficiary of this economic boom as it exported both skilled and unskilled workers.

What is the profile of the Indian community in Kuwait?

- According to the Indian Embassy in Kuwait, besides the million-plus who are in the country as legal workforce, there are about 10,000 Indian nationals who have overstayed their visas.
- The Indian community in Kuwait has been growing at 5-6% per annum until the economic crisis triggered by the COVID-19 pandemic put an abrupt stop to immigration to the country.
- Indians are the largest expatriate community and Egyptians are the second largest.
- In 2018, India received nearly \$4.8 billion from Kuwait as remittances.

Fear among the Citizens

- The development comes as COVID-19 has had a major impact on economies of west Asian countries due to the collapse in crude oil prices. These countries have been trying to reorient the economies.
- It has resulted in economic crisis, high unemployment among the natives and demographic imbalance has triggered movement for nationalization of the workforce.

Similar Examples

- Saudi Arabia launched nitaqat — a Saudisation scheme which introduced quotas in the workforce —

in 2011.

- Oman had proposed a phased reduction of expats in its workforce.

Impact on India

- If passed, this Bill could result in eight lakh Indians being forced out of Kuwait.
 - * The Indian community is the largest expat community in Kuwait, with 1.45 million Indians living in the country.
- It could have a significant impact as Kuwait is also a top source of remittances for India

Conclusion

- India should be ready to bring back them and use their skills for national development in our country.

8. Malabar drill

Context:

- Inclusion of Australia into the Malabar naval exercise.

Background:

- The Malabar exercise began as a bilateral exercise between India and the U.S. in 1992 and was expanded into a trilateral format with the inclusion of Japan in 2015. The Malabar exercise has grown in scope and complexity over the years.
- Japan and the U.S. have been pressing India for Australia's inclusion in Malabar. Australia first requested for observer status in the trilateral exercise in April 2017. India has been reluctant to include Australia due to China's sensitivities.

India's approach:

- While India has been reluctant to accept Australia's participation in Malabar exercise, the bilateral cooperation between India and Australia has gone up significantly over the years.
- Recently, India and Australia have signed the long-pending Mutual Logistics Support (MLSA) agreement, elevated their partnership to Comprehensive Strategic partnership and have also announced a joint declaration on a shared vision for maritime cooperation in the Indo-Pacific.

Details:

- A key meeting of the Ministry of Defence (MoD) has discussed the issue of inviting Australia for the trilateral Malabar naval exercise with Japan and the United States. However, no final decision has been taken yet.
- There has been the increasing consensus at the official level that Australia should join the naval war games.
- The final decision has been delayed in view of the ongoing standoff with China on the Line of Actual Control (LAC).

Arguments in favour of including Australia

- It will bring all Quad countries together as part of the annual war games and mark a major shift for India's

Indo-Pacific plans. This could point towards the militarization of the Quad coalition.

- * The Quadrilateral Security Dialogue or Quad is an informal strategic forum between the United States, Japan, Australia and India.

Australia's role:

- Australia's inclusion in the Malabar naval exercises would strengthen not only the maritime perspectives shared by India and Australia but also their cooperative vision in the Indian Ocean Region (IOR).
- Involving Australia, a two-ocean maritime power with competence in the South Pacific, will strengthen the interoperability of the Quad navies and allow maritime domain awareness to emerge as a major point of cooperation between India and Australia.

Chinese presence in IOR:

- China has also been involved in deployments, exercises and military hardware relationships with an increasing number of nations in the "Indo-Afro-Pacific" which can neither be ignored nor left bereft of counter-measures.
- Chinese research and intelligence ship presence close to the Andaman Islands has relatively expanded.

Chinese assertiveness:

- Appeasing China has been counter-productive. In fact, China has been accused of increasing assertiveness in its actions.
- Following the stand-off in Ladakh, many Indian analysts believe the time is right for India to shed its traditional defensiveness in the maritime domain. An alliance with the U.S., Japan and Australia to counter Chinese moves in the Indian Ocean could help in this direction.
- Expanded Malabar participation points to the emergence of a structured maritime coalition in the Indo-Pacific, amounting to an emergent defence maritime architecture vis-à-vis a revisionist China. It is an indication of resistance to any aggressive posturing and change in status quo in the region.
- The quadrilateral dialogue that includes Australia can have meaning only when it is ready to take robust steps that include military-operational potential.

Concerns:

- The article argues that the benefits or gains for India in the strategic-operational realm would be limited as compared to the cost of participating in the quadrilateral engagement.

New conflict point:

- China has long opposed QUAD coalition and the Chinese leadership sees the maritime quadrilateral as an Asian-NATO that seeks only to contain China's rise.
- At a time of strained bilateral ties with China, India's intention to involve Australia in the Malabar drill could only be construed as a move directed against China.

At a time when India and China are negotiating a truce on the border in Eastern Ladakh, India's invitation to Australia to participate in the Malabar exercise sends contrary signals to China.

- China would view the move by India as a pressure tactic on China and a move aimed at expanding India's sphere of influence into the entire Indian Ocean and the South Pacific.
- This move could invite retaliatory moves by China. China could respond through aggressive posturing in the Eastern Indian Ocean, which could lead to the opening up of a new front in the India-China conflict.

Modest gains:

- India's priority for the Indian Ocean region is to acquire strategic capabilities to counter a Chinese naval presence in the Indian Ocean.
 - * Though India possesses airborne surveillance capabilities, the Indian Navy is yet to develop the undersea capability to deter Chinese submarines in the eastern Indian Ocean.
- U.S. defence companies have been hesitant to part with proprietary technology related to vital anti-submarine warfare technology. Cooperation with the U.S. and Japan without attendant benefits of strategic technology transfers will not improve the Indian Navy's deterrence potential in the Indian Ocean Region (IOR).
- Notably, neither the U.S. nor Japan believes China's threats in the Indian Ocean equal the challenges China poses in the Pacific. While they may engage in the occasional naval exercise in the Bay of Bengal, the U.S. and Japanese navies have little spare capacity for sustained surveillance and deterrence operations in the IOR. Australia, ironically, is the only one ready and able to partner India in securing the Eastern Indian Ocean.
- Naval coalition-building alone may not credibly deter Chinese naval power in the Indian Ocean.
- Upgrading the trilateral Malabar to a quadrilateral, without acquiring the requisite combat and deterrence capability, could yield gains for India in the short term, but would prove ineffective in the long run.

Strategic autonomy:

- The strategic contest between the U.S. and China in East Asia and Southeast Asia has been increasing.
 - * In recent days, China has stepped up its naval presence in the South China Sea, even as the U.S. has directed three aircraft carrier groups — USS Theodore Roosevelt, USS Nimitz and USS Ronald Reagan — to the region, in a seeming bid to counter the People's Liberation Army Navy (PLAN).
- In such a scenario, there is every possibility that the military-Quad will be used to draw India into the security dynamics of the Asia-Pacific. The U.S. would

expect its Indo-Pacific partners, including India, to assist the U.S. Navy in its South China Sea endeavour.

Conclusion

- The inclusion of Australia in Malabar allows the Quad process to emerge as a coalition of structured maritime partnerships, strengthen threat assessment capabilities, and enhance the maritime roles and missions of the four naval powers — Australia, Japan, India, and the United States.
- There is the need for careful thought on India's moves with respect to the quadrilateral engagement. India should reflect on the strategic rationale of the military-Quad.
- There should be a cost-benefit exercise and any move should lead to commensurate gains in the strategic-operational realm for India.

9. SAARC revival to deal with China

Context:

- India's diplomatic efforts to strengthen its position vis-a-vis China.

India's hesitancy with SAARC:

- In the last few years, due to increasing animosity with Pakistan and India's attempts at isolating Pakistan internationally for its role in promoting terrorism in India, India's political interest in SAARC dipped significantly. SAARC has been in the doldrums since 2014.
- India started investing in other regional instruments, such as BIMSTEC, as an alternative to SAARC.
 - * The author argues that BIMSTEC cannot replace SAARC for reasons such as lack of a common identity and history among all BIMSTEC members. He further adds that given the fact that BIMSTEC's focus is on the Bay of Bengal region, it becomes an inappropriate forum to engage all South Asian nations.

Chinese foray into South Asia:

- China, as part of its global expansionism, is increasing its influence in the South Asian region.
 - * China shares a strong bilateral relationship with Pakistan and has invested heavily in Pakistan through the China Pakistan Economic Corridor (CPEC). The two countries also share strategic ties in international forums.
 - * Nepal is also seen moving closer to China for ideational and material reasons.
 - * 1. China offers Nepal an alternative for its dependence on India and is capable of making high economic investments in the relatively underdeveloped Nepal.
 - * 2. The Communist parties in Nepal share similar ideologies with China.

- * China, through its economic diplomacy, is wooing Bangladesh by offering tariff exemption for 97% of Bangladeshi products.
- * China has intensified its ties with Sri Lanka through massive investments.
- * According to a Brookings India study, most South Asian nations are now largely dependent on China for imports despite geographical proximity to India.
- * The increasing influence of China in the South Asian region is a major cause of concern for India given the fact that it results in the decrease of India's influence in South Asia.

Details:

- As India-China border tensions continue to fester and there being increasing build up along the LAC, India while preparing militarily will also have to redouble its diplomatic efforts to counter China's intransigence.
- Several foreign policy experts argue that India's strategic dealing with China has to begin with South Asia. In this regard, it is important to reinvigorate SAARC.

Way forward:

Economic integration:

- One way to reinvigorate SAARC is to revive the process of South Asian economic integration.

SAARC's economic ineffectiveness:

- South Asia is one of the least integrated regions in the world with intra-regional trade being a low 5% of total South Asian trade, compared to 25% of intra-regional trade in the ASEAN region.
- According to the World Bank, trade in South Asia stands at \$23 billion of an estimated potential value of \$67 billion.
- While South Asian countries have signed trade treaties, the lack of political will and trust deficit has prevented any meaningful movement in this direction.
- The negotiations of the SAARC investment treaty have been pending since 2007. According to the UN Conference on Trade and Development, intra-ASEAN investments constitute around 19% of the total investments in the region.

- India should take the lead and work with SAARC members to slash the tariff and non-tariff barriers. There's a need to revive the negotiations on SAARC investment and trade treaties.
- Deeper regional economic integration will create

greater interdependence with India acquiring the central role, which, in turn, would serve India's strategic interests too.

Dealing with domestic factors:

- There are two major domestic challenges that India faces in revitalising SAARC.
 - * Of late, domestic politics have had an undesirable influence on foreign policy. This has had an effect on India's neighbourhood relations and fueled an anti-India sentiment in India's neighbourhood.
 - * The economic vision of the current government focusing on *atma nirbharta* (self-reliance) and cutting down India's dependence on imports should not seem like signaling a return to the obsolete economic philosophy of import substitution. A sense of protectionism might indicate India's disinterest in deepening South Asian economic integration.
- India will have to ensure that domestic politics does not adversely affect India's standing in the region and India's economic policies consider the South Asian region into consideration in long term planning.

10. South China Sea dispute

Background:

PCA's award:

- The Philippines on the issue of the disputed Spratly Islands invoked the dispute settlement mechanism of the UN Convention on the Law of the Sea (UNCLOS) in 2013 to test the legality of China's 'nine-dash line'.
- In response, the Permanent Court of Arbitration (PCA) at The Hague decreed in its 2016 judgment that the 'nine-dash line' had no legal basis.
 - * The PCA in its judgment held that none of the features of the Spratlys qualified them as islands, and there was no legal basis for China to claim historic rights and to the resources within the 'nine-dash line'.
 - * 1. UNCLOS provides that islands must sustain habitation and the capacity for non-extractive economic activity. Reefs and shoals that are unable to do so are considered low-tide elevations.
 - * The Judgment also noted that China had aggravated the situation by undertaking land reclamation and construction, and had harmed the environment and violated its obligation to preserve the ecosystem.
- The PCA judgment undermined the Chinese claim and implied that China violated the Philippines' Exclusive Economic Zone (EEZ).
- China dismissed the judgment as "null and void." Given the power equations, the Philippines did not press for enforcement of the award and accepted the status quo. No country challenged China.
- China agreed to settle disputes bilaterally and to

continue work on a Code of Conduct with countries of the ASEAN.

- * Given that their economic ties with China are deepening, the ASEAN countries were seen bandwagoning with China.

Details:

Growing Chinese assertiveness:

- Growing Chinese assertiveness in the SCS is visible in the increased patrolling and live-fire exercising by Chinese naval vessels; ramming and sinking of fishing vessels of other claimant countries; renaming of SCS features; and building of runways, bunkers, and habitation for the possible long-term stationing of personnel on the atolls claimed by China.
- Chinese exploration and drilling vessels compete aggressively with those of other littoral countries in the disputed waters.

Growing discontent against the Chinese:

- The growing assertiveness of the Chinese in the South China Sea is leading to growing discontent against the Chinese.
 - * While avoiding military confrontation with China, countries in the region are strengthening their navies and deepening their military relationships with the United States and other powers to balance China.
 - * 1. A complicating factor for China is Russia's growing military and economic equities in the SCS. Russia and Vietnam have a defence cooperation relationship, which they are committed to strengthening. Russian oil firm Rosneft along with Vietnam has been prospecting within the Chinese defined 'nine-dash line'.
 - * The festering regional resentment against China resulted in an ASEAN response at its recent 36th Summit.
 - * Though Vietnam, Japan and the U.S. have been vocal about Chinese activities in the SCS, the Philippines and the ASEAN beginning to protest is new, even if their criticism is restrained. This points to China's growing isolation.
 - * 1. Indonesia protested to China about Chinese vessels trespassing into its waters close to the Nantua islands, towards the south of the SCS.
 - * 2. The Philippines protested to China earlier this year about violations of Filipino sovereignty in the West Philippine Sea. It has also written to the UN Secretary-General (UNSG) repeatedly on the issue.

India's stakes:

- The South China Sea (SCS) is important not just to its littoral countries. It has been a transit point for trade since early medieval times, contains abundantly rich fisheries, and is a repository of mineral deposits and hydrocarbon reserves.

- The SCS carries merchandise to and from India. It follows that India has a stake in the SCS, just as China has in the Indian Ocean.
- From India's perspective, foreign and security policy in its larger neighbourhood covers the entire expanse of the Asia-Pacific which includes the SCS.

Way forward for India:

Building military capacity:

- India must improve the military capacity of the tri-service Andaman and Nicobar Command given its immense geostrategic value, as it overlooks Asia's maritime strategic lifeline and the world's most important global sea lane.

Regional diplomatic outreach:

- India must continue to actively pursue its defence diplomacy outreach in the Indo-Pacific region through the following measures:
 - * Increasing military training and conducting exercises and exchanges at a higher level of complexity
 - * Extending Humanitarian Assistance and Disaster Relief activities
 - * Sharing patrolling responsibilities of the Malacca Strait with the littoral countries
- The Comprehensive Strategic Partnerships that India has concluded with Australia, Japan, Indonesia, the U.S. and Vietnam could be extended to Malaysia, the Philippines, Thailand and Singapore.

11. In stand-off, keeping an eye on the nuclear ball

Context:

- India-China tensions along the LAC.

Background:

- There is growing evidence that the People's Republic of China (PRC) has been expanding its nuclear arsenal and missile capabilities.

Nuclear weapons:

- The Stockholm International Peace Research Institute (SIPRI) observes that China's nuclear arsenal has risen from 290 warheads in 2019 to 320 warheads in 2020.
 - * Though the increase might not seem large relative to the size of the nuclear arsenal of the U.S. and Russia, it indicates a gradual shift toward a larger arsenal. Even as the U.S. and Russia are attempting to reduce the size of their respective arsenals, China is in an expansionist mode.
- China also possesses a sizeable inventory of fissile material. According to the International Panel on Fissile Materials (IPFM), China is estimated to possess 2.9±0.6 metric tonnes of Weapons-grade Plutonium (WGP) compared to India's 0.6±0.15 tonnes of WGP.
- China's Lop Nur has been the site of Chinese sub-critical testing since China adopted a moratorium on hot testing in 1996. China has been able to miniaturise warheads and develop new designs that have been

progressively integrated into its nuclear arsenal.

Chinese Missile modernization

- The Peoples Liberation Army Rocket Force (PLARF) fields a range of Medium Range Ballistic Missiles (MRBMs) and Short-Range Ballistic Missiles (SRBMs).
- China is arming its missiles with Multiple Independently Targetable Re-entry Vehicles (MIRVs) capabilities to neutralise the multi-layered missile defence capabilities of the United States.
- China's DF-31As, which are road mobile Intercontinental Ballistic Missiles (ICBMs), are equipped with MIRVs and potent penetration aids.

Details:

- China's nuclear modernisation and diversified nuclear capabilities present India with challenges.

Nuclear upper hand:

- On a comparison based on nuclear capabilities, China has an upper hand over India. China has a higher number of nuclear warheads and a higher amount of Weapons-grade Plutonium.

China's Missile force:

- India also needs to take into consideration the PLARF's land-based missile forces.
 - * China is believed to base a part of its nuclear arsenal in inland territories such as in the Far-Western Xinjiang Region, which is close to Aksai Chin.
 - * China's land-based missiles are primarily road mobile and could play a key role in any larger conventional offensive the PLA might mount against Indian forces along the LAC. Their mobility gives them a high degree of survivability.
 - * Korla in Xinjiang is believed to host DF-26 IRBMs with a range of 4,000 kilometres, which can potentially strike targets across most of India. The DF-26 IRBMs can be armed with either a conventional or nuclear warhead.

The Pakistan factor:

- India has to contend with a nuclear-armed Pakistan as well.
- The Indian nuclear arsenal, according to the SIPRI, stands at roughly 150 nuclear warheads while Pakistan has 160 warheads.

Instrument of coercion:

- This development would also have implications for the conventional military escalation along the China-India boundary.
- The conventional military balance between Indian and Chinese forces along the Line of Actual Control (LAC) presents significant challenges for Indian decision-makers. The variegated and highly sophisticated nature of Chinese nuclear capabilities relative to India could give China considerable coercive leverage. China could commit further aggression under the cover of its nuclear arsenal.

Way forward:

- In the conventional escalation along the LAC, India cannot afford to ignore China's expanding nuclear arsenal. India needs to factor in the role of nuclear weapons and their impact on military operations executed by the Indian Army and the Indian Air Force.

Short term measures:

- India's Strategic Forces Command (SFC) needs to be on a heightened state of alert to ward off Chinese nuclear threats as well as be prepared to support India's conventional forces.
 - * The Strategic Forces Command (SFC), also referred to as the Strategic Nuclear Command, forms part of India's Nuclear Command Authority (NCA). It is responsible for the management and administration of the country's tactical and strategic nuclear weapons stockpile.

Long term measures:

- India should start assessing its extant nuclear doctrine and redouble efforts to get a robust triadic nuclear capability for deterrence.
 - * The basic principle of India's nuclear doctrine of 2003 is "No First Use". According to this policy, nuclear weapons will only be used in retaliation against a nuclear attack on the Indian Territory or on Indian forces anywhere.
 - * A nuclear triad consists of land-launched nuclear missiles, nuclear-missile-armed submarines and strategic aircraft with nuclear bombs and missiles. The purpose of having this three-branched nuclear capability is to significantly reduce the possibility that an enemy could destroy all of a nation's nuclear forces in a first-strike attack, ensuring a credible threat of a retaliatory strike, and thus increasing a nation's nuclear deterrence.

12. Russian Navy will soon get hypersonic n-weapons, says Putin

Context:

- Russian President Vladimir Putin has said that the Russian Navy would be armed with hypersonic nuclear strike weapons and underwater nuclear drones.

Details:

- The weapons include:
 - * The Poseidon underwater nuclear drone, designed to be carried by submarines.
 - * The Tsirkon (Zircon) hypersonic cruise missile, which can be deployed on surface ships.
- The combination of speed, maneuverability and altitude of hypersonic missiles, capable of travelling at more than five times the speed of sound, makes them difficult to track and intercept.

- Testing of "Belgorod", the first submarine capable of transporting the Poseidon drones, has also begun.

Concerns:

- Putin has said Moscow does not want an arms race, but in 2019, threatened to set hypersonic missiles on ships and submarines that go beyond US territorial waters if Washington moved to deploy intermediate-range nuclear weapons in Europe.

13. Sustainable Growth Pillar

Context:

- An India Energy Modeling Forum was launched in the joint working group meeting of the Sustainable Growth Pillar.

About the Sustainable Growth Pillar:

- The Sustainable Growth Pillar is an important pillar of the India-US Strategic Energy Partnership co-chaired by NITI Aayog and USAID.
- The SG pillar entails energy data management, energy modelling and collaboration on low carbon technologies as three key activities.

About the Energy Modeling Forum (EMF):

- The Energy Modelling Forum (EMF) in the USA was established in 1976 at the Stanford University to connect leading modelling experts and decision-makers from government, industry, universities, and other research organizations.
- The forum provides an unbiased platform to discuss the contemporary issues revolving around energy and environment.

Details:

- In India, there was no formalized and systematic process of having a modeling forum.
 - * Even then, various think-tanks/research organizations like TERI, IRADe, CSTEP, CEEW, NCAER, etc., have been consistently developing scenarios and contributing through modelling studies and analyses to provide the required inputs to the Environment Ministry and other relevant ministries, including NITI Aayog.
- The India Energy Modelling Forum will accelerate this effort and aim to:
 - * Provide a platform to examine important energy and environmental-related issues;
 - * Inform decision-making process to the Indian Government;
 - * Improve cooperation between modelling teams, government, and knowledge partners, funders;
 - * Facilitate exchange of ideas, ensure production of high-quality studies;
 - * Identify knowledge gaps at different levels and across different areas;
 - * Build capacity of Indian institutions.
- The NITI Aayog will initially coordinate the activities of the forum and finalize its governing structure.

The forum would include knowledge partners, data agencies and concerned government ministries.

14. U.K. imposes new human rights sanctions

Context:

- Under its new powers to punish human rights offenders, Britain has announced economic sanctions against individuals and organisations from Russia, Saudi Arabia, Myanmar and North Korea.

Details:

- Britain had previously imposed sanctions as part of the European Union or under the auspices of the United Nations.
- Since leaving the EU in January 2020, it has implemented its own version of the U.S.'s Magnitsky Act.
 - * This allows authorities to ban or seize assets of individuals guilty of human rights abuses.
- The U.K. law authorises the British government to prevent sanctioned individuals from entering the country, channeling money through British banks, or profiting from the U.K. economy.

Sanctions:

- The sanctions include 49 individuals and organizations:
 - * Saudi intelligence officials accused of involvement in the killing of journalist Jamal Khashoggi at the Saudi Consulate in Istanbul.
 - * Russian authorities implicated in the death of Sergei Magnitsky, a lawyer who died in a Moscow prison after exposing a tax fraud scheme involving Russian officials.
 - * Commander-in-chief of the Myanmar armed forces, and Myanmar army commander – accused of orchestrating systematic violence against Myanmar's Rohingya minority.
 - * North Korean organisations: the Ministry of State Security Bureau and the Ministry of People's Security Correctional Bureau, sanctioned for running prison camps in the authoritarian state.

15. U.S.-India Strategic Energy Partnership (SEP)

Context:

- The 2nd ministerial meeting of the U.S.-India Strategic Energy Partnership (SEP) was held recently

Details:

- The SEP was established in 2018 at the direction of President Trump and Prime Minister Modi, recognizing the strategic importance of energy to the U.S.-India bilateral relationship.
- The SEP builds upon our longstanding energy partnership and sets the stage for meaningful engagements through robust government-to-government cooperation and industry engagement.

- The SEP organizes inter-agency engagement on both sides across four primary pillars of cooperation:
 - * Power and Energy Efficiency
 - * Oil and Gas
 - * Renewable Energy
 - * Sustainable Growth.
- Through these pillars, the United States and India are working to strengthen and modernize the power grid and distribution utilities for clean, affordable, and reliable energy access; improve efficiency, flexibility, and environmental performance in the power sector; promote inclusive and sustainable economic growth through long-term energy development; enhance energy security through oil and gas trade, and infrastructure investment; advance the development, deployment, and integration of renewable energy and expand access to finance for renewable energy projects; and reduce market barriers to energy trade and investment.
- The two countries are also leading joint research and development (R&D) through the S.-India Partnership to Advance Clean Energy-Research (PACE-R) on smart grids and energy storage to increase resilience and reliability of the electric grid.

Outcomes of the SEP:

- The two sides signed a Memorandum of Understanding to begin cooperation on Strategic Petroleum Reserves operation and maintenance, including the exchange of information and best practices.
 - * They also discussed the possibility of India storing oil in the U.S. Strategic Petroleum Reserve to increase their nations' strategic oil stockpile.
- The sides launched a public-private Hydrogen Task Force to help scale up technologies to produce hydrogen from renewable energy and fossil fuel sources and to bring down the cost of deployment for enhanced energy security and resiliency.
- They also signed an MOU to collaborate on India's first-ever Solar Decathlon India in 2021, establishing a collegiate competition to prepare the next generation of building professionals to design and build high-efficiency buildings powered by renewables.
- The two sides agreed to collaborate on advanced high-efficiency coal technologies with low-to-zero emissions through carbon capture, utilization, and storage (CCUS).
- Several other agreements were signed between agencies of both countries in the field of energy to advance the strategic and economic interests of both countries.

16. TikTok Ban

Context:

- The Government of India has banned 59 apps including TikTok, most of them popular Chinese applications citing threat to national security and sovereignty.

Details:

- The move was executed by the IT Ministry's Indian Computer Emergency Response Team (CERT-In) and approved by the National Cyber Security Coordinator (NCSC), who is a part of the National Security Council Secretariat.
 - * National Cyber Security Coordinator (NCSC) under National Security Council Secretariat (NSCS) coordinates with different agencies at the national level for cyber security matters.
 - * The Indian Computer Emergency Response Team (CERT-In) issues alerts and advisories regarding latest cyber threats and also issues countermeasures on regular basis.
- MEITY has claimed that the ban was necessary due to specific threats to India's cybersecurity.
 - * The move was taken in view of the information available that the banned apps were engaged in activities which were prejudicial to sovereignty and integrity of India, defence of India, security of state and public order.
 - * There were complaints and reports about misuse of mobile apps for stealing and surreptitiously transmitting users' data in an unauthorised manner to servers that have locations outside India. The compilation of these data, its mining and profiling by elements hostile to national security and defence of India, which ultimately impinges upon the sovereignty and integrity of India, was a matter of very deep and immediate concern that required emergency measures.
 - * The Ministry had also received "exhaustive recommendations" from the Home Ministry's Indian Cyber Crime Coordination Centre.
- Though the ban on the 59 apps including TikTok is being claimed as a targeted move to ensure the safety and sovereignty of Indian cyberspace, it is also being seen as a retaliatory step against China's aggression along the border amid the tense border standoff between India and China.

Legal basis for India's action

- The Ministry of Electronics and Information Technology (MEITY) invoked its power under Section 69A of the Information Technology Act read with the relevant provisions of the Information Technology (Procedure and Safeguards for Blocking of Access of Information by Public) Rules, 2009.
- Section 69A of the Information Technology Act, 2000 permits the blocking of information that falls within specific grounds and this power can be invoked when it is necessary and expedient.

* 69A of the Information Technology Act, 2000 deals with "Power to issue directions for blocking for public access of any information through any computer resource, Where the Central Government or any of its officers specially authorised by it, is satisfied that it is necessary or expedient so to do, in the interest of sovereignty and integrity of India, defence of India, security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of any cognizable offence relating to above, it may, by order, direct any agency of the Government or intermediary to block for access by the public or cause to be blocked for access by the public any information generated, transmitted, received, stored or hosted in any computer resource."

- In terms of process, there are two options available to the government under Section 69A of the IT Act to issue ban orders — normal and emergency. In the case of the ban on the 59 apps, it appears that the government may have adopted the emergency route.
 - * In the normal course, an order to block content requires: (a) a decision to be made by a government committee (b) relevant intermediaries to be given an opportunity to be heard by this committee.
 - * These processes are not required when emergency provisions are used. The emergency route allows content to be blocked on the directions of the Secretary, Department of IT, who must consider the impugned content and record his reasons for doing so. However, in the case of emergencies, the order of the Secretary, Department of IT, must be placed before the government committee within 48 hours. Based on the recommendations of this committee, the order can then be finalised or vacated.

Enforcement of the ban

- The notification is expected to be followed by instructions to Internet service providers to block these apps. While this will impact the apps that need a live feed to serve any purpose, users might still be able to continue using apps that don't need an active Internet connection to be used.
- Installed apps may continue to exist on mobile devices. But further downloads of these apps would be blocked and the previous users will not receive updates.
- Google's Play Store and Apple's App Store have been directed to remove the apps.

Countering China

- In light of the ongoing India-China tensions, there have been arguments that India's success in countering China's assertiveness will hinge upon India's economic prowess.
 - * India's huge domestic market is an economic tool for India. India is the world's second-largest

internet market. Not only are the number of app downloads and users in India increasing each year, but there has also been an increase in the overall revenue generated from apps in the country. The move to ban the apps is a way of using this tool to ensure favourable foreign policy results for India

* In terms of the economic impact, the ban would help put an end to huge profits that were sent outside to countries like China and provides domestic players an opportunity to develop equivalent apps. This would present an opportunity to bring up more startups and more technology-oriented companies.

- The ban on the apps seems to be a message to China that it is not going to be business as usual as far as India's relations with China are concerned particularly after the Galwan valley confrontation. The move could be seen as a warning to bigger Chinese businesses in India, and to China itself against further escalation along the border.
- The Indian Government is also considering a ban on Huawei and ZTE, both prominent Chinese telecom vendors.

Impact of the ban

On China:

- The move has both geopolitical and economic impact on the Chinese.
- Indians make up the largest chunk of the user base of these apps.
 - * Indians make up the largest base of TikTok, owned by ByteDance of China. Indians form a third of TikTok's user base. According to media reports, file-sharing tool SHAREit has about 400 million users.
 - * The Alibaba-owned UC Browser has a market share of 10.19% in India. Reports estimate UC Browser user base at 130 million.
- The potential loss of advertising revenue due to the ban will have an impact on the app-makers.
 - * Though TikTok's India business may have yielded only \$5.8 million in revenue for the year ended March 2019, but with quicker user adoption more recently, the stakes seem to be getting higher for the companies in the Indian market

Concerns

- Some sections have argued that the move of the central government, though aimed at China, may also have an impact on Indian citizens.

Impact on Indian users

- Some apps on the banned list are very popular in India and are some of the most downloaded in the country. The web censorship would impact many Indian users.
- Most of these platforms have Indian creators, for many of whom this is the only source of income.

- Though there are alternatives available for apps like TikTok, users of some apps such as CamScanner may not be able to find a suitable alternative.

Economic impact on India

- Many of these apps have offices and employees in India, and a few thousand jobs could be at stake following the ban.
- The move could also impact India in terms of investments and employment. ByteDance Ltd. had proposals of around \$1 billion investment in India. This will remain suspended following the ban.

Unofficial versions of the app

- While technology companies upload the official version of their apps on the App Store (Apple) and Play Store (Google), when applications are taken down from these platforms, users can still download their unofficial versions from the web.
- This poses additional security threats since companies do not roll out updates for the unofficial versions of the apps.
- Updates generally fix vulnerabilities, which otherwise can be exploited by hackers and cyber criminals.

Legality of the move

- There are also questions regarding the legality of the move and the impact on democratic norms.

Lack of transparency

- There has been a lack of transparency in the move.
- The legal order that empowers the designated authority to implement the ban is yet to be made public. Disclosure of this order is necessary because the nature of the action of blocking impacts the right not only of the owners of these smartphone applications, but the public's fundamental right to receive information also.
- The imperative for disclosure becomes clearer on a joint reading of the Shreya Singhal and Anuradha Bhasin judgments of the Supreme Court.
 - * In the Shreya Singhal case, while examining the constitutionality of Section 66A, the Supreme Court, upholding the blocking powers of the government, reasoned that the writ remedies would always be available to an aggrieved person. Hence, to approach a High Court in a writ, the petitioner would require the availability of the legal order.
 - * In the AnuradhaBhasin judgment, the need for public disclosure prior to placing any restriction on Internet access (of any scope or nature) has been expressly directed by the Supreme Court.

- However it is worth noting that the rule 16 of the Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009 requires strict confidentiality to be maintained regarding blocking requests, complaints received, and actions taken

Non-adherence to procedure

- The ban has been imposed without any form of pre-decisional hearing. Such a process would have required a show-cause notice to be served, offering the aggrieved party a detailed opportunity to defend itself; this would have been followed by a detailed legal order.

Against WTO rules

- China has claimed that India's actions could be in violation of the World Trade Organization (WTO) rules and runs against fair and transparent procedure requirements.

Way forward:

- Though privacy and data protection concerns must be addressed through appropriate state actions, the government should also ensure that it acts within the bounds of law.
- There is a need to commence an exploration into whether investments and operational control pose cybersecurity concerns or intersect with sectors of foundational and emerging technologies. This may be done through legislation and creation of an institutional process like the Committee on Foreign Investment in the United States.

17. India-Israel Defence Relations

Context:

- India has invited greater participation from Israeli defence companies under the new liberalised foreign direct investment (FDI) regime in defence manufacturing.

Details:

- In May 2020, the Indian government increased the limit for FDI in defence through the automatic route from 49% to 74%.
- Indian Armed Forces are undertaking a series of emergency defence purchases, including from Israel, amid ongoing tensions with China.
- The major procurements from Israel include the Long Range Spike Anti-Tank Guided Missiles (ATGM) and Heron Undermanned Aerial Vehicles (UAV), among others.

18. UAE Seeking Open Skies Agreement With India

Context:

- UAE's ambassador to India has recently expressed UAE's keenness to have an open sky agreement with India.

Background:

- An open sky air service agreement allows for airlines from the two countries to have an unlimited number of flights as well as seats to each other's jurisdictions.

India's open skies policy:

- India has an open skies policy with SAARC countries and those beyond the 5,000-km radius, which implies that nations within this distance need to enter into a bilateral agreement and mutually determine the number of flights that their airlines can operate between the two countries.

Details:

Freedoms of the air:

- The freedoms of the air are a set of commercial aviation rights granting a country's airlines the privilege to enter and land in another country's airspace.
 - * The first freedom of air allows a carrier to take off from its home state, the second freedom of air allows it to land in a second country.
 - * The third and fourth freedoms of air allow the airline to take off from the country it has landed in and come back to land at its home base.
 - * The fifth freedom allows an airline to carry revenue traffic between foreign countries as a part of services connecting the airline's own country. It is the right to carry passengers from one's own country to a second country and from that country onward to a third country (and so on). Fifth freedom traffic rights are intended to enhance the economic viability of an airline's long haul routes, but tend to be viewed by local airlines and governments as potentially unfair competition.
 - * Sixth freedom is the right to carry passengers or cargo from a second country to a third country by stopping in one's own country.
- The issue of fifth and sixth freedoms of air has been a sore point between airlines in India and the UAE and the UAE ambassador has called on India to reduce the protective cover for domestic airlines and have a more open sky policy.

19. Treaty on Open Skies

Context:

- In the light of the decision of United States to withdraw from the 35 member Open Skies Treaty, Russia and the other members of the 'Treaty on Open Skies' held a conference to discuss the future of this framework.

What is the Treaty on Open Skies?

- The treaty was started in 1992 as an initiative of the U.S. and came into effect on January 1, 2002.
- Currently it has 34 member states, while the 35th nation Kyrgyzstan, has signed but not ratified it.
 - * India is not a member of the Treaty on Open Skies.

Provisions

- This treaty is not related to civil-aviation open skies agreements.

- It allows unarmed aerial surveillance flights to go over the member nations' entire territory as well as over their military establishments, under certain controlled conditions for inspecting and surveying these establishments.
- Observing states must provide at least 72 hours' advance notice before arriving in the host country to conduct an overflight.
- The treaty lays out certain standards for aircraft being used as observation flights.
- Copy of all data collected has to be supplied to the host country.

Significance

- The treaty aims to increase transparency, promote confidence-building measures and predictability.
- The larger aim is to reduce the likelihood of a war by miscalculation. Sometimes routine military exercises of ground forces or air forces of a country may be mistaken by another nation as preparation for an attack. They provide an opportunity to check offensive activities on the other side, such as any suspicious concentration of troops.

ART AND CULTURE

1. Dhamma Chakra Day

- The Dhamma Chakra Day marks the Buddha's first teaching after attaining Enlightenment to the first five ascetic disciples (pañcavargika) on the full-moon day of Asadha at 'Deer Park', Rishipatana in modern-day Sarnath, near Varanasi.
- This teaching of Dhamma Cakka Pavattana Sutta (Pali) or Dharma Chakra Pravartana Sutra (Sanskrit) is also known as the First Turning of Wheels of Dharma and comprised the Four Noble Truths and Noble Eightfold Path.
- The auspicious day of Asadha Poornima which falls on the first full moon day of the month of Asadha as per the Indian sun calendar is also known as Esala Poya in Sri Lanka and Asanha Bucha in Thailand.
- It is the second most sacred day for Buddhists after the Buddha Poornima or Vesak.
- The day is also observed as Guru Poornima by both Buddhists and Hindus as a day to mark reverence to their Gurus.

2. Ghateshwar Temple

- It is located near the river Chambal in Rajasthan
- The Ghateshwar temple is dedicated to the god Shiva and is constructed in the Pratihara style
- The Ghateshwar temple is governed by the Archaeological Survey of India

Context

- Natesa, a rare sandstone idol in the 9th century Pratihara style of Rajasthan, is returning to the country.

Details:

- The Natesa icon, currently at the Indian High Commission, London, was from the Ghateswara Temple, Baroli, Rajasthan.
- The sandstone Natesa figure stands tall at almost 4 ft. in a rare and brilliant depiction of Shiva in the late 9th century Pratihara style of Rajasthan.
- A beautiful depiction of Nandi is shown behind the right leg of the Natesa icon.



3. Kanwar Yatra

- It is an annual month-long yatra in the Hindu calendar month of Shravana (Saavan) in which Shiva devotees walk barefoot with pitchers of holy water from the Ganga
- The water is used by the pilgrims to worship Shiva lingas at shrines of importance in one's village or town.

Kanwar

- Kanwar is a bamboo pole which has two pitchers hung with a rope on either side
- A Kanwariya, meaning a devotee, carries this bamboo on his shoulder or both the shoulders and does a yatra while balancing the weight of the two containers.
- While most pilgrims are men, a few women also participate in Yatra.

The legend associated with Kanwar Yatra

- The Kanwar Yatra is associated with the Samudra Manthan episode when Lord Shiva consumed the Halahala (poison) that emerged from the ocean bed. As a result of consuming the poison, Lord Shiva experienced a burning sensation and discomfort.

- Therefore, to help him heal, demon-king Ravana and other devotees, offered him Gangajal.

4. **Mongolian Kanjur Manuscripts**

Context

- First five re-printed volumes of Mongolian Kanjur Manuscripts released.

Details:

- The Ministry of Culture has taken up the project of reprinting of 108 volumes of Mongolian Kanjur under the National Mission for Manuscripts (NMM).
- The first set of five volumes of Mongolian Kanjur published under the NMM was presented to the President of India and the Mongolian Ambassador on the occasion of Guru Purnima.
- It is expected that all the 108 volumes of the Mongolian Kanjur will be published by March 2022.

What is Mongolian Kanjur?

- Mongolian Kanjur, the Buddhist canonical text in 108 volumes, is considered to be the most important religious text in Mongolia.
- In the Mongolian language 'Kanjur' means 'Concise Orders'- the words of Lord Buddha in particular.
- It is held in high esteem by Mongolian Buddhists and they worship the Kanjur at temples and recite the lines of Kanjur in daily life as a sacred ritual.

- The Kanjur is kept in almost every monastery in Mongolia.
- The Mongolian Kanjur has been translated from Tibetan. The language of the Kanjur is Classical Mongolian.

5. **Nehru Memorial Museum & Library (NMML)**

- It was established in memory of Jawaharlal Nehru.
- It is an autonomous institution under the Ministry of Culture, Government of India.
- It is located in the majestic Teen Murti House, the official residence of the first Prime Minister of India.
- It has four major constituents namely:
 - * A Memorial Museum,
 - * A Library on Modern India,
 - * A Centre for Contemporary Studies and
 - * Nehru Planetarium.

6. **Zardozi**

- It is a world-renowned textile embroidery.
- Zardozi is an art patronised by the Mughals that involves weaving metallic threads on fabric to create intricate patterns.
- It flourished during the reign of Mughal Emperor Akbar.
- Zardozi is a Persian word that means "Sewing with gold string".
- Lucknow Zardozi has a Geographical Indication tag.

SCIENCE AND TECHNOLOGY

1. Accelerate Vigyan

Context

- The Science and Engineering Research Board (SERB) has launched a new scheme called 'Accelerate Vigyan' (AV).

About Accelerate Vigyan:

- The idea behind the launch of this scheme is to provide a single platform for research internships, capacity building programs, and workshops across the country.
- The primary objective of this inter-ministerial scheme is to give more thrust on encouraging high-end scientific research and preparing scientific manpower, which can lead to research careers and knowledge-based economy.
- Recognizing that all research has its base as the development of quality and well-trained researchers, AV will initiate and strengthen mechanisms of identifying research potential, mentoring, training and hands-on workshops on a national scale.
- The vision of the scheme is to expand the research base, with three broad goals:
 - * Consolidation
 - * Aggregation of all scientific programs, initiating high-end orientation workshops
 - * Creating opportunities for research internships for those who do not have access to such resources/facilities
- An Inter-Ministerial Overseeing Committee (IMOC) involving all the scientific ministries/departments and a few others has been constituted for the purpose of supporting SERB in implementing the AV scheme in a successful manner.

Components under the AV:

- ABHYAAS Program: It is an attempt to boost research and development in the country by enabling and grooming potential PG/PhD students by means of developing their research skills in selected areas across different disciplines or fields.
 - * It has two components: High-End Workshops ('KARYASHALA') and Research Internships ('VRITIKA'). This is especially important for those researchers who have limited opportunities to access such learning capacities/facilities/infrastructure.
- SAMMOHAN: Under this, there are two subcomponents:
 - * SAYONJIKA: It is an open-ended program to catalogue the capacity building activities in science and technology supported by all government funding agencies in the country.

* SANGOSHTI: It is a pre-existing program of SERB.

About SERB:

- The Science and Engineering Research Board (SERB) is a statutory body established through an Act of Parliament.
- Supporting basic research in emerging areas of Science & Engineering is the primary and distinctive mandate of the Board.
- The SERB Act 2008 is the legislation of Parliament that established the Board.
- It functions under the Department of Science and Technology, GOI.

Objectives of SERB:

- Serve as a premier agency for planning, promoting and funding of internationally competitive research in emerging areas.
- Identify major inter-disciplinary research areas, and individuals, groups or institutions and fund them for undertaking research.
- Assist in setting up infrastructure and environment for scientific pursuit.
- Enable in order to achieve synergy between academic institutions, research and development laboratories and industry for promoting basic research in science and engineering.
- Evolve a system of approach to expeditiously provide funding for research, including monitoring and evaluation, by adopting modern management practices.

2. Bilirubin

- Bilirubin is an orange-yellow pigment that occurs normally when part of the red blood cells break down.
- If the bilirubin levels are abnormally high, it is an indication that the red blood cells are breaking down at unusual rates or that the liver is not breaking down waste properly and clearing the bilirubin from the blood.
- The bilirubin test measures the amount of bilirubin in the blood. It is used to find the cause of health conditions such as jaundice, liver disease and anaemia. The test is used to diagnose and monitor liver and bile duct diseases like hepatitis, cirrhosis and gallstones.

Context

- A team from S.N. Bose National Centre For Basic Sciences (SNBNCBS) has developed a 'no-touch' and painless device for non-invasive screening of bilirubin in newborns.

- The SNBNCBS, located in Kolkata, is an autonomous research Institute under the Department of Science and Technology (DST).

Details:

- The new device developed has been named 'AJO-Neo'.
- The operation of the device is based on non-contact and non-invasive spectrometry-based techniques for measurement of neonatal bilirubin level as an alternative of Total Serum Bilirubin (TSB) test without limitations of other available bilirubin meters.
- According to the team, this is a reliable device for measuring the bilirubin levels in preterm, and term neonates irrespective of gestational or postnatal age, sex, risk factors, feeding behaviour or skin colour.
- The device can give the test result in about 10 seconds compared to the conventional blood test, which can take up to 4 hours for report generation.
- The detection of neonatal blood bilirubin (Hyperbilirubinemia) faster is extremely important for therapeutic management in order to avoid Kernicterus leading to neuro-psychiatry problems in neonatal subjects.

3. International Thermonuclear Experimental Reactor (ITER)

- ITER is an energy project located in Cadarache, Southern France.
- It is the largest plasma-based fusion reactor ever built.
- It will be the first fusion device to maintain fusion for long periods of time.
- ITER will also be the first fusion device to test the integrated technologies, materials, and physical regimes necessary for the commercial production of fusion-based electricity.
- ITER will work on the "Tokamak" concept where the reaction of hydrogen isotopes Deuterium and Tritium produces energy by the mass-energy conversion principle, thereby proving to be a source of unlimited energy.
- The idea of the ITER was first launched in 1985.
- It is a collaborative project involving thousands of engineers and scientists from 35 countries.
- As of 2019, 66% of the project's construction has been completed.
- ITER members: European Union, China, India, USA, Japan, Russia and South Korea.
- India formally joined the ITER Project in 2005.
- ITER Organization (IO) is the central team responsible for construction at site and operation, while the ITER partners created their own domestic agencies to deliver their commitments to ITER. ITER-India is the Indian domestic agency.

- * ITER-India is a specially empowered project of the Institute for Plasma Research (IPR), an aided organization under the Department of Atomic Energy, Govt. of India.

India is responsible for the delivery of the following ITER packages:

- Cryostat
- In-wall Shielding
- Cooling Water System
- Cryogenic System
- Ion-Cyclotron RF Heating System
- Electron Cyclotron RF Heating System
- Diagnostic Neutral Beam System
- Power Supplies
- Diagnostics

4. Restore-L

- Restore-L is a robotic spacecraft that will take everything that NASA has learned about spacecraft servicing and refuelling and put it to the test with a visit to Landsat 7, a U.S. government-owned remote sensing satellite which has been operating in low Earth orbit since 1999 and will likely run out of fuel by 2021.

5. Solar Orbiter

- It is an international collaboration between the European Space Agency or ESA, and NASA
- Solar Orbiter is a mission dedicated to solar and heliospheric physics.
- The programme outlines key scientific questions which need to be answered about the development of planets and the emergence of life, how the Solar System works, the origins of the Universe, and the fundamental physics at work in the Universe.
- It will be able to brave the heat of the sun because it has a custom titanium heat shield coated in calcium phosphate so that it can endure temperatures up to 970 degrees Fahrenheit.

Significance

- This is the first mission that will provide images of the sun's north and south poles using a suite of six instruments on board that will capture the spacecraft's view.
 - * Having a visual understanding of the sun's poles is important because it can provide more insight about the sun's powerful magnetic field and how it affects Earth.
- Understanding the sun's magnetic field and solar wind are key because they contribute to space weather, which impacts Earth by interfering with networked systems like GPS, communications and even astronauts on the International Space Station

6. **Stevioside**

Context

- Researchers at the Institute of Nano Science & Technology (INST), an autonomous institute of the Department of Science and Technology, Government of India, in their recent study have found that stevioside, when coated on nanoparticles can increase the efficiency of Magnetic Hyperthermia-mediated Cancer Therapy (MHCT).

What is Stevioside?

- Stevioside is a natural plant-based glycoside found in the leaves of Honey yerba ('Stevia rebaudiana Bertoni').
- Stevioside is a glycoside derived from the stevia plant, which can be used as a sweetener.
- Stevioside is the main sweetener with rebaudioside A, found in the leaves of Stevia rebaudiana, a plant originating in South America.
- Stevioside was discovered in 1931 by French chemists who gave it its name.
- The sweetening power of stevioside was estimated to be about 300 times stronger than cane sugar.

Magnetic hyperthermia-mediated cancer therapy (MHCT)

- MHCT method of cancer therapy is based on heating the tumour tissues using magnetic nanoparticles in comparison to the routinely used surfactant moieties (oleic acid and polysorbate-80).
- It is based on generation of localised heat at the tumour site on exposure to AMF (alternating magnetic field) in the presence of magnetic nanoparticles.

7. **Tianwen-1**

- It is China's first fully home-grown Mars mission.
- It was launched atop Long March-5 carrier rocket.
- It consists of an orbiter and a lander/rover duo, a combination of craft that had never before been launched together towards Mars.

Details:

- It is especially striking given that it's China's first attempt at a full-on Mars mission.
- China did launch a Mars orbiter called Yinghuo-1 in 2011, but the spacecraft accompanied Russia's Phobos-Grunt mission. However, the launch failed, leaving the probes trapped in Earth orbit.
- Tianwen-1 is expected to arrive at the Red Planet in February 2021.
- The lander/rover pair will touch down on the Martian surface two to three months later somewhere within Utopia Planitia.
 - * Utopia Planitia is a large plain in Mars' Northern Hemisphere.
 - * NASA's Viking 2 lander landed there in 1976.

- The solar-powered rover will then spend about 90 Martian days (called sols, and slightly longer than Earth Days), studying its surroundings in detail.
- The orbiter will eventually settle into a polar elliptical orbit.
- The lander apparently will not do any substantive science work, serving as a delivery system for the rover.

Objectives of Tianwen-1:

- To map the morphology and geological structure.
- To investigate the surface soil characteristics and water-ice distribution.
- To analyze the surface material composition.
- To measure the ionosphere and the characteristics of the Martian climate and environment at the surface.
- To perceive the physical fields (electromagnetic, gravitational) and internal structure of Mars.

Note:

- Landing on Mars is notoriously difficult. Only the U.S. has successfully landed a spacecraft on Martian soil, doing it eight times since 1976.
- And the U.S. is aiming to launch Perseverance, its most sophisticated Mars rover ever.

8. **Transcatheter Aortic Valve Replacement (TAVR) procedure**

- It is a minimally invasive procedure to replace a narrowed aortic valve that fails to open properly which may be an option for those who can't have open-heart surgery.
- It is the replacement of the aortic valve of the heart through the blood vessels (as opposed to valve replacement by open heart surgery).
 - * Usually, valve replacement requires an open heart procedure with a "sternotomy", in which the chest is surgically separated (open) for the procedure.
 - * The TAVR procedures can be done through very small openings that leave all the chest bones in place.
- In this procedure, generally, doctors insert a catheter in the patient's leg or chest and guide it to his/her heart.
- The replacement valve is delivered via one of several access methods:
 - * In the upper leg,
 - * Through the wall of the heart, beneath the collar bone,
 - * Through a minimally invasive surgical incision into the aorta,
 - * From a temporary hole in the aorta near the belly button through a vein in the upper leg, etc.

SECURITY AND DEFENCE

1. IAF on a buying spree

Context:

- The Defence Acquisition Council (DAC) has approved the procurement of the following for the Indian Air Force (IAF)
 - * 21 MiG-29 fighter jets
 - * 12 Su-30MKI aircraft from Russia
 - * Along with upgradation of 59 existing MiG-29 jets in the IAF inventory.

What are the new fighter jets for?

- Each squadron generally has 18 aircraft.
- The IAF currently has 30 fighter squadrons against a sanctioned strength of 42 squadrons and it is further said to reduce.
 - * There would be gradual decommissioning of obsolete aircraft over time
 - * The loss of aircraft in crashes on the one hand, and
 - * Massive delays in purchases of new aircraft on the other
- This is causing imbalance in Squadron strength.
- The IAF last had its full complement of 42 fighter squadrons in 2002
- As seen during the Balakot air strikes (Pakistan) in February 2019, air power will be key to swiftly respond to any short escalations and especially relevant amid the ongoing stand-off with China on the Line of Actual Control (LAC).
- In comparison, the Pakistan Air Force will have 25 squadrons of fighter aircraft, while China will be able to unleash as many as 42 squadrons upon India in case of a conflict.
- The government's mandate for the IAF is to be prepared for a two-front collusive threat from China and Pakistan.

How do other major powers tackle situations like these?

- Among the global military powers, India is perhaps the only country which doesn't produce top quality fighter jets indigenously.
- The US, Russia, and the European powers, all have highly developed defence industries that can design, develop, produce, and supply fighter jets to their air forces.
- Countries like Pakistan and Israel can depend upon their allies — Pakistan Air Force earlier got F16s from the US and now it gets the JF17 from China.
- India has no such option.

Options Available

- The indigenously developed and produced LCA Tejas has to provide the bulk of the numbers
- The other option is to import more fighter aircraft.

What other steps is the Indian Air Force taking to address the shortage?

- The IAF will start adding the first batch of the 36 Rafale multi-role jets contracted from France. Another deal for 83 Light Combat Aircraft (LCA) Mk-1A is expected to be signed
- The more capable and larger LCA Mk-2 is under development which the IAF is keen to add in large numbers.
- An indigenous fifth generation Advanced Medium Combat Aircraft (AMCA) is also under development and is expected to make first flight by 2032.
- The IAF is also upgrading all aircraft in its current inventory to make up for the shortfall.
 - * The Jaguar, Mirage-2000, MiG-29 fighters are all being upgraded and negotiations are on with Russia for a major upgrade of the Su-30MKI fleet.

What are the major deals approved?

Other deals approved by the DAC include

- Pinaka rocket ammunition
- Long-Range Land Attack Missile System of over 1,000 km range
- Astra- Beyond Visual Range (BVR) air-to-air missiles for the IAF.
 - * The Astra Mk-1 has been integrated on the Su-30MKI jets and is being inducted into the force.
 - * An ungraded variant, the Astra Mk-II is under development by the Defence Research and Development Organisation (DRDO).

What about budgetary allocations?

- The defence budget has been going down as a percentage of the GDP, and the novel coronavirus pandemic has put further budgetary constraints on military modernisation.
- For instance, the defence allocation for 2020-21 is pegged at ₹3.37-lakh crore excluding defence pensions which accounts for 1.5% of the GDP.

Significance

- The modernization will help increase combat capabilities and expand the functional properties
- These decisions will address the long-felt need of the IAF to increase its fighter squadrons.

Way forward

- The long-term answer is to promote indigenous manufacturing in a major way, but in the immediate term, there is a need to take steps to ensure that this shortfall is made up quickly. That is a national security imperative.

2. Opium seizures: India in top five list**Context:**

- Findings of the World Drug Report 2020.

Details:

- The global area under opium poppy cultivation declined for the second year in a row in 2019.
 - * Despite the decline in cultivation, opium production remained stable in 2019, with higher yields reported in the main opium production areas.
- Globally, 47 countries reported opium seizures, 30 countries reported morphine seizures and 103 countries reported heroin seizures in 2018.
 - * It suggests that trafficking in heroin continues to be more widespread in geographical terms than trafficking in opium or morphine.
- Quantities of seized opiates remained concentrated in Asia, notably in south-west Asia (70%).
 - * Most opiates seized were reported in or close to the main opium production areas.
 - * Asia, which is host to more than 90% of global illicit opium production and the world's largest consumption market for opiates, accounted for almost 80% of all opiates seized worldwide in 2018.
- Outside Asia, the largest total quantity of heroin and morphine was seized in Europe.

Opium Seizure:

- Opium is illicitly produced in about 50 countries.
- The fourth highest seizure of opium in 2018 was reported from India, after Iran, Afghanistan and Pakistan.
- Close to 97% of the total global production of opium in the past five years came from only three countries.
- About 84% of the total opium was produced in Afghanistan, from where it is supplied to neighbouring countries, Europe, West Asia, South Asia and Africa. A small percentage also reaches North America and the Oceania region.

Heroin Seizure:

- In terms of heroin seizure (1.3 tonnes), India was at the 12th position in the world.
- Iran reported the highest seizure of heroin (25 tonnes), followed by Turkey, the United States, China, Pakistan and Afghanistan.
- Heroin is manufactured from the morphine extracted from the seed pod of opium poppy plants.

Note:

- World Drug Report is published by the United Nations Office on Drugs and Crime (UNODC).

3. PASSEX

- PASSEX is a passage exercise.
- A passage exercise is normally conducted when there is an opportunity in contrast to pre-planned maritime drills.

Context:

- Indian Naval ships conducted a Passage Exercise (PASSEX) with the U.S. Navy's USS Nimitz carrier strike group near the Andaman and Nicobar Islands.
- The exercise comes amid a high alert by the Navy in the Indian Ocean Region (IOR) due to the stand-off with China along the border in Ladakh.

Details:

- As part of this, four frontline naval ships, Shivalik, Sahyadri, Kamorta and Rana including a stealth corvette, teamed up with carrier USS Nimitz and three other U.S. ships in the eastern Indian Ocean near the islands.
 - * USS Nimitz is the U.S. Navy's largest aircraft carrier.
 - * It was returning from the South China Sea through the Malacca Straits.

4. Tehreek-e-Taliban leader Noor Wali Mehsud**What's in News?**

- Tehreek-e-Taliban Pakistan (TTP) terror group's leader Noor Wali Mehsud has been designated as a global terrorist by the UN.

Details:

- The UN Security Council's 1267 ISIL and Al-Qaeda Sanctions Committee added Mehsud to the ISIL (Da'esh) and Al-Qaeda Sanctions List.
- This would subject the Pakistani national to an assets freeze, travel ban and arms embargo.

Who is Noor Wali Mehsud?

- In June 2018, Mehsud was named the leader of Tehreek-e-Taliban Pakistan, following the death of former TTP leader Maulana Fazlullah.
- The TTP was blacklisted by the UN on July 29, 2011, for its association with al-Qaeda.
 - * The group had claimed responsibility for an attempted bombing in Times Square in April and May 2010.
 - * It had launched a multi-pronged assault against the United States Consulate in Peshawar.

Why is Mehsud black-listed?

- He has been blacklisted for participating in the financing, planning and perpetrating acts on behalf of and in support of entities associated with al-Qaeda.

- According to the sanctions committee, under Noor Wali's leadership, TTP has claimed responsibility for numerous deadly terrorist attacks across Pakistan, including an attack targeting Pakistani security forces in North Waziristan and a bomb attack against Pakistani soldiers in Khyber Pakhtunkhwa in 2019.
- The U.S. domestically designated Noor Wali as a Specially Designated Global Terrorist (SDGT) in September 2019.
 - * Once an individual or an entity is designated an SDGT by the United States Secretary of State or Secretary of the Treasury, their assets in the US or their possessions held by "US persons" are frozen or blocked, which means that they cannot be exported or dealt with.
 - * This includes leaders of terrorist organisations and individuals who have participated in terrorism-related training activities.

Note:

- Blacklisting by the UN Security Council entails that all states are required to freeze without delay the funds and other financial assets or economic resources of designated individuals and entities.

5. Domestic firms worried over small arms imports

Background

- Indian Army has decided to buy 72,000 Sig Sauer assault rifles for its troops from the United States.
- The new assault rifles will gradually replace the flaw-ridden 5.56 mm INSAS (Indian Small Arms System) rifles.
- The rifles are currently being used by US forces as well as several other European countries.

Context

- Domestic small arms manufacturers have expressed concern over continuing imports and they have written a letter to the Defence Minister asking for a level playing field to showcase their products.

Details

- Several Indian companies have invested in the small arms segment, given the large requirement and efforts by the government to open up ammunition to the private sector and have started production as well.

Concerns

- Companies would have invested crores of rupees with the hope of business and contract from the Government, but today they are staring at an uncertain future.
- If the domestic industries are not given a chance, it will only undermine the Make in India initiative and companies may shut their operations.

6. A quest for order amid cyber insecurity

Context:

- The issue of global cyberspace rules and norms.

Background:

Cyberspace:

- The digital revolution has sped up the emergence of a global digital space. This digital space, the "cyberspace", is the communication space made of network infrastructure (such as servers and cables), devices (like computers and smartphones), software (both human-machine and machine-to-machine interfaces) and data carried over the network.

Significance of cyberspace:

- Cyberspace has been growing at an exponential rate. The world is adopting new ways of digital interaction and more of our critical infrastructure is going digital.
- Cyberspace provides major opportunities for innovation, economic progress, cultural development and access to information. Its increasing accessibility and affordability have proved hugely useful for many human activities.
- The cyberspace market has grown exponentially. Apple, Amazon and Microsoft together have added more than a trillion dollars in market value, since the start of 2020.

Cyber insecurity:

- Cyberattacks have grown in sophistication, intensity and frequency. Cyberinsecurity of individuals, organisations and states has been expanding even amidst the COVID-19 crisis.
- New and dangerous practices are developing in cyberspace: cybercrime, information manipulation, political or economic espionage, attacks on critical infrastructure or individuals, theft of personal information or confidential data, compromise of information and communications systems used by citizens, companies and agencies.

Non-state actors:

- There has been a substantial increase in cyberattacks during the pandemic crisis. In just one week of April 2020, there were over 18 million daily malware and phishing emails related to COVID-19 monitored by a single email provider. Also, more than 240 million COVID-19-related daily spam messages were reported.
- The cyberattack on the Twitter platform targeting high profile twitter accounts was able to dupe people of around \$120,000.
- The ransomware attack on California University leading COVID-19 research had resulted in the university paying around \$1 million.

State actors:

- Australia has blamed state-backed cyber attacks on its cyber infrastructure.
- China has been accused of hacking healthcare institutions in the United States working on the novel coronavirus treatment.
- The United Kingdom has warned of hackers backed by the Russian state targeting pharmaceutical companies conducting COVID-19 vaccine research.
- India recently banned 59 Chinese Apps, on grounds of protecting security, sovereignty and privacy.

Details:

Need for global collaboration:

- Since the cyberattacks respect no borders, it is thus essential to bring the international community together to ensure peace and security in the digital space. In such a scenario, shared rules and norms become imperative.

Current cyberspace architecture:

- The article argues that, against popular perception, cyberspace is not borderless and the connectivity across national boundaries hasn't been nurtured and hence, it cannot be equated to a global commons.
- The Internet which depends on physical infrastructure under national control remains subject to border controls with each state applying its own laws to national networks, consistent with its international commitments.
- Also, cyberspace has multiple other stakeholders with the non-state actors playing key roles. There are also many private networks.
- Nevertheless, states alone have the right of oversight. States remain responsible for cybersecurity, enforcement of laws and protection of public good.

Previous International efforts:

- In 1998, Russia for the first time raised the issue of information and communications technologies (ICTs) in international security at the UN.
- Six Group of Governmental Experts (GGE) with two-year terms and limited membership have functioned at the United Nations with the aim of drafting norms for responsible state behaviour in cyberspace. India has had representatives on five of the six GGEs.
- An Open-Ended Working Group (OEWG) with a broader membership has been working on the issue of ICT since 2019. India has actively participated in the OEWG.
- UN Secretary-General António Guterres's recent report, "Roadmap for Digital Cooperation", also calls for action on the issue of cyberspace.
- Many regional organizations, like the Shanghai Cooperation Organisation, have voiced support for a cyber code of conduct.

- The Christchurch Call brings together countries and companies in an effort to stop the use of social media for promoting terrorism and violent extremism. India has been part of these efforts.

Limitations:

- Like all other technologies, the growth of cyberspace technology has been way ahead of the development of associated norms and institutions.
- There has been slow progress in the GGEs and the OEWG. And the discussions have been narrowly focused. Issues such as Internet governance, development, espionage, and digital privacy have been kept out. While terrorism and crime are acknowledged as important, discussion on these has not been focused on.
- The net result of the UN exercise has been an acceptance that international law and the UN Charter are applicable in cyberspace and subsequently a set of voluntary norms of responsible state behaviour was agreed to in 2015. However, there continues some uncertainty as to what aspects of international law and in what circumstances will it be applicable.
- There seems to be very little hope that the current processes would lead to any substantial cyberspace architecture in the current geopolitical circumstances.

Way forward:

For the world:

- There is a need for rules and norms that provide clarity on acceptable behaviour and deter subversive behaviour from nefarious actors.
- The next phase of global collaboration in an increasingly contested and fragmenting cyberspace domain requires better arrangements and more intense partnerships with more safeguards.

For India:

- Given the fact that the next billion new smartphone users will include a significant number from India, India has high stakes in this issue.

Balancing the competing needs:

- India needs to evolve an approach, in tune with its economic, social and political objectives. The approach will have to balance the competing demands of national sovereignty and transnational connectivity and the twin needs of national security and economic growth.
 - * India's disinclination to support unfettered data flows across borders is propelled by the 'data sovereignty principle'. However, the emphasis to nationalise data could pose problems for entrepreneurs and start-ups who prefer relaxed data-sharing rules to foster innovation and product development.

Shaping cybernorms and rules:

- Globally, India's passivity in influencing global tech rules must end and India needs to play a key role in shaping cybernorms and rules.
 - * Engagement in multi-stakeholder orientations such as the Paris Call (for trust and security in cyberspace) could be helpful.
 - * India could consider acceding to the Budapest Convention, or Convention on Cybercrime of the Council of Europe.
- The sheer volume of data generated by citizens at home makes India an essential destination for foreign technology firms enabling India to exercise its authority in shaping global trade rules. This allows India to shape, influence and constrain global technology rules that serve its strategic interests. It can and must significantly shape the making of the digital world.

Domestic data protection regime:

- Domestically, there is a need for the adoption of a robust data protection regime.

Involving the stakeholders:

- There is the need to encourage the private sector to get involved more in industry-focused processes in the domain of cyberspace such as the Microsoft-initiated Cybersecurity Tech Accord and the Siemens-led Charter of Trust.
- There is also the need for a deeper public understanding of the various dimensions of cyberspace. Addressing the current digital divide will help in this direction.

ENVIRONMENT AND ECOLOGY

1. Assam keelback

- The Assam keelback snake has been sighted by a team from the Wildlife Institute of India, Dehradun, for the first time since 1869.
- Initially known as Hebius Pealii, the Assam keelback is so far known only to inhabit Sivasagar in Upper Assam and Poba reserved forest in Assam-Arunachal border.
- As far as present knowledge goes, Assam keelback is an endemic snake of Upper Assam.

The Abor Expedition (1911-1912)

- It was a punitive expedition against the Abors in Assam
- It was carried out to punish the perpetrators of a massacre of a British colonial official Mr Noel Williamson

2. Bhagirathi eco-sensitive zone

Context:

- Approval accorded to the Zonal Master Plan of Bhagirathi Eco-Sensitive Zone.

About the Bhagirathi Eco-sensitive Zone:

- The Bhagirathi eco-sensitive zone notification stretches from Gaumukh to Uttarkashi covering an area of 4179.59 sq km in the state of Uttarakhand.
- The zone notification was first issued by the Environment Ministry in December 2012.

Background:

- Since 2006, a huge public outcry against three bumper to bumper hydropower projects on the upper stretch of the Bhagirathi – Ganga was raised.
- After much deliberation, in 2010, the government decided to cancel the three projects to ensure the protection of the fragile area.
- The Government of India also decided to declare the approximately 135 km stretch from Gaumukh to Uttarkashi as an eco-sensitive zone under the Environmental Protection Act, 1986.
- With due consideration of the cultural significance of the origin path of the Ganga, the decision to preserve this last pristine stretch of the river Ganga was taken.
- Thus, the Bhagirathi eco-sensitive zone notification is a notification meant for protecting the spiritual-cultural significance of the area and to protect/conservate the fragile ecology of the origin of the national river – Ganga.
- There were objections to the notification from Uttarakhand politicians citing it as anti-developmental.
- However, the stretch identified as eco-sensitive zone is of such fragile nature that it is not suited for the usual developmental activities being carried out elsewhere in the state.

- Moreover, the state has witnessed many disasters in the past that have claimed thousands of lives and have left the area vulnerable.

Vulnerability of the area:

- Located in the upper Himalayas, the notified area of the Bhagirathi eco-sensitive zone is an interwoven, interdependent fragile Ganga-Himalayan Basin.
- Geographically, the area falls under the Garhwal lesser Himalayas and Higher Himalayas.
- Over the last few years, the frequency & intensity of disasters in the state of Uttarakhand has consistently been increasing.
- There have been flash floods and landslides, and also earthquakes with increased frequency.
- Experts have repeatedly pointed out that an increased burden of anthropogenic activities lies at the root of this frequent destruction.
- High landslide-prone area
 - * A significant part of the eco-sensitive zone area lies in high to very high hazard landslide zone.
 - * After the recurrent disasters of 2012 and 2013, many old landslides have become active and many new landslides have also been seen.
 - * It has been estimated that, on average, the damage caused by landslides in the Himalayan range costs more than US\$ 1 billion besides causing more than 200 deaths every year, which overall is considered as 30% of such types of losses occurring worldwide.
- High seismic sensitivity zone
 - * The state of Uttarakhand is amongst the most seismically active states in the country.
 - * There are many parallel thrusts & faults in the state.
- Hydrology of the area
 - * The water sources of the Himalayan terrain are of great significance.
 - * The upper reaches of the Himalayas are the recharge areas of the Tarai & Bhabhar water bodies in the plains.
 - * Lying at the confluence of the Himalayas & the Indo-Gangetic basin, the Tarai & Bhabhar regions carry the fertile alluvial silt of the waters from the upper reaches that brings rich fertility to this area and carry it further downstream.
 - * Hydrogeological connectivity of the entire basin is very crucial and cannot be ignored.

- * The hydrogeological network is also linked to flora and fauna. Thus, it is an important and integral component of the entire ecological system of the area and cannot be ignored.

Cultural significance of the area:

- Being the origin valley of the river Ganga, Uttarkashi is of immense cultural significance.
- Uttarkashi (literally Kashi of the north) is considered a sacred place for Hindu pilgrimage.
- Gaumukh is the terminus or pout of the Gangotri glacier and the source of the Bhagirathi river. This is the place where the holy Ganga river originates and is hence of great significance.
- There are many historically and culturally significant places along the Bhagirathi river.

3. Climate Feedback Mechanism

- Climate feedback loops are “processes that can either amplify or diminish the effects of climate forcings.”
 - * In climate change, a feedback loop is something that speeds up or slows down a warming trend.
- A positive feedback accelerates a temperature rise, whereas a negative feedback slows it down.
 - * So, in terms of global warming, a negative feedback has a cooling effect, while a positive feedback increases warming.

Examples

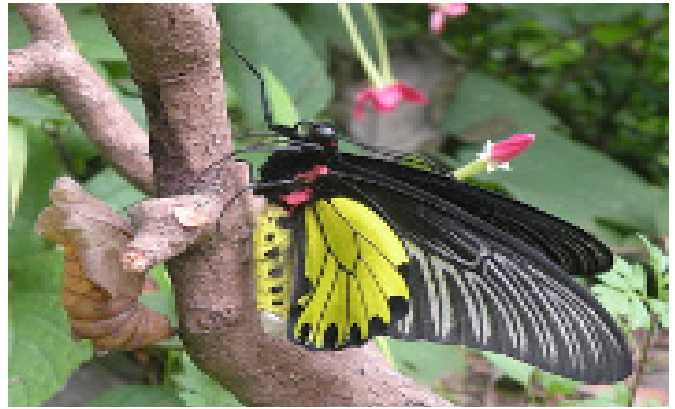
1. Ice albedo feedback

- Ice–albedo feedback is a positive feedback climate process where a change in the area of ice caps, glaciers, and sea ice alters the albedo and surface temperature of a planet.
- Because ice is light-coloured and reflective, a large proportion of the sunlight that hits it is bounced back to space, which limits the amount of warming it causes. But as the world gets hotter, ice melts, revealing the darker-coloured land or water below.
- The result is that more of the sun's energy is absorbed, leading to more warming, which in turn leads to more ice melting – and so on.

2. An example of a positive feedback that could happen is when warming causes permafrost to melt.

- This may lead to an increase in methane being released from Arctic soils.
- Since methane is a greenhouse gas, the extra methane may cause further global warming, which may make permafrost melt faster

4. Golden birdwing



- A Himalayan butterfly named golden birdwing is now India's largest butterfly (wingspan of 194 mm).
 - * While the male golden birdwing (*Troides aeacus*) is much smaller at 106 mm wingspan, the female of the species is marginally larger than the southern birdwing.
- The record was earlier held by southern birdwing (wingspan of 190 mm) for 88 years.
- The smallest is the quaker (*Neopithecops zalmora*) with a wingspan of 18 mm.

5. Indian Pangolin

- Scientific name: *Manis crassicaudata*
- It is listed in Schedule I of the Wildlife (Protection) Act, 1972.
- It is classified as Endangered on the IUCN Red List.
- Of the eight extant species of pangolin, the Indian Pangolin *Manis crassicaudata* and the Chinese Pangolin *Manis pentadactyla* occur in India.

Threats

- Major threats to pangolins in India are hunting and poaching for local consumptive use (e.g. as a protein source and traditional medicine) and international trade, for its meat and scales in East and Southeast Asian countries, particularly China and Vietnam.
- There is now greater evidence of its inclusion in illicit international trade, in particular for its scales, from both India and Pakistan, with Myanmar and China comprising the most likely final destinations.

Conservation Initiatives:

- TRAFFIC (Wildlife Trade Monitoring Network) is mapping pangolin trade hubs, conduits, transportation, high poaching areas and drivers in relation to poaching and illegal trafficking of pangolins.
- In 2015, TRAFFIC, in partnership with WWF-India and Wildlife Crime Control Bureau (WCCB) launched a social media campaign to create awareness and divert efforts towards curbing illegal trade in pangolins.

Context:

- A rare pangolin (*Mannis crassicaudata*) was rescued from suspected smugglers in an undercover operation by the Forest Department in Andhra Pradesh.

6. Kanger Ghati National Park

- It was declared a national park in 1982 by the Government of India.
- It is near Jagdalpur, in the Bastar region of Chhattisgarh and is one of the densest national parks.
- The Kanger Valley National Park is noted for its highly heterogeneous land formations ranging from low flat and gentle areas to steep slopes, plateaus, valleys and stream courses.
- The park is Valley of Kanger River
- The national park is well known for the presence of subterranean limestone caves with dripstones and flowstones. The formations of stalactites and stalagmites are still growing

7. *Ophiocordyceps nutans*

- It is an entomopathogenic fungus belonging to the order Hypocreales
- Found this fungi for the first time in central India
 - * It was previously reported in India only from the Western Ghats
- The fungus was found on its specific host insect *Halyomorpha halys*. Also called the stink bug, this insect is a pest to forest trees and agricultural crops.
- The modus operandi of the fungi involves infecting the insect when alive, developing fungal mycelium inside its thorax, and when it is time for the spores to come out, kill the bug.
- The fruiting body sprouts out from between the insect's thorax and head, and it continues to take nutrition from the dead body. The fungi are very host-specific, so the spores travel and infect many more stink bugs.

Significance

- The stink bug is known to damage the flower and fruits of soybean, green beans, apple and pear
- Studies have shown that these fungi can be used as a biological pest control agent.
- Exploring these fungi as a pesticide will help reduce the harmful effect of chemicals in our fields.
- Important point to note is that several species of the *Ophiocordyceps* fungi have medicinal properties. Reports have shown that China has been traditionally using it.
 - * Studies from across the globe have noted that these fungi is rich in biologically active metabolites, vitamin C, phenolic compounds, and also has anti-inflammatory and antioxidant properties.

- * They also claim that it contains a component called 'cordycepin' which has anticancer properties.

8. KURMA App

- It is a citizen science initiative which is aimed at turtle conservation.
- The application, developed by the Indian Turtle Conservation Action Network (ITCAN) in collaboration with the Turtle Survival Alliance-India and Wildlife Conservation Society-India, not only provides users a database to identify a species but also provides the location of the nearest rescue centre for turtles across the country.
- It serves as a digital database, with a built-in digital field guide covering 29 species of freshwater turtles and tortoises of India, and information on turtle identification, distribution, vernacular names, and threats.

Background

- India has a rich turtle biodiversity. Unsustainable harvesting, illegal trade and habitat degradation, however, threaten turtles across the country. Only a few conservationists across the country work on turtle conservation, to make matters worse.
- A group of leading conservation agencies have come together to launch the citizen-science initiative, named the Indian Turtle Conservation Action Network (ITCAN).
- This provides a platform for the exchange of vital information on turtles, promises to engage the general public in ground data collection and provide assistance to enforcement agencies / forest departments.
- Thus, ITCAN can lead to potential conservation success stories through its tool, the Kurma app.

9. Sacred groves

- Sacred groves refer to a piece of natural vegetation that is protected by a certain community due to religious reasons. The area is usually dedicated to a local deity.
- As a result, local communities tend to take responsibility to protect and nurture the area. The groves are also looked after by joint families who fear the wrath of the resident god.
- It could be only a few trees or an entire forest.
- In India, there are over a lakh sacred groves across different states. They go by different names like koyil kaadu in Tamil, orans in Rajasthan, devara kaadu in Karnataka, and sernas in Madhya Pradesh. They are called kavu in Malayalam.
- Such religious beliefs strengthen protection measures.

Significance

- The sacred groves shelter medicinal plants of great value not only for the primary health care of

the village communities, but also for the modern pharmacopoeia.

- The groves harbour certain wild crop relatives and other endemic biotas.
- They act as micro-watersheds and meet the drinking and irrigation water needs of the local communities.

Threats

- Due to several socio-economic and cultural reasons, the traditional belief systems, which were fundamental to the concept of sacred grove conservation, are now considered mere superstitions. The traditional values appear to be gradually eroding with the advent of modernity and urbanization.
- Invasion of exotic weeds into sacred groves has become a serious problem in the ecological functioning of some sacred groves.
- Today, with the fast pace of industrialization, roads and highways are being widened for smooth vehicular movement. In the process, some sacred groves, which are on the edge of the village, near highway areas, have been reduced to less than half their size.
- The increase in the number of construction of new buildings in the place of ancestral homes, which used to house sacred groves in its premises, has virtually led to the destruction of this biodiversity system.
- In several areas, the land on which sacred groves are located is not declared as forestland and thus is not protected by the government. It is owned by individual persons, families, clans who would have converted them into agricultural land for the purpose of cultivation.

Way Forward

- Therefore, there is an urgent need to strengthen the traditional concepts of sacred grove conservation by identifying the key issues and providing solutions through appropriate rehabilitation packages.

Context:

- An award-winning scientist at the Institute of Forest Genetics and Tree Breeding, Coimbatore, Kannan Warriar was conferred the National Award of excellence for outstanding research in forestry, including conservation of endangered sacred groves in the Alappuzha district of Kerala.
- The award also recognises his research on Casuarina (savukku) trees.

Casuarinas

- They are a versatile group of plants with wide-ranging adaptability to grow in different environments.
- They fix atmospheric nitrogen through a symbiotic association with the bacteria.

Uses:

- India is the largest planter of casuarina in the world.
- The tree pulp goes into the paper-making industry.
- Casuarina stems find use as fabrication material in

scaffolding work, and are also used to safeguard banana plantations from the wind.

- Of late it is also a preferred choice for biomass-based power generation.

10. Tiger orchids

Tiger Orchids, big yellow flowers with deep brown markings on them, resembling a tiger's coat are in full bloom at the Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) in Kerala.



- Tiger orchids (*Grammatophyllum speciosum*) are so-called for their large and resplendent flowers that resemble the tiger skin.
- It is also known as the Giant Orchid because the flowers become massive on attaining maturity.
- They flower in alternate years.
- Tiger Orchids are native to the jungles of Myanmar, Malaysia, Indonesia, Thailand and Papua New Guinea.

11. SC to examine Kerala Act on animal, bird sacrifices

Context:

- The Supreme Court has asked the Kerala Government to respond to an appeal against the High Court decision upholding the constitutional validity of the state's law which prohibits animal or bird sacrifice for propitiating a deity.

Details:

- The Supreme Court has agreed to examine the constitutional validity of the Kerala Animals and Birds Sacrifices Prohibition Act of 1968 that prohibits the sacrifice of animals and birds in temples to 'please' the deity.
- Chief Justice of India (CJI) Sharad A. Bobde, heading

a three-judge Bench, highlighted the “dichotomy” in animal protection law that allows the killing of animals for food but does not permit “killing of animals for offer to a deity and then consumption”.

What is the issue?

- The killing of animals for consumption of their meat is allowed as per the Prevention of Cruelty to Animals Act.
- However, the law which is under challenge in the present case, the Kerala Animals and Birds Sacrifices Prohibition Act, 1968 (Act), prohibits the killing of animals for the appeasement of deities in temples.
 - * The State law bans the killing of animals and birds for religious sacrifices but not for personal consumption.
- Recently, the Kerala High Court dismissed the PIL challenging the validity of the Kerala Animals and Birds Sacrifices Prohibition Act on the ground that no material was brought on record to establish that the practice was essential to the religion.
- The High Court had observed that the Prevention of Cruelty Act does not have the word “sacrifice” for the purpose of religion.
- The petitioner in his appeal claimed that animal sacrifice was an integral part of his religious practice. The plea said that the high court order violates his fundamental right under Article 25(1) of the Constitution.
- The petitioners claimed that the Act violates the right to equality because identical practices by other religious communities are not prohibited by the Act.
- The impugned Act criminalises the intent behind the animal sacrifice and not animal sacrifice per se. If the sacrifice is not for propitiating any deity but for personal consumption even in the precincts of a temple, it is not forbidden.
 - * This arbitrary classification is violative of Article 14 of the Constitution of India, the plea said.
- Petitioner also argued that Section 28 of the Prevention of Cruelty to Animals, 1960 does not make the killing of animals for religious purposes an offence.

12. Before the next health crisis

Context:

- The article analyzes the inter-relation between health disasters and air pollution and greenhouse gas (GHG) emissions causing global warming.

Background:

Lockdown effect:

- The lockdown has had a positive impact on air pollution levels and GHG emissions.
 - * In Europe, 11,000 air-pollution related deaths were estimated to have been averted since the start of lockdowns.

- However, despite the plunge during the lockdown, atmospheric carbon emissions are a record high because of past accumulation and the respite from the air pollution that blankets Indian cities is only but transitory.

Details:

- The article claims that apart from the current pandemic, there are two impending dangers to people’s health — air pollution and greenhouse gases — and a weak public health system.

Issue of air pollution:

- Globally, some 9 million premature deaths a year are associated with air pollutants, such as fine particulate matter, known as PM 2.5.
- Recent experience seems indicative of the association between pollution levels in cities and COVID-19 infections and death rates, a link observed in New York City and the northern provinces of Italy. Delhi, Maharashtra, Gujarat, and Tamil Nadu, in the top tier of pollution concentration, have also seen high deaths and infections per thousand people.
- 14 of the world’s 20 most polluted cities are in India.

Issue of GHG emissions:

- GHGs, like carbon dioxide, which contribute to global warming also have a damaging impact on human health.
- There have been studies indicating the link between communicable diseases and global warming.
 - * Mosquito-borne diseases in India have been connected to global warming through both increased rainfall and heatwaves. Europe reported its first local transmissions of dengue in 2010.
- Global warming intensifies heat waves and worsens respiratory illnesses.
- India has been ranked as the world’s fifth most vulnerable country to climate change.

Issue of public health system:

- The government spending on health in India is 1.6% of GDP, which is low for a lower middle-income country.
- Given the weak state of affairs of the public health system, India fails the test of readiness for health disasters, according to the 2019 Global Health Security Index.

Way forward:

Emission reduction:

- There is an urgent need to confront air pollution and global warming.
- Big cities like Delhi need to deal with transport which is responsible for two-fifth of the PM 2.5 emissions.
- Reforms should encourage public transportation in place of private vehicles by providing inter-connectivity between the metro and buses. Reforms should also focus on expanding electric vehicles.

Strengthening public health system:

- In managing health risks, emission reduction should be coupled with a stronger public health system.
 - * Kerala and Tamil Nadu have recorded lower COVID-19 mortality rates because of the good healthcare systems in place in these states.
- There is a need for higher budgetary allocation to the critical health sector along with a dominant state presence in the sector.
- A preventive health care approach, along with a decentralized approach, should be a policy priority for the administration.

Re-orienting development approaches:

- India should avoid the scramble to return to the traditional ways of boosting short-term growth at the cost of environmental degradation and should capitalise on the increasing interest towards a more sustainable development model. This approach would not only lead to a cleaner world but would also lead to a healthier world.
 - * Spending on reducing air pollution and GHGs provides estimated health benefits of 1.4 to 2.5 times more than the cost of the actions.

13. Nearly 28 lakh people affected by Assam floods

Context:

- Floods have devastated Assam, inundating the Kaziranga National Park and Tiger Reserve (KNPTR), putting the lives of several endangered species under threat, besides affecting about 28 lakh people.

Issues:

- Large swathes of East Siang and other districts along the flow of river Siang in Arunachal Pradesh have also been affected.
 - * Siang is one of the three rivers that form the Brahmaputra in Assam downstream.
- Goalpara continued to be the worst-affected district.
 - * River Brahmaputra takes a sharp turn at Goalpara village, causing maximum red alerts and flooding in that area.

Role of floods in Kaziranga's ecosystem:

- Assam is traditionally flood-prone. KNPTR, sandwiched between the Brahmaputra river and the Karbi Anglong Hills, is no exception.
- Floods are considered necessary for Kaziranga as it is a riverine ecosystem.
 - * The entire area of Kaziranga, formed by alluvial deposits from the Brahmaputra and its tributaries is centred around the river.
- The regenerative nature of floods helps replenish Kaziranga's water bodies and maintain its landscape, a mix of wetlands, grasslands and semi-evergreen deciduous forests.

- It helps get rid of unwanted plants, such as water hyacinth, which collect in huge masses in the landscape.
- Animals adapt naturally to floods but when the waters hit a certain level, they gravitate towards safer, higher ground in the Karbi Anglong hills.

Way forward:

- Over the years, artificial highlands (111 in the nineties, 33 in 2016-17) have been built inside the park for wild animals to take refuge in during floods.
- Emphasis is needed to secure animal corridors and ensuring a safe passage to the Karbi hills.
- In 2019, the Supreme Court banned all types of mining and related activities along the park's southern boundary and in the entire catchment area of the rivers that originate in the Karbi Anglong hill ranges and flow into Kaziranga, as well as new construction activities in private lands on nine animal corridors.

14. Fewer species, more disease

Context:

- The article analyzes the link between the loss of biodiversity and the emergence of zoonotic diseases.

Background:

- In the recent past, dangerous infectious diseases (Ebola, Bird flu, MERS, SARS, Nipah, etc.) have been transferred from wild animals to humans.
- Though not confirmed yet, there is a growing acceptance among the experts that SARS-CoV-2 is a zoonotic virus.

Details:

- There is increasing evidence showing strong linkages between the loss of biodiversity, and wildlife trade, with the emergence of epidemics.
- The IPBES Global Assessment Report on Biodiversity and Ecosystem Services notes that with significant encroachment of natural habitats by humans, biodiversity has been declining significantly. By disturbing the delicate balance of nature, ideal conditions for the spread of viruses from animals to humans have been created.

Loss of biodiversity:

- The clearing of forest lands for agriculture and developmental activities have destroyed the habitat of several species of flora and fauna. This has added to the extinction of many species and the loss of biodiversity. This has resulted in new conditions that host vectors and/or pathogens.

Wildlife trade:

- Both legal, as well as the illegal trade of wildlife, is a serious threat to biodiversity. Trafficking in wild plants and animals and wildlife products has become one of the largest and most lucrative forms of organised crime.

- Body parts of animals including pangolins, Asiatic black bears and rhinos are being traded illegally to countries such as China, Vietnam, and Laos. Species are being wiped out by organised trade networks.

The way forward:

Adopting an environmentally sustainable model:

- The pandemic is an opportunity for the global community to examine the impact of its unscientific actions on nature and prepare for behavioural change. The mainstreaming of biodiversity is needed in India's post-COVID-19 development programme.
- There is a need for an environmentally responsible world. India should work towards realising the 2050 vision for biodiversity, 'Living in Harmony with Nature'.
- Ecosystem integrity based on high biodiversity helps restrict the transmission of pathogens from one species to another.

One health approach:

- There is a need to accept the 'one health' approach which considers the health of people, wild and domesticated animals, and the environment.

Enforcement of existing laws and strategies:

- India should strictly enforce the Wildlife (Protection) Act of 1972 and the Biological Diversity Act of 2002.
 - * The Wildlife (Protection) Act of 1972 prohibits the trade of 1,800 species of wild animals/plants and their derivatives.
- There is also a need to fulfil the strategies and action plans including the National Biodiversity Targets and the National Biodiversity Mission.
 - * National Biodiversity Mission involves the following:
 - * 1. Comprehensive documentation of India's biodiversity. Assessment of the distribution and conservation status of India's biodiversity.
 - * 2. Expansion of knowledge in ecosystem functioning that will inform restoration efforts.
 - * 3. Establishment of a vibrant biodiversity-based economy.
 - * 4. Enhanced engagement with the public.
 - * 5. There are 12 National Biodiversity Targets. These NBTs would be in line with the Strategic Plan (SP) for Biodiversity (2011-2020) and 20 Aichi Targets.

HEALTH ISSUES

1. Antibiotics in livestock a worry

Context:

- In a survey report by the Centre for Science and Environment (CSE), the issue of extensive misuse of antibiotics in the dairy sector has surfaced.

Issues:

- CSE's assessment shows that dairy farmers indiscriminately use antibiotics for diseases such as mastitis.
 - * Mastitis is an infection/inflammation of the udder, a common ailment in dairy animals.
- The antibiotics used include Critically Important Antibiotics (CIAs) for humans.
 - * The WHO has warned that they should be preserved in view of the growing crisis of antibiotic resistance.
- Farmers often inject animals based on their own judgment of signs and symptoms of a disease without any veterinary supervision.
- The residues of antibiotics remain largely untested in milk.
- There is an inadequate focus on testing for antibiotic residues in the milk collected by some State federations, which process it and sell packaged milk and dairy products under popular brands.
 - * While milk sold directly to consumers is not tested, contrary to what one would expect, processed milk sold in packets is also largely unchecked for antibiotic residues.
- Food being produced in a chemical-intensive manner, consequently fuelling antibiotic resistance, is a matter of concern.

Way Forward:

- The wise use of antibiotics is not a substitute for, but a complement to, good sanitation and husbandry practices.
- Extensive use of low-level antibiotics in feeds has brought about concern for potential harmful effects due to the development of resistant strains of organisms in host animals that might compromise animal as well as human health.
- Veterinary supervision is essential in treating dairy animals. It must be ensured that antibiotics are not available without a prescription.
- Focus must be laid on routine surveillance and testing for antibiotic residues in the milk collected before being processed and sold.

- The abused antibiotics, despite a law against it, are easily available without the prescription of a registered veterinarian and stocked at farms. Effective implementation of the laws is the key.
- It is important to completely stop the use of critically important antibiotics and penalise their use.
- Stakeholders must work with farmers and the agriculture-dairy sectors to innovate on solutions.

2. Dhanvantri Rath

Context:

- A mobile van providing non-COVID essential healthcare services to the doorsteps of the people in the city of Ahmedabad has been set by the Ahmedabad Municipal Corporation (AMC).

About the Dhanvantri Rath

- The mobile van has been named the 'Dhanvantri Rath'.
- These vans have an Ayush Doctor, paramedic and nursing staff along with local Medical Officer from Urban Health Centre of AMC.
- These vans have been visiting various areas and providing OPD services for non-COVID essential services and field medical consultations to people all over Ahmedabad City at their doorsteps.
- The mobile medical vans carry all essential medicines including ayurvedic & homeopathic medicines, vitamin supplements, basic testing equipment along with pulse-oxymeter.
- In addition to healthcare services reaching the people who cannot access hospital OPD services for various reasons, Dhanvantri Rath has helped identify those who need further clinical treatment or an IPD admission, and ensured that they reach the hospital in a timely manner.
- In view of the coming monsoons, the scope of health services of mobile medical vans has been extended to include malaria & dengue tests.

3. Coronavirus is airborne

Context:

- The World Health Organisation (WHO) published an updated version of scientific brief, 'Modes of transmission of virus causing COVID-19: implications for infection prevention and control (IPC) precaution recommendations', which it said included "new scientific evidence available on transmission of SARS-CoV-2, the virus that causes Covid-19".
- In the brief, the WHO has formally acknowledged the possibility that the novel coronavirus can remain in the air in crowded indoor spaces, where "short-range aerosol transmission... cannot be ruled out".

So, what has the WHO said in its updated brief?

- Referring to several recent studies, the WHO has said that some outbreaks that have occurred in crowded indoor spaces suggest “the possibility of aerosol transmission”, although “combined with droplet transmission”. Such situations have arisen “during choir practice, in restaurants or in fitness classes”.
- According to the WHO, “in these events, short-range aerosol transmission, particularly in specific indoor locations, such as crowded and inadequately ventilated spaces over a prolonged period of time with infected persons cannot be ruled out”.

According to the technical lead on the COVID-19 pandemic at the WHO, there is a possibility of airborne transmission and aerosol transmission as one of the modes of transmission of COVID-19.

- **Droplet Transmission:** Occurs when a person is within 1 metre of the infector, who coughs or sneezes and so is exposing their mouth, nose or eyes to potentially infective respiratory droplets. Such droplets are >5-10 µm in diameter. Being heavy, the droplets fall to the floor soon.
- **Airborne Transmission:** It refers to transmission via aerosols (smaller droplets <5 µm) which can be transmitted to others over distances greater than 1 m. Aerosols may get released when infectors breathe heavily or talk, apart from coughing and sneezing. Aerosols contain fewer virus particles than larger droplets.

Consequences

- If the airborne transmission is a significant factor, especially in crowded spaces with poor ventilation, the consequences for containment will be significant.
- Masks may be needed indoors, even in socially distant settings.
- Health care workers may need N95 masks that filter out even the smallest respiratory droplets as they care for coronavirus patients.
- Ultraviolet lights may be needed to kill viral particles floating in tiny droplets indoors.

How to prevent transmission?

- The WHO brief said that apart from hand washing and physical distancing,
- one should “avoid crowded places, close-contact settings and confined and enclosed spaces with poor ventilation”, and
- “Wear fabric masks when in closed, overcrowded spaces to protect others; and ensure good environmental ventilation in all closed settings and appropriate environmental cleaning and disinfection”.

4. Drug Discovery Hackathon 2020 (DDH2020)**Context:**

- Union HRD Minister and Union Health Minister jointly launch the Drug Discovery Hackathon 2020 (DDH2020).

About DDH2020:

- The DDH2020 is an open-source drug discovery hackathon against COVID-19.
- It is a joint initiative of AICTE and CSIR, supported by the Office of Principal Scientific Advisor, Govt. of India, NIC and MyGov.
- The goal of the hackathon is to establish ‘Open innovation Model’ for in silico drug discovery against the COVID-19 virus and will cover the various processes in drug discovery, including but not limited to, in silico screening of molecules, lead optimization and identification of drug-able non-toxic targets.
- The targets/tools/lead molecules identified through the process of DDH2020 will be further taken forward for synthesis followed by subsequent steps in routine drug discovery programs.

The hackathon will have two major tracks:

- **Track-1:** will primarily deal with drug design for anti-COVID-19 hit/lead molecule generation using tools such as molecular modeling, pharmacophore optimization, molecular docking, hit/lead optimization, etc.
- **Track-2:** will deal with designing/optimizing new tools and algorithms which will have an immense impact on expediting the process of in silico drug discovery. Novel or refined tools/algorithms from Track-2 will help develop better models for predicting ADMET in silico, thus improving screening efficiency.
- There is also a third track called “Moon shot” which allows for working on problems that are of ‘out of the box’ nature.

Who can participate?

- Professionals and researchers from anywhere in the world can participate.
- The winners will be given prizes and the best entries will be taken into stage 2 of the competition.
- The best of stage 2 will go to stage 3.
- The plan is that at the end of the stage 3 competition, the best solutions such as drug molecules or drug targets will be taken to the experimental level and validated for their predictions by either CSIR labs or start-ups.

5. G4 EA H1N1**Context:**

- In a new research, scientists from China have discovered a new strain of the H1N1 swine flu virus, which is spreading silently in workers on Pig Farms in China

G4 EA H1N1- The new strain

- Genotype 4 (G4) reassortant Eurasian Avian-like (EA) H1N1 virus mainly affects pigs, but there is some evidence of it infecting people
 - * The swine flu strain has genes similar to those in the virus that caused the 2009 flu pandemic.
- Antibody tests picked up that workers handling swine in these areas have been infected.
 - * They also found the virus can infect human airway cells.
 - * The issue now is people's immune systems does not have the necessary tools to prevent disease if they get infected by a G4 virus.
- The researchers found no evidence yet of human-to-human transmission.

Steps to be taken

Biosecurity measures aimed at preventing the spread of the virus from farm to farm is key, along with surveillance. The more the virus spreads, the more chance it has to mutate.

- Controlling the prevailing G4 EA H1N1 viruses in pigs and close monitoring in human populations, especially the workers in swine industry, should be urgently implemented

Importance of surveillance to detect and respond to a pandemic

- Most countries have their own disease surveillance mechanisms in place to monitor and track emerging diseases.
- This involves a system for outbreak detection, rapid data collection, analysis, assessment and timely reporting.
 - * Closely studying a pathogen will yield valuable information on transmission, and behaviour of the organism, giving humans early lessons in its prevention and treatment.
 - * Early detection of the start of a pandemic is crucial to rapidly implement measures to stop the pandemic at its source and to prevent millions of deaths, social disruption and economic loss.
- Alerts should also be sent out by global health mechanisms, including the World Health Organization (WHO), so that other nations at equal risk might be warned before the outbreak hits their shores.

How do we stop potential pandemics from spreading?

- Surveillance systems to rapidly detect and report cases
- Laboratory networks to accurately identify the cause of illness
- A trained workforce to identify, track, and contain outbreaks
- Emergency management systems to coordinate an effective response

Benefits of global pandemic influenza surveillance

- An influenza pandemic will affect every country. Standardized and coordinated international information sharing is crucial for crisis management at global and national levels.
- National authorities will need to know how the pandemic is evolving not only in their own country, but also in neighbouring countries and continents.
- Sharing of information at global level will be a benefit to all.

Successful attempts in the past

- Early warning systems have been successful in predicting dengue and Ebola outbreaks, among other diseases, in the past, enabling health systems to be pre-warned and, thus, prepared to tackle the challenge.
- Local outbreaks of cholera or diarrhoeal disease have also been identified in cities, and have helped limit the damage in the community.

Global Outbreak Alert and Response Network (GOARN)

- It is a technical partnership established in 2000 by the World Health Organization (WHO) as a key mechanism to engage the resources of technical agencies for rapid identification, confirmation and response to major international public health emergencies.

Conclusion

- G4 virus might emerge into a pandemic in the future, and therefore greater vigilance in monitoring people is the need of the hour.
- Vigilance is primarily required because this is a new strain against which humans would have no inbuilt immunity from the virus
- All risk assessment systems across the world will have to be on active mode, besides forming a network globally to share information on emerging diseases and pathogens.

6. Integrated Disease Surveillance Programme (IDSP)

- It is a disease surveillance scheme under the Ministry of Health and Family Welfare in India, assisted by the World Bank.
- It is a unit under the National Centre for Disease Control (NCDC).
- A large amount of data on disease reports are collected in order to be able to identify the outbreak of a disease, identify its causes and take corresponding preventive and responsive measures.
- An early warning system has been put into place in order to take timely preventive steps.

Objectives of IDSP:

- To strengthen/maintain a decentralized laboratory based IT enabled disease surveillance system for epidemic-prone diseases.

- To monitor disease trends.
- To detect and respond to outbreaks in the early rising phase through trained Rapid Response Teams (RRTs).

Concerns:

- The lack of public updates from IDSP in recent times seems unacceptable. This might lead to a lack of surveillance and might result in an outbreak of diseases in India.
- The IDSP also faces a manpower crunch.

Conclusion:

- It is essential to improve the overall routine surveillance as well as provide timely updates to the public and international health agencies.
- The pandemic needs serious focus, but India cannot afford to ignore other diseases.

7. Itolizumab -Psoriasis drug in COVID-19 therapy

Context:

- Biocon is a biopharmaceutical company. It has announced that it had received the approval of the Drugs Controller General of India (DCGI) to market Itolizumab for treatment of Cytokine Release Syndrome (CRS) in moderate to severe acute respiratory distress syndrome patients due to COVID-19.

Itolizumab

- It is a Monoclonal Antibody which is used to treat acute psoriasis.
 - * Psoriasis is a skin disorder that causes skin cells to multiply up to 10 times faster than normal. This makes the skin build up into bumpy red patches covered with white scales.

What are monoclonal antibodies?

- Monoclonal antibodies are proteins cloned in the lab to mimic antibodies produced by the immune system to counter an infection.
- These are man-made (synthetic) antibodies that are created in the lab

Cytokine Storm

- Cytokines are small proteins released by many different cells in the body, including those of the immune system where they coordinate the body's response against infection
- Sometimes the body's response to infection can go into overdrive.
- These cytokines can aggravate inflammation and injury in lung cells as well as in several other organs.

Issue of control

- A challenge in treatment is how to prevent this over-reaction.
- One method is to use antibodies that can block a particular protein, called CD6.

- They are found on the surface of T-cells, a class of cells that are a central prong in the body's defence system.
- Experts say if this CD-6 is suppressed, it will prevent the T-cells from releasing a cytokine cascade and thus better regulate the immune system.
- Itolizumab will be used for emergency in India for the treatment of Cytokine Release Syndrome (CRS) in moderate to severe ARDS (Acute Respiratory Distress Syndrome) patients due to COVID-19

Concerns

- The critics are pointing to the small size of the clinical trial
- In phase 3 trials, typically conducted with hundreds or thousands of participants at multiple centres and over multiple months, researchers check how efficacious a drug is compared to the current 'gold standard'.
 - * The DCGI has waived Biocon's need to conduct phase 3 clinical trials, and allowed the company to conduct post-marketing surveillance, also called Phase 4.
- People are seeking more transparency from the Indian drug regulator on checks and balances that are being adopted while approving the drug.
- Some experts have criticised the way the company went to the media before publishing the data in a reputed journal, that would have allowed independent experts to assess the claims threadbare.

Is there a downside?

- Sometimes antibodies are known to help viral entry and replication in target cells which can worsen the disease.

8. Latent Virus

Context:

- Doubts over second infection of COVID-19.

Background:

- There have been repeated instances of 'reinfection' from COVID-19 since early January 2020.
 - * Reinfection means people who had tested negative for COVID-19 test positive again after a while.

Details:

- The article analyzes the possible reasons for reinfection from COVID-19.

Latency:

- The observation of re-infection of COVID-19 brings to light the possibility of SARS-CoV-2 virus having latency. The COVID-19 virus may have "reactivated" in the patients rather than them becoming re-infected.

- * A latent infection is when the virus in the body is dormant and does not replicate within the host. It however possesses the capacity to be reactivated at some point, causing the disease at a later point of time.
- * As opposed to active infections, where a virus is actively replicating and potentially causing symptoms, latent infections are essentially static which last the life of the host and occur when the primary infection is not cleared by the adaptive immune response.
- * Chronic viruses can go into latency. The latent viral infections can be reactivated into the active lytic form.
- * 1. Examples: Herpes simplex viruses type 1 and 2, varicella-zoster virus, HIV, Epstein-Barr virus (human herpesvirus 4), and cytomegalovirus.

Different types of viral infections:

- A chronic virus infects its host for extended periods of time, often through the lifetime of the host.
- An acute infecting virus, such as influenza and rotavirus creates noticeable symptoms in a short period of time and is cleared from the body after a few days or weeks.

Flaws in testing:

- While the RT-PCR [reverse transcription/polymerase chain reaction] tests are considered to be the gold standard for testing, all tests are not 100% accurate. False positives and false negative results can occur.
- There are limits of detection of the current testing methods employed. The concept of "limit of detection" of a virus notes that there is a threshold where a virus can be detected. A negative SARS-CoV-2 test does not mean zero infection; it means no detectable infection.

Other reasons:

- Many viruses can survive at the mucosal level in spite of immunity. A similar behaviour is possible from SARS-CoV-2.
 - * Example: In the case of polio virus, viral shedding can continue for up to 10 weeks, in spite of very high antibody levels post the vaccination.
- Another reason for the positive test might be due to the host harboring an antibody-bound virus that is non-infective.
- Even fragmented RNA particles can yield a positive result. The remaining virus fragments in humans can also lead to positives during testing.

Conclusion:

- So far none of the observations conclusively prove a second infection. In each one of these cases, there is sufficient reason to suspect that it is one infection,

with negative results in between. This necessitates a change to testing policy.

- There is the need to globally adopt a system where clinical signs are considered sufficient to commence treatment for COVID-19, even before an RT-PCR test is done. Also, cessation of symptoms can be taken as a signal to show that a person has recovered.

9. Measles and Rubella

The World Health Organization (WHO) has said that measles and rubella have been eradicated from Sri Lanka and the Maldives after decades of immunisation programmes.

- This makes Sri Lanka and the Maldives the first two countries in WHO South-East Asia Region to achieve measles and rubella elimination ahead of the 2023 target.
- Member countries of WHO South-East Asia Region had in September 2019 set 2023 as the target for elimination of measles and rubella, revising the goal of the flagship programme that since 2014 had focused on measles elimination and rubella control.
- Bhutan, DPR Korea and Timor-Leste are other countries in the Region that have eliminated measles.
- Under the Global Vaccine Action Plan, measles and rubella are targeted for elimination in five WHO Regions by 2020.

Measles and Rubella:

- Both Measles and Rubella are caused by an RNA virus and are generally spread through respiratory droplets of sick people.
- Measles is a highly contagious viral disease and is a cause of death among young children globally.
- It is caused by a virus which causes rashes all over the body.
- Rubella causes milder infections than measles.
- A person can be vaccinated against both the disease with a Measles, Mumps, and Rubella (MMR) vaccine.

10. National Doctors' Day

- National Doctor's Day is celebrated every year to recognise the invaluable work done by doctors and physicians and thank them for their dedicated service.
- As a way of recognising their efforts, Indian Medical Association (IMA) observed the first National Doctor's day in July 1991.
- India celebrates 1 July as National Doctors' Day in honour of Dr Bidhan Chandra Roy, who was not only a physician himself, but a philanthropist, educationist and social worker, who also served as Chief Minister of West Bengal for 14 years.

Context:

- PM salutes doctors on the occasion of Doctors' Day.

2020

- This year, the day seeks to thank all doctors and medical professionals for their service against the fight against the coronavirus pandemic.
- The theme for this year is "Lessen the mortality of COVID 19"

11. Pneumococcal Polysaccharide Conjugate Vaccine

Context:

- The first indigenously-developed vaccine in the field of pneumonia has been given market approval by the Drug Controller General of India (DCGI).

Details:

- The first fully indigenously developed Pneumococcal Polysaccharide Conjugate Vaccine has been developed by the Serum Institute of India Pvt. Ltd, Pune.
- This is the first indigenously developed vaccine in the field of pneumonia.
 - * Earlier the demand of such vaccine was substantially met by licensed importers in the country since the manufacturers were all vaccine companies based outside India.
- This vaccine is used for active immunization against invasive disease and pneumonia caused by "Streptococcus pneumonia" in infants.
- The vaccine is administered in an intramuscular manner.
 - * An intramuscular injection is when medication is injected deep into the muscles.

Clinical Trials

- The company has concluded phase III trials in India and has also conducted clinical trials in Gambia.
- Thereafter, it had applied for approval and permission to manufacture this vaccine with the office of the DCGI.
- The company has been granted permission to manufacture this vaccine.

Conjugate vaccines

- A conjugate vaccine is a type of vaccine which combines a weak antigen with a strong antigen as a carrier so that the immune system has a stronger response to the weak antigen.
 - * They are somewhat similar to recombinant vaccines: they're made using a combination of two different components

12. Scheme for Promotion of Bulk Drug Parks

Context:

- Union Minister launched the scheme for the Promotion of Bulk Drug Parks.

Background:

- The Indian pharmaceutical industry is the third-largest in the world in terms of volume and the 14th largest in terms of value.
- India contributes 3.5% of the total medicines and drugs exported globally.
- However, India is still dependent on imports for bulk drugs.
 - * Bulk drugs are critical basic raw materials that are used to produce the finished dosage formulations.
- The growth of the pharmaceutical sector is contingent upon the ability to ensure the uninterrupted supply of quality bulk drugs and the capacity to upscale their manufacturing during emergency situations.
- It is therefore highly desirable to achieve self-reliance in bulk drug manufacturing.
- This scheme is promoted with a view to bring down the manufacturing cost of bulk drugs and increase competitiveness in the industry.
- Bulk drugs are also called Active Pharmaceutical Ingredients (API).
 - * China's Hubei province is considered the hub of the API industry.
 - * Around 70% of the Indian API imports come from China.

Objectives of the scheme:

The chief objective of the scheme is to reduce the cost of bulk drug manufacturing in the country and reduce dependence on imports for the same.

- To promote setting up of bulk drug parks in the country for providing easy access to world-class Common Infrastructure Facilities (CIF) to bulk drug units located in the park.
- To help industry meet the standards of the environment at a reduced cost through innovative methods of common waste management system.
- To exploit the benefits arising due to the optimization of resources and economies of scale.

About the scheme:

- The scheme envisages the creation of 3 bulk drug parks in the country.
- It is a central sector scheme with a total financial outlay of Rs.3000 Crore.
 - * The grant-in-aid will be 90% of the project cost in

the case of North-East and hilly States and 70% in the case of other States. Maximum grant-in-aid for one bulk Drug Park is limited to Rs.1000 crore.

- The duration of the scheme is from 2020 to 2025.
- The parks will have common facilities such as solvent recovery plant, distillation plant, power & steam units, common effluent treatment plant, etc.
- For implementing the scheme, the respective state government will set up a State Implementing Agency (SIA).
- The SIA will be responsible for the day-to-day management of the Bulk Drug Park.

13. Trump starts withdrawal of U.S. from WHO

Context:

President Donald Trump has formally started the withdrawal of the U.S. from the World Health Organization (WHO).

Background:

- Trump had earlier issued threats to deprive the UN body (WHO) of its top funding source over its response to the coronavirus.
 - * He had also threatened to suspend \$400 million in annual U.S. contributions.
- The withdrawal is effective in one year — July 6, 2021. And could be reversed by a new administration or if circumstances change

Decision can be overturned

- The decision has apparently been taken without the approval of the US Congress and there could be a possibility that Congress or Courts might reverse the withdrawal.
- Academia and medical associations have put constant pressure on Congress to prevent the USA from withdrawing.
- Democratic challenger Joe Biden has promised to revoke the decision if he is elected as President.

Consequences

- If the USA withdraws from the WHO, it will lose its seat and will not have access to new influenza virus samples for research.
- With no more U.S. scientists embedded in the WHO in key roles, including outbreak response teams like the one that visited Wuhan, it will lose out on health intelligence that will compromise the country's response to international disease outbreaks.

Impact on Global Health

- The departure of the U.S. will be a significant blow to the WHO in terms of loss of technical expertise and could lead to loss of annual funding of about \$450 million.
- WHO is the only body capable of leading and

coordinating the global response to COVID-19. Terminating the US relationship would undermine the global effort to beat this virus and could jeopardize global health.

Challenges faced by WHO

- In 2005 there was a revision of the International Health Regulations which made it mandatory for countries to notify the WHO of all events that may constitute an international public health emergency and to "respond to requests for verification of information regarding such events".
- Yet, the WHO has limited power to ensure compliance by the Member States, including limitations in independently verifying member states' official reports.

Conclusion

- In the end, none gains from a further weakened WHO, neither the USA by withdrawing nor the Global Community.

14. Vitamin D-Arming India's poor against the pandemic

Context

- There was a paper that was published in European Journal of Clinical Nutrition titled, "Perspective: Improving vitamin D status in the management of COVID-19".
- According to the paper it points out how vitamin D deficiency can affect COVID-19 high-risk patients, particularly those who are diabetic, have heart conditions, pneumonia, obesity and those who smoke.

How is it produced?

- It is produced when sunlight (or artificial light, particularly in the ultraviolet region of 190-400 nm wavelength) falls on the skin and triggers a chemical reaction to a cholesterol-based molecule, and converts it into calcidiol (adding one hydroxyl group, also called 25(OH)D technically) in the liver and into calcitriol (or 1, 25(OH)2D) in the kidney.

Importance of Vitamin D

Vitamin D is known to help in

- having the right amount of calcium in the bones,
- catalyze the process of protecting cell membranes from damage,
- Preventing the inflammation of tissues and helping stop tissues from forming fibres and weakening bones from becoming brittle, leading to osteoporosis.
- Vitamin D helps the body absorb calcium and phosphate from our diet. These minerals are important for healthy bones, teeth and muscles.

Concerns

- Since sunlight is important for the generation of vitamin D, tropical countries have an advantage over the northern countries. India, being a tropical country, one would expect naturally derived vitamin D levels to be good. Yet, it is not so!
- A paper titled, "Systematic review on vitamin D level in apparently healthy Indian population and analysis of its associated factors" was published in 2017.
- The authors of the paper concluded that India, a nation of abundant sunshine, is surprisingly found to have a massive burden of vitamin D deficiency among the public irrespective of their location (urban or rural), age or gender, or whether they are poor or even rich. Hence, it is clear that vitamin D supplementation is necessary for most Indians to treat its deficiency.

Way Forward

- The Central and State governments, as well as public-spirited foundations, companies and even sympathetic public have been very helpful in offering free food for crores of poor, particularly, migrant workers.
- The main government schemes of giving free mid-day meal scheme for students studying in government schools, and the feeding programmes for preschool children and pregnant women under the Integrated Child Development Services through anganwadis have been vital.
- Given the deficit in vitamin D (indeed in many other vitamins, and calcium), it is highly desirable for the governments to
 - * consult nutrition experts and institutions to advise and suggest the type of nutritive items that can be added to the current 'ration' food given to the poor, and the meals given to school children,
 - * In any case, supply free of charge, vitamin D, other vitamins and calcium, in consultation with medical and public health experts regarding the dosage, frequency and other details.

- Hepatitis refers to an inflammatory condition of the liver.
- The condition can progress to fibrosis (scarring), cirrhosis or liver cancer.
- It is commonly caused by a viral infection, but there can be other causes as well (such as toxic substances, autoimmune diseases, etc.)
- There are five main strains of the hepatitis virus – A, B, C, D and E. Together, Hepatitis B and C are the most common cause of deaths, with 1.4 million lives lost each year.
- Hepatitis A and E are typically caused by ingestion of contaminated food or water. Hepatitis B, C and D usually occur as a result of parenteral contact with infected body fluids.

15. World Hepatitis Day

- 28th July is observed as World Hepatitis Day every year.
- The idea behind the observance is to raise awareness of the global burden of viral hepatitis.
- The theme for 2020 is "Hepatitis-free future".
- It is one of eight official global public health campaigns marked by the World Health Organization (WHO).
- 28 July was chosen as the day because it is the birth anniversary of Baruch Samuel Blumberg, an American physician who did pioneering work on the hepatitis B virus.

About Hepatitis:

SOCIAL ISSUES

1. Affordable Rental Housing Complexes (ARHCs)

Context:

- Ministry of Housing and Urban Affairs released guidelines for ARHCs.

About ARHCs Scheme:

- The Housing Ministry had launched the ARHCs scheme as a sub-scheme under the Pradhan Mantri Awas Yojana – Urban (PMAY-U) as a part of the Atmanirbhar Bharat Abhiyan.
- The chief objective of the initiative is to provide dignified and affordable living spaces to the urban poor/migrants in need.
- Estimated to benefit about 3.5 lakh people, the government is also considering allowing 100% FDI in the scheme.

Implementation models:

- The scheme provides an opportunity for all States/UTs to convert their existing vacant houses constructed under various Central/State Government schemes into ARHCs.
- Another model allows construction, operation and maintenance of ARHCs by public or private entities on their own available vacant land for a period of 25 years.

Benefits of the scheme:

- Ensure dignified living environments for urban poor and migrants close to their workplaces at affordable rates.
- This will unlock existing vacant housing stock and make them available in urban space.
- It will propel new investment opportunities and promote entrepreneurship in the rental housing sector by encouraging Private/Public Entities to efficiently utilize their vacant land available for developing ARHCs.
- Prevent the proliferation of slums.
- Strengthen municipal finances at ULB level.
- Ensure a sustained supply of workforce and increased productivity for industries and manufacturing units.

2. India Cycles4Change Challenge

- The India Cycles4Change Challenge is an initiative of the Smart Cities Mission, Ministry of Housing and Urban Affairs, Government of India to inspire and support Indian cities to quickly implement cycling-friendly initiatives in response to COVID-19.
- The Challenge aims to help cities connect with their citizens as well as experts to develop a unified vision to promote cycling.

- In addition to creating extensive cycling-networks through low-cost interventions like pop-up cycle lanes and traffic-calmed or non-motorised zones, cities could launch programmes such as community-led cycle rental schemes that increase the availability of cycles to citizens and promote the usage of cycling through public events and outreach.
- In the longer term, the Smart Cities Mission encourages cities to convert temporary interventions into permanent.
- Cities are encouraged to collaborate with CSOs, experts, and volunteers as they develop and implement their plans. Citizen collaboration will also be a key metric in the evaluation of proposals submitted by the cities.

The Challenge will run in two stages.

- Stage one will run until October where cities will focus on piloting quick interventions to promote cycling and developing a scale-up strategy.
- In October 2020, 11 cities will be shortlisted and will receive Rs. 1 Crore award and guidance from national and international experts to further scale-up the initiatives in Stage Two, which will be held until May 2021.

Who can apply?

- Cities with a population of more than 5 lakh.
- Capital cities of states/UTs.
- Cities under the Smart Cities Mission.

Benefits for cities:

- Through this challenge, cities will be able to implement quick cycling interventions with support from experts and citizens.
- They will also receive guidance on how to create permanent interventions to encourage cycling in their city.

Context:

- Smart Cities Mission, Ministry of Housing and Urban Affairs opens registration for India Cycles4Change Challenge.

3. Maternal Mortality Rate (MMR)

- MMR is defined as the number of maternal deaths per 1,00,000 live births.
- It is one of the key indicators of maternal mortality.
- The target 3.1 of Sustainable Development Goals (SDG) set by the United Nations aims to reduce the global maternal mortality ratio to less than 70 per 1,00,000 live births.

Context:

- According to the special bulletin on Maternal Mortality in India (2016-18) released by the Office of the Registrar General's Sample Registration System (SRS), India has registered a steep decline in Maternal Mortality Ratio (MMR).

Details:

- The Maternal Mortality Ratio (MMR) in India has declined to 113 in 2016-18 from 122 in 2015-17 and 130 in 2014-2016.
 - * This is almost 100 deaths less than the 2007-09 period where MMR was at 212.
- Maternal mortality in a region is a measure of the reproductive health of women in the area.
- As per the World Health Organization, maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management.

Note:

- The MMR of various States according to the bulletin includes Assam (215), Bihar (149), Madhya Pradesh (173), Chhattisgarh (159), Odisha (150), Rajasthan (164), Uttar Pradesh (197) and Uttarakhand (99).
- The southern States registered a lower MMR — Andhra Pradesh (65), Telangana (63), Karnataka (92), Kerala (43) and Tamil Nadu (60).

4. SKOCH Award

- SKOCH Award, instituted in 2003, is the highest civilian honor in the country conferred by an independent organisation.
- It recognises people, projects and institutions that go the extra mile to make India a better nation.
- It is given in the areas of digital, financial and social inclusion; governance; inclusive growth; excellence in technology and applications; change management; corporate leadership; corporate governance; citizen service delivery; capacity building; empowerment and other such softer issues.
- It is given to both institutions/organisations and individuals.

Context:

- The Ministry of Tribal Affairs received the SKOCH Gold Award for its "Empowerment of Tribals through IT enabled Scholarship Schemes" project.

5. State of the World Population 2020 report**Context:**

- The United Nations Population Fund (UNFPA) has released its State of the World Population 2020 report.

Details:

- The report examines the issue of missing women by studying sex ratio imbalances at birth as a result of gender-biased sex selection as well as excess female mortality due to deliberate neglect of girls because of a culture of son preference.
 - * Sex ratio measures the number of females born for every 1,000 males.
 - * Excess female mortality is the difference between observed and expected mortality of the girl child or avoidable death of girls during childhood. It is calculated as a difference between observed and expected mortality rates for girls below age 5.

Key findings:

- The figure shows that the number of missing women has more than doubled over the past 50 years, who were at 61 million in 1970.
- With the advent of technology and increased access to ultrasound imaging, the number of girls missing due to female foeticide has exceeded those that were missing because of postnatal sex selection.
 - * Gender-biased sex selection tends to be higher among wealthy families but percolates down to lower-income families over time, as sex selection technologies become more accessible and affordable.
- According to estimates averaged over a five year period (2013-17), annually, there were 1.2 million missing female births, at a global level.
- These skewed numbers translate into long-term shifts in the proportions of women and men in the population of some countries, the report points out.
 - * In many countries, this results in a "marriage squeeze" as prospective grooms far outnumber prospective brides, which further results in human trafficking for marriage as well as child marriages.
- Globally, roughly one in five (21%) of women are subjected to child marriage.
 - * The report said that the drivers of child marriage are poverty, insecurity and limited access to quality education and work opportunities. These factors mean that child marriage is often seen as the best option for girls, or as a means to reduce the economic burden on the family.
- At least 19 harmful practices, ranging from breast ironing to virginity testing, are considered human rights violations, according to the UNFPA report, which focuses on the three most prevalent ones: female genital mutilation, child marriage, and extreme bias against daughters in favour of sons.

Key findings with respect to India:

- One in three girls missing globally due to sex selection, both pre- and post-natal, is from India — 46 million out of the total 142 million.
- The report cites a 2014 study to state that India has the highest rate of excess female deaths at 13.5 per 1,000 female births or one in nine deaths of females below the age of 5 due to postnatal sex selection.
 - * The same study shows that in Afghanistan, Bangladesh and Pakistan, excess female mortality of girls below 5 years of age was under 3%.
- Also, as per the 2011 Census, the latest to take place in the country, the sex ratio for all Indians was 940 females to 1,000 males.
- The State of World Population Report added that 32% of Indian women who had been married before the age of 18 had experienced physical abuse from their husbands, compared to 17% for those who married as adults.
 - * This is based on a survey of more than 8,000 women in five states where child marriage is most prevalent – Andhra Pradesh, Bihar, Jharkhand, Maharashtra and Rajasthan.
- However, there is a silver lining. According to the report, advances in India have contributed to a 50% decline in child marriages in South Asia.

Impact of COVID-19:

- The major concern is that, while progress has been made in ending some harmful practices worldwide, the COVID-19 pandemic threatens to reverse gains.
- A recent analysis revealed that if services and programmes remain shuttered for six months due to the COVID-19 pandemic, an additional 13 million girls may be forced into marriage and 2 million more girls may be subjected to female genital mutilation between now and 2030.

Suggestions:

- Countries that have ratified international treaties such as the Convention on the Rights of the Child have a duty to end the harm, whether it's inflicted on girls by family members, religious communities, health-care providers, commercial enterprises or state institutions. Many have responded with laws, but laws alone are not enough.
- According to the report, decades of experience and research show that bottom-up, grassroots approaches are better at bringing change.
- Economies and the legal systems that support them must be restructured to guarantee every woman equal opportunities, the report adds.

United Nations Population Fund:

- UNFPA stands for United Nations Fund for Population Activities. Its name was later changed to the United Nations Population Fund in 1987.
- It is a subsidiary organ of the UN General Assembly.

6. World Population Day

- Governing Council of the United Nations' Development Program for the first time in 1989 launched an initiative to observe 11 July as the World Population Day every year to garner world's attention towards the urgency and importance of population issues.
- The day is significant because it highlights the problems of overpopulation, raises awareness about the effects of overpopulation on the environment and development.
- It also talks about the health problems faced by child bearing women and the importance of family planning, gender equality, poverty, maternal health and human rights.

World Population Day 2020: Theme

- The theme of the World Population Day 2020 is to raise awareness about safeguarding sexual and reproductive health needs and vulnerabilities of women and girls during the Covid-19 pandemic

7. Permanent commission for Women in Indian Army**Significance**

- It breaks gender stereotyping and provides equal opportunities for women in the Army.
- This was a long-fought battle. It will go a long way in ending a prejudice associated with the Army.
- The Army is often seen as the preserve of men, but enough women have fought heroic battles to bust that myth, from Rani of Jhansi in the past to Squadron Leader Minty Agarwal of the Indian Air Force, who in 2019 "was part of the team that guided Wing Commander Abhinandan Varthaman during the Balakot airstrike carried out by the IAF".
- Today mindsets have changed, young men are more used to seeing women as peers and occupying leading public roles.

Way forward

- So far, women make up only 3.89% of the Indian army, 6.7% of the navy and 13.2% of the air force, excluding the various medical services, which indicates there are less women in the armed forces. Gradually the number has to be increased.
- The physical and mental standards for the role must be uniform and gender-neutral, and women and men free to compete for them. A change in the mindset and gender sensitization is the need of the hour.

- Countries like the United States and Israel had allowed women to play a key role in active combat. But in India, the Supreme Court had to forcefully nudge the government to make women's role in the Army more inclusive.
- A gender barrier may have fallen, but the war against inequity is far from over.

Context:

- Formal Government Sanction Letter has been issued by the Ministry of Defence for grant of Permanent Commission (PC) to women officers in the Army.
- The Supreme Court in February 2020 had given a verdict that directed the government that women officers be granted PC and command postings in all services other than combat.

GEOGRAPHY

1. Comet Neowise

- It is officially known as C/2020F3.
- It is the brightest comet that can be seen in the sky and will be visible across the globe as it is closest to the earth these days.
- The Neowise, once disappears, will be visible only after 6800 years.
- 'Comet Neowise' was first spotted by NASA's spacecraft mission Near-Earth Object Wide-field Infrared Survey Explorer (NEOWISE) on 27 March 2020 and hence the name NEOWISE.

What is a comet?

- A comet is an icy small body that consists mostly of rocky materials, dust and ice. As they come closer to the sun there is evaporation of volatile contents from these comets. When they start melting, the particles start glowing by the reflected sunlight. This makes the 'dust tail' of comets.

2. Earthquakes in Arunachal Pradesh

Context:

- Seismicity study of Arunachal Himalaya reveals low to moderate earthquakes at 2 crustal depths.

Background:

- The exhumation and growth of the Himalayas is a continuous process that results predominantly from reverse faults in which the rocks on the lower surface of a fault plane move under relatively static rocks on the upper surface, a process called underthrusting of the Indian plate beneath its Eurasian counterpart.
- This process keeps modifying the drainage patterns and landforms and is the pivotal reason for causing an immense seismic hazard in the Himalayan mountain belt and adjoining regions.
- The Tuting-Tidding Suture Zone (TTSZ) is a major part of the Eastern Himalaya, where the Himalaya takes a sharp southward bend and connects with the Indo-Burma Range.
- This part of the Arunachal Himalaya has gained importance in recent times due to the growing need of constructing roads and hydropower projects, making the need for understanding the pattern of seismicity in this region critical.
- A study exploring the elastic properties of rocks and seismicity in this part of India revealed that the area is generating moderate earthquakes at two different depths.

- * Low magnitude earthquakes are concentrated at 1-15 km depth, and slightly higher, greater than 4.0 magnitude earthquakes are mostly generated from 25-35 km depth.
- The intermediate-depth is devoid of seismicity and coincides with the zone of fluid/partial melts.
- The crustal thickness in this area varies from 46.7 km beneath the Brahmaputra Valley to about 55 km in the higher elevations of Arunachal, with a marginal uplift of the contact that defines the boundary between the crust and the mantle (technically called the Moho discontinuity).

3. Knowledge Resource Centre Network (KRCNet)

Context:

- Knowledge Resource Centre Network (KRCNet) launched on the Foundation Day of the Ministry of Earth Sciences.

About KRCNet:

- The Ministry of Earth Sciences aims to develop a world-class Knowledge Resource Centre Network (KRCNet) under Digital India.
- The traditional libraries of the Ministry system will be upgraded into a top-notch Knowledge Resource Centres (KRC).
- The KRCs will be connected with each other and integrated into the KRCNet portal. It will be a single point entry to the intellectual world of the Ministry of Earth Sciences (MoES).
- Objectives of the KRCNet:
 - * Establish a Total Quality Management (TQM) system by securing ISO certification for documenting MoES knowledge resources, its maintenance, easy retrieval and dissemination.
 - * Collect, collate, analyze, index, store and disseminate the intellectual resources, products and project outputs available in the MoES headquarters and its institutes.
 - * Develop and maintain an up-to-date meta-data of the print & digital resources available in the MoES headquarters and MoES institutes, including MoES services.
 - * Provide 24X7 access to the subscribed knowledge contents through the KRCNet portal.
 - * Application of information analytical tools & techniques like bibliometrics, scientometrics, big-data analytics, social media analytics, etc., for policy formulation, report preparation and information dissemination.

- * Periodically organize training workshops to popularize the usage of electronic journals, databases, digital products, data analytics, etc.

4. Mausam App

Context:

- Ministry of Earth Sciences launches Mobile App "Mausam" for India Meteorological Department on its Foundation Day Celebrations.

Details:

- The Mausam App is designed to communicate the weather information and forecasts in a lucid manner without technical jargons.
- Users can access observed weather, forecasts, radar images and be proactively warned of impending weather events.
- Services offered under the App:
 - * Current weather – Current temperature, humidity, wind speed and direction for 200 cities updated 8 times a day, information on sunrise/sunset and moonrise/moonset.
 - * Nowcast – Three hourly warnings of localized weather phenomena and their intensity issued for about 800 stations, and districts of India.
 - * City Forecast – Past 24 hours and 7-day forecast of weather conditions around 450 cities in India.
 - * Warnings – Alerts issued twice a day for all districts for the next five days in colour code (Red, Orange and Yellow) to warn citizens of approaching dangerous weather.
 - * Radar products – Latest station-wise radar products updated every 10 minutes.

5. Mizoram quake zone caught between two geological faults

Context:

- A geologist assigned to make a preliminary study on the frequent tremors in Mizoram has said that Mizoram's zone of scary earthquakes is caught between two subterranean faults.

Background:

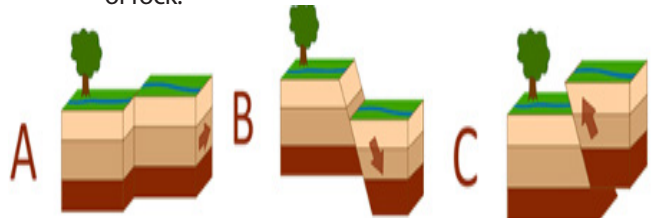
- Mizoram experienced at least eight moderate earthquakes between June 21 and July 9, 2020. The tremors ranged from 4.2 to 5.5 on the Richter scale.
- The epicentre of most of these quakes was beneath Champhai district bordering Myanmar, including the last one of magnitude 4.3 and about 10 kilometres deep.
- A few were beneath the adjoining Saitual and Serchhip districts.

Details:

- According to the geologist, earthquakes have happened and will happen in that part of Mizoram because it is caught between two geological faults i.e, the Churachandpur Mao Fault and the Mat Fault.
- The Churachandpur Mao Fault is named after two places in Manipur and runs north-south into Myanmar along the border of Champhai.
- The Mat Fault runs northwest-southeast across Mizoram, beneath the river Mat near Serchhip.
- There are several shallower transverse or minor faults in between these two major faults that are deeper.
- People there have nothing to worry about if their magnitude does not measure above 5 on the Richter scale.

Faults:

- Faults are discontinuities or cracks that are the result of differential motion within the earth's crust.
- It is a fracture or zone of fractures between two blocks of rock.



6. Nag River

Context

- The Nagpur Bench of the Bombay High Court recently noted that the Nag River has turned into a stinking channel of sewage, filth and industrial waste.

Details:

- It is a part of the Kanhan-Pench river system.
- Nagpur derives its name from the river.
- The river serves as drainage for Nagpur and as a result, its ecosystem is heavily polluted by urban waste from the city.

7. National Awards for Excellence in Earth System Science

Science

Context:

- The Ministry of Earth Sciences (MoES) announced the National Awards for Excellence in Earth System Science.

About the awards:

- The awards were instituted with the aim to provide due recognition and platform to major scientific contributions made by eminent scientists/engineers in various fields of Earth System Science.
- It also aims at encouraging women and young researchers for coming into the mainstream of Earth System Science.
- The awards are announced every year on 27th July, which is the foundation day of the Ministry of Earth Sciences. This ministry was constituted in 2006.
- The following awards are announced:
 - * Life Time Excellence Award in the sphere of Earth System Sciences
 - * Young Researcher/Achiever Award in the field of Earth System Science
 - * National award in the fields of:
 - * 1. Ocean Science & Technology
 - * 2. Atmospheric Science & Technology
 - * 3. Geoscience & Technology
 - * 4. Polar Science & Cryosphere
- The awards are open to all residents of India.

- Division of Digital mapping System & Digitized and Scanning of existing maps on digital format
- Geographical Researches
- Remote Sensing & GIS, Digital Image processing
- Division on Cartography for the Visually Impaired
- Capacity and Infrastructure building of NATMO to convert/to upgrade in digital mode

Context:

- NATMO publishes 4th updated version of its COVID-19 Dashboard.

8. National Atlas and Thematic Mapping Organisation (NATMO)

- NATMO was established in 1956 as the National Atlas Organisation.
- Professor S.P. Chatterjee, the doyen of Indian Geography was the Founder-Director of this institute.
- It was renamed in 1978 to give it a broad-based responsibility in the field of thematic cartography and geographical research.
- It is under the administrative control of the Department of Science & Technology of the Government of India.
- It is headquartered in Kolkata.

Major functions of NATMO:

- Compilation of the National Atlas of India
- Preparation of the National Atlas maps in regional languages
- Preparation of thematic maps based on research studies on environmental and associated aspects and their impact on social and economic development
- Any other work entrusted by the Central Government or its agencies to NATMO
- Installation of automated Mapping System for increasing speed and efficiency in mapping

EDUCATION

1. India Report on Digital Education, 2020

Context

- HRD Minister launches India Report on Digital Education, 2020.

Details

- This report details the various initiative and programmes of the MHRD and also the state/UT governments with respect to online learning initiatives.
- It was compiled and released by the Ministry of Human Resource Development (MHRD).

Major Initiatives

- DIKSHA (Digital Infrastructure for Knowledge Sharing)
- Swayam Prabha TV Channels
- Radio broadcasting is being used for children in remote areas who are not online.
- Differently-abled students: One DTH channel is being operated specifically for hearing impaired students in sign language. For visually and hearing impaired students, study material has been developed in Digitally Accessible Information System (DAISY) and in sign language; both are available on NIOS website/YouTube.
- E-textbooks: The e-textbooks can be accessed using e-Pathshala web portal and mobile app by students, teachers, teacher educators and parents.
- National Repository of Open Educational Resources (NROER): NROER is an open storehouse of e-content for students, teachers, teacher educators and parents.

Future plans include :

- Developing digital classrooms as an instructional modality – Integration of use of technology with the education system.
- Inclusion of virtual vocational training, virtual labs & skill development courses.
- Multi-mode access to education using web portals, mobile apps, TV channels, radio, podcasts, etc. with coherent user experience.
- Developing quality e-content in local languages.
- Developing framework for enhancing learning within and outside the classroom, and for assessments in the era of digital education.
- Framing of Online/Digital Education Guidelines addressing the digital divide.
- Efforts are also underway for developing mechanisms to provide textbooks to all children at home, upskill teachers to leverage e-learning resources, use of mobiles to increase penetration, etc.

2. Manodarpan initiative

Context

- Manodarpan initiative launched by the Union HRD Minister.

Background:

- The outbreak of the global pandemic COVID-19 presents a challenging time for everyone around the world.
- Not only is this pandemic a serious medical concern, but it also brings mixed emotions and psycho-social stressors for all.
- There are emerging mental health concerns with a specific focus on children, adolescents and youth especially children with disabilities.
- Children and adolescents may be more vulnerable and may experience a heightened level of stress, anxiety and fearfulness, along with a range of other emotional and behavioural issues.
- Such unanticipated and sudden changes will be required to be addressed from all educational platforms.
- Teachers as well as families with an empathetic and patient approach can go a long way in mitigating such needs of children and adolescents.
- This time can also be challenging for teachers and parents.

About Manodarpan initiative:

- It is an initiative launched by the Union Ministry of Human Resource Development as part of the Atmanirbhar Bharat Abhiyan.
- The objective of the initiative is to provide psychosocial support to students for their mental health and well-being.
- The portal will include student counselling, tips, podcasts, etc. aimed at reducing stress levels and anxiety.
- The Manodarpan initiative has been launched with a view to provide support to students, families and teachers all over the country and ensure their well-being.

3. PRAGYATA Guidelines on Digital Education

Context:

- Union HRD Minister virtually releases PRAGYATA Guidelines on Digital Education.

Background:

- The COVID-19 pandemic has led to the closure of

schools and has impacted over 240 million children of the country who are enrolled in schools. Extended school closures may cause loss of learning.

- To mitigate the impact of the pandemic, schools will not only have to remodel and reimagine the way teaching and learning have happened so far, but will also need to introduce a suitable method of delivering quality education through a healthy mix of schooling at home and schooling at school.
- The PRAGYATA guidelines have been developed from the perspective of learners, with a focus on online/blended/digital education for students who are presently at home due to lockdown.

About PRAGYATA Guidelines:

- The guidelines on Digital/Online Education provide a roadmap or pointers for carrying forward online education to enhance the quality of education.
- The PRAGYATA guidelines include eight steps of online/digital learning that is, Plan- Review- Arrange-Guide- Yak (talk)- Assign- Track- Appreciate.
- Based on the class of the students, the guidelines recommend the number of sessions per day and also the number of hours per session.
- These guidelines for school heads and teachers describe the need assessment, planning and steps to implement digital education while ensuring cyber safety and privacy measures.
- It also outlines the support to be provided to students with special needs.
- The main emphasis is on balanced online and offline activities keeping the screen time as an essential parameter in accordance with the level of students.
- Guidelines for physical health and mental wellness are stressed for all stakeholders so that children do not get overly stretched or stressed, or get affected negatively (postural defects, ophthalmic issues, and other physical problems) owing to prolonged use of digital devices.

4. University examination guidelines that score low

Context

- According to an official statement from the University Grants Commission (UGC), final year university examinations may be postponed until the end of September 2020, but must be conducted in either online or offline mode.
- Students who are unable to appear for these examinations will be given the opportunity to appear for special examinations which will be conducted later.
- The Home Ministry has also given its approval for the conduct of the examinations in a letter to the Ministry of Human Resources Development, and directed that final term exams must be “compulsorily conducted” as per UGC guidelines.

Why was this decision taken by UGC?

- There had been a vociferous demand from a section of students and parents to cancel the examinations due to the spread of the COVID-19 pandemic and use alternative grading mechanisms. At least seven state governments have already announced the cancellation of examinations.
- However, the UGC decided that it was important to “protect academic quality and credibility”.
- It further said it was “very crucial to ensure academic credibility, career opportunities and future progress of students globally”.

UGC Act 1956

- The UGC was fundamentally meant to be a funding institution as is clear from its nomenclature. But the UGC Act 1956 does confer on it the power of ‘coordination and determination of standards’ in universities as well and, therefore, it has become the regulator of higher education.

Issues surrounding the Indian education system

- Most examinations in India merely test an ability to recall facts or information rather than an understanding of those facts or an ability to use them in practical situations.
- Teachers usually are trained to set papers for the offline mode and transition to online mode may be a bit difficult.
- Certification through examination is important but cannot and should not be the sole goal of education.
- A one size fits all cannot apply to our universities as we have all kinds of universities, i.e. unitary, affiliating, private and subject-specific.

Criticism

Importance should be given to cooperative federalism

- Before the new UGC guidelines were released, many State Governments like Rajasthan, Haryana and Maharashtra had already cancelled examinations for final-year students.
- Their decisions should be respected and not be dominated, by respecting the principles of cooperative federalism.
 - * This creates fresh uncertainty for states that had already decided to cancel exams.
- With the UGC recommendations in logger-heads with the decision of the States, students and parents are worried about the situation and are requesting clarity.

The shadow of the virus

- India has nearly one million cases of the novel coronavirus and a number of State Governments are enforcing periodic lockdowns to prevent the spread of the disease. So, the September 2020 deadline does not inspire much confidence.

- If the virus continues to spread, university administrations will not be in a position to announce examinations, and students will continue to be in limbo about their future.
- It will compromise the safety of students.

Furnishing Proof

- The guidelines state that the decision has been taken keeping in view the future of the students — jobs and higher education — these prospects are, in fact, harmed by this decision.
- In normal circumstances, examinations would have been conducted and either results announced or provisional certificates given by this time.
- These help students who are graduating confirm their admissions in institutes of higher education or report at their places of employment by providing proof of them having completed the course.
- The current system does not provide for any such possibility.

More discrimination possible

- In case the infection does not subside, it would mean that the UGC either extends the deadline further or universities are forced to conduct online exams.
- In the latter case, the UGC would have imposed a patently discriminatory policy on the students — issues with access to the Internet, electricity and study materials, as well as a lack of a study environment in homes would go unaddressed — and it would only manifest the disparity prevalent in the education system.
- In the former case, it only furthers the uncertainty, and even if the UGC decides to allow universities not to conduct examinations, this entire exercise would be pointless.

The privileged class have an advantage over the poor

- The elite, with the privilege of being unaffected by the crisis caused by the infection as well as its economic ramifications, will be much better placed than their peers without the same level of assuredness. The whole purpose of the university acting as an equalizer will be lost.
- Students from a humble background, from remote areas and those with doctors/health workers as parents or are coronavirus positive in families would be at a disadvantage.

Advantages of cancelling examination amidst the Covid-19 crisis

- First, it avoids the extended uncertainty created by repeated (but unavoidable) postponements.
- Second, it protects the integrity of the examination by refusing to abandon its two most basic features – impartiality, or equal treatment of all examinees; and close supervision to prevent cheating.

- * Given the realities facing the overwhelming majority of our students and institutions, examinations held in the “online” or “mixed” modes will be biased because they will favour students with better access to the internet.

Way Forward

- Using alternative methods of evaluation based on each student's own past performance (in exams conducted in normal times) offers a fair solution and brings closure, with the option of retaking the exam when normalcy is restored.

Conclusion

- UGC will have to take the decision that would be equitable, fair, pragmatic and beneficial and not one that is risky and exclusionary of any set of students.
- Let the mental health of students and their anxieties be taken into account.

5. Centre to focus on online education

With the social inequity in online education coming to the fore due to the COVID-19 pandemic, the Centre has proposed long-term measures to bridge the divide.

- The measures include plans to distribute laptops or tablets to 40% of all college and university students over the next five years, and to equip all government schools with information and communication technology (ICT).
- The School Education Department also estimated it would need to spend up to ₹1 lakh per school for sanitisation and quarantine measures in preparation for the safe reopening of schools that have been shut due to the pandemic.
- Funds for these measures are being provided under the composite grant for schools, ranging between ₹25,000 for small schools with less than 100 students and ₹1 lakh for schools with over a thousand students.
- For college and university students, the promotion of online education, which has become more urgent due to the pandemic, will be twofold. On the one hand, the Human Resource Development Ministry proposes to spend ₹2,306 crore on developing and translating digital course content and resources over the next five years.
- On the other, it intends to provide laptops and tablets to 4.06 crore students — that is, 40% of the projected student population — by 2026, at a total cost of ₹60,900 crore. The largest chunk of 1.5 crore students are to receive devices in the next financial year 2021-22. An average cost of ₹15,000 has been assumed per device.
- The Centre and States are to share the cost of making devices available, in a 60:40 ratio, according to the presentation to the Finance Commission.

6. National Education Policy 2020

Context

- The Union Cabinet has approved the new National Education Policy.
- The National Education Policy 2020 aims to overhaul the country's education system paving way for transformational reforms in school and higher education sector in the country.

Challenges in the Indian Education Sector

Low enrolment

- Except in the primary level, the gross enrolment ratios have been low in the subsequent levels. The gross enrolment ratio is 68% in Class 9 and it is 25.8% currently in higher education
- The dropout levels in middle and secondary schools have been significant.

Inequality in access

- India faces huge inequality challenges. The disadvantaged and disabled face challenges in accessing quality education.

Low state capacity

- Despite many schemes like the Sarva Shiksha Abhiyan, there continues to be a lack of adequate resources and capacity in the public education system.

Privatization

- The increasing private sector share in school education has led to the rapid commercialization of the critical educational sector in India.
 - * In the last 25 years, private sector involvement in education has witnessed a substantial rise. There is nearly 50% private school education, and nearly 70% of enrolment in higher education through the private sector.
- Despite the Right to Education Act, fee regulations exist only in some States even now. Although fee regulations exist in some States, but the regulatory process is unable to rein in profiteering by the private institutes. This can lead to exclusion of the disadvantaged classes while further accentuating access asymmetries between the haves and the have not's.

Rote learning:

- The exam oriented evaluation process has led to a scenario where rote learning without understanding concepts or enhancing knowledge has become the norm.

Poor learning outcomes

- Poor learning outcomes have been a consistent concern in India as indicated by the Annual Status of Education Report. Primary schools have recorded poor literacy and numeracy outcomes.

- There has been a persistent mismatch between the knowledge and skills imparted in degree courses and the job requirements.

Medium of instruction

- The presence of multiple mother tongues in India and the lack of adequate English language skills in the populace of the country pose critical questions on the language of education in India.

Lack of Research and Development

- Total investment on research and innovation in India declined from 0.84% of GDP in 2008 to 0.6% in 2018.
- There are currently only 15 researchers in India per 100,000 of the population, compared with 111 in China.

National Education Policies

- National Policy on Education (1968): In 1968 the Government of India had formulated the National Policy on Education, in response to the recommendations of the Kothari Commission.
 - * In the National Policy on Education sought 'total reformation' and aimed at extending the prospects of education to all sections of the society to accomplish the goal of harmony and integration.
- National Policy on Education (1986): The Government of India initiated the National Policy on Education in 1986.
 - * Its major objective was to provide education to all sections of society, with a particular focus on scheduled castes, scheduled tribes, other backward classes and women, who were deprived of educational opportunities for centuries
- The NEP 2020 will replace the 1986 Policy.
 - * Recommendations made by the Committee for Evolution of the New Education Policy (NEP) Chaired by T S R Subramanian (2016) and a panel headed by K. Kasturirangan (2018) have been incorporated in the NEP.

Salient provisions of NEP, 2020

- The new National Education Policy aims to introduce several changes to the existing Indian education system.

"5+3+3+4" format

- In a shift from the 1986 education policy, which pushed for a uniform 10+2 structure of school education, the new policy pitches for reconfiguration of curriculum into a "5+3+3+4" format keeping in mind a child's developmental level and capabilities.
- By this restructuring of the school education it aims to make it more flexible and also ensure an integrated approach.

- It also aims to double the Gross Enrolment Ratio in higher education, including vocational education, from 26.3% in 2018 to 50% by 2035.

Phasing out of all institutions offering single streams

- Standalone Higher Education Institutes and professional education institutes will be evolved into multi-disciplinary institutes. By 2040, all higher education institutions (HEIs) should aim to become multidisciplinary institutions. Even engineering institutions, such as IITs, will be expected to move towards more holistic and multidisciplinary education with more arts and humanities.
- By the year 2030, the NEP, 2020 envisages setting up of at least one large multidisciplinary HEI in or near every district.

Multidisciplinary Bachelor's programme, with exit options

- The traditional three-year BA, B.Sc, degrees will continue, under the four-year programme, students can exit after one year with a certificate, after two years with a diploma, and after three years with a Bachelor's degree.
- The four-year programme "may also lead to a degree 'with Research' if the student completes a rigorous research project in their major area(s) of study".
- Higher education institutions will have the flexibility to offer different designs for Master's programmes.
 - * Students with a three-year Bachelor's degree can pursue a two-year Master's programme, and
 - * For students with a four-year Bachelor's degree with Research, there could be a one-year Master's.

Higher Education Commission of India (HECI)

- The NEP paves the way for a single overarching regulator for higher education (except medical and legal courses), which will replace the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE).
- The single regulator, called the Higher Education Commission of India (HECI), will have "four independent verticals" to carry out its various functions.
 - * National Higher Education Regulatory Council (NHERC) for regulation,
 - * General Education Council (GEC) for standard-setting,
 - * Higher Education Grants Council (HEGC) for funding,
 - * National Accreditation Council (NAC) for accreditation.

National Educational Technology Forum (NETF)

- The policy proposes the setting up of a National Educational Technology Forum (NETF), a platform for the free exchange of ideas on the use of technology

to enhance learning, assessment, planning, administration, etc., for both school and higher education.

- A dedicated unit for the purpose of creating digital infrastructure, digital content and capacity building will be set up in the ministry.

Foreign universities

- The new National Education Policy (NEP) states that the world's top 100 universities will be "facilitated" to operate in the country through a new law.

Graded autonomy system

- One of the major provisions of the National Education Policy (NEP) 2020 was the phasing out of the system of affiliated colleges and the grant of greater autonomy in academic, administrative and financial matters to the top-ranked colleges and universities of the country.
- This envisaged a graded autonomy model for the educational institutes.

Significance of the NEP, 2020

Necessity of the policy

- Given the importance of education in the process of national development, the National Education Policy (NEP) 2020 is an important step forward in India's transition from deprivation to development.

Improving learning outcomes

- By adopting a 5+3+3+4 model for school education starting at age 3, the NEP 2020 recognizes the primacy of the formative years from ages 3 to 8 in shaping the child's future. This could help address the challenge of poor learning outcomes in schools.
- The NEP 2020 recognizes the importance of learning in the child's mother tongue until at least Class 5. This can also play a critical role in helping improve learning outcomes.
- Among the many imperatives, the deadline to achieve universal literacy and numeracy by 2025 would lead to considerable progress at higher levels too.

Student friendly system

- The proposed "5+3+3+4" format marks a progressive shift towards a more scientific approach to education. The 5+3+3+4 structure works in line with the ability of the child – stages of cognitive development as well as social and physical awareness.
- The restructuring of the curriculum and redesigning of the board exams could help make learning less stressful and more learning-oriented.
 - * The offering of school board examinations twice a year to help improve performance.
- The NEP, 2020 thus rightly acknowledges the 21st century need for flexibility, alternate pathways to learning, and self-actualisation.

- * The doing away with rigid straitjackets of arts, commerce and science streams in high school would allow the students to take up courses of their choice, thus allowing flexibility.

Holistic education

- The NEP 2020 promotes holistic education involving both academic and non-academic spheres, emphasizing even on extra-curricular activities.
- The multidisciplinary education in different streams as well as the involvement in extra- Curricular activities and vocational training would help ensure the all-round development of students and also help break the monotony of book-based education for the children.
 - * The introduction of vocational courses with internships would help streamline vocational education in India.

Inclusive education

- Inclusion is a major theme of the NEP, 2020.
 - * The provision for a 'Gender-Inclusion Fund', the designation of aspirational districts as 'special educational zones' and special funds earmarked for the education of challenged children will help ensure that no child is deprived of education. The creation of 'inclusion funds' will help socially and educationally disadvantaged children pursue education. These measures will help provide equitable quality education to all.
 - * The Gender Inclusion Fund is a welcome equity measure.
 - * The NEP 2020's recognition for online education would enable an increase in the GER and increase inclusivity in higher education.
 - * The provision of an energy-filled breakfast, in addition to the nutritious mid-day meal, will help children achieve better nutrition and also increase enrolment among the disadvantaged sections.

Extension of Right to Education

- The Right to Education Act provides a fundamental right of every child aged between 6 and 14 years to get free and compulsory education, in a neighbourhood school. This right begins at age 6 which has been considered late by some experts. The move to bring children into some sort of formal education fold at age three marks the intention of the government to universalize education between 3 and 18 years in line with the 2019 draft NEP proposal.

Language policy

- The NEP 2020 recognizes the importance of learning in the child's mother tongue until at least Class 5. This along with exposure to English between ages 3 and 8 would allow for multilingual skills to become the USP of the educated Indian.

- The NEP 2020 also hopes to implement the three-language formula. The three-language formula will promote national integration.

Reforms in higher education

- The NEP 2020 proposes a multi-disciplinary higher education framework with portable credits, and multiple exits with certificates, diplomas and degrees. This would provide interested students with the flexibility to plan their education according to their means and interests.
- The vision of an integrated higher education system involving the undergraduate, postgraduate and research levels would ensure more industry-oriented education. This can help bridge the skill gap among the job market entrants.
- The policy facilitates selective entry of high-quality foreign universities which could play a significant role in improving the quality of education in India.
- The establishment of a model Multi-Disciplinary Education and Research University in every district would help ensure more inclusivity in the higher education sector.

Research and Development

- The Multidisciplinary Education and Research Universities would form the apex of the higher education system. Research in these institutes would be supported by a new National Research Foundation. This will give the necessary impetus to research and development in India.

Regulatory system

- The creation of a Higher Education Commission of India is a welcome move. The NEP 2020 proposes a single regulatory body with four verticals for standards-setting, funding, accreditation and regulation. This would provide for "light but tight" oversight.
- This would free the schools, colleges and universities from periodic "inspections" and place them on the path of self-assessment and voluntary declaration.
- Transparency, maintaining quality standards and a favourable public perception will become a 24X7 pursuit for the institutions, leading to all-round improvement in their standard.

Greater Autonomy

- The provision of the graded autonomy system would help free the well performing institutes from the constraints of over-centralization, and allow them to innovate and evolve.
- This would also help reduce the potential for politico-bureaucratic interference in the internal functioning of universities and also lessen the burden on universities.

Technology enabled education

- The separate technology unit to develop digital education resources is a welcome step given that digital education is gaining more ground.
- The technology enabled education offers the following advantages:
 - * Allows self paced learning among the students.
 - * It can help reach students in remote areas.
 - * It can ensure the availability of affordable quality education for all.
 - * It can also lead to better learning outcomes.

Financial resources

- As part of the NEP 2020, public spending on education by states and centre would be raised to 6% of the GDP. This will help address the poor state capacity in the education sector.

Challenges

Building consensus among the states

- Since education is a concurrent subject (both the Centre and the state governments can make laws on it) and with most States having their own school boards, State governments would have to be brought on board for actual implementation of the proposals made in the NEP, 2020. The Centre has the difficult task of building a consensus on the proposals.
 - * The idea of a National Higher Education Regulatory Council as an apex control organization is bound to be resented by States.
 - * The National Testing Agency (NTA) envisaged to offer a high-quality common aptitude test, as well as specialized common subject exams in the sciences, humanities, languages, arts, and vocational subjects, at least twice every year for university entrance exams may not find acceptance from the states as has been evident in case of NEET and other national level exams.

Resource allocation

- The implementation of NEP 2020 will require enormous resources.
- The ambitious target of public spending for the educational sector at 6% of GDP though necessary, will be difficult to ensure, given the current tax-to-GDP ratio and competing claims on the national exchequer of healthcare, national security and other key sectors.

Implementation challenges:

- The article argues that despite the bold reforms envisaged, implementation of these reforms would be the real challenge.

Language policy

- The provision for education in mother tongue till class 5 could pose challenges to the mobility of students in a large and diverse country like India.

- The implementation of such a policy would require appropriate resources in the form of availability of teachers proficient in the concerned languages.

Early childhood care and education (ECCE)

- Though the policy aims to make all children entering Grade 1 school-ready through Early Childhood Care and Education, there are lots of practical issues with the anganwadis and preschools which are assigned the function of early childhood care and education. The anganwadi workers are not professionally trained to be teachers. The lack of a provision of a good, professional teacher for the earliest years may not yield the expected improvement in learning outcomes.
- Placing the burden of pre-primary education on the overstretched, under-funded and under-equipped anganwadis may not be the ideal way forward.

Private sector participation

- Despite envisaging a strong, vibrant public education system to ensure accessibility, affordability of quality education for all the NEP 2020 is also open to private sector participation.
 - * Given that it is very unlikely that the private sector is going to open schools in remote areas with less than 10 children, it is very important to emphasize public education with private schools only supplementing governmental efforts.
 - * There are also concerns that there are many private players who are not of good quality and are only looking for profits.
 - * The focus on the private sector, will drive up costs and make access to quality education unaffordable for the poor.

Other challenges

- The lack of popularity of vocational training and the 'blue-collarisation' of vocations in the society act as obstacles in the introduction of vocational training in school.
- The shift to a four-year undergraduate college degree system may lead to a situation where overzealous parents may stream their children into professions at the earliest thus burdening the students further.

Conclusion

- The new education policy serves as a comprehensive framework to guide the development of education in the country to make India a global knowledge superpower.
- There is the need for public and political will to ensure the targets set by the NEP, 2020 are achieved.

Additional Information

- Ministry of Human Resource Development has been renamed as Ministry of Education.

HISTORY

1. Hunter Report:

- The Legislative Council of the Government of India constituted the Hunter Commission to examine the massacre at Jallianwala Bagh in 1919.
- The investigating committee was led by Lord William Hunter.
- In its report, the majority of the members concluded that General Dyer firing at the mob was justified and they only reprimanded General Dyer for not following appropriate procedures before the firing. Martial law declared in Punjab was justified.
- A minority report was submitted by the Indian members of the Commission who questioned the need for martial law at that time.
- There were widespread protests against the findings of the Hunter Committee.
- He eventually escaped the surveillance and made his way to Germany to plan events for independence without any further intervention.
- Singh finally arrived in England in 1933 and worked odd jobs like that of a mechanic, carpenter among others.
- He opened fire at Michael O'Dwyer in Caxton Hall in London, killing him on the spot in March 1940 to avenge the loss of Jallianwala Bagh massacre.
 - * He was the then governor of Punjab responsible for the brutal Jallianwala Bagh massacre.
- Historians say though Col Dyer was the man on the spot, it was Michael Francis O'Dwyer, the lieutenant governor of Punjab, who ordered the Jallianwala massacre

2. Shaheed Udham Singh

Background

- On 13 April, 1919, the day of the Baisakhi festival (festival of harvest), about 20,000 unarmed men, women and children gathered at Amritsar's Jallianwala Bagh.
- While the crowd gathered to celebrate the festival, General Dyer arrived with his troops, sealed the only exit to the park and opened fire without any warning on the unarmed crowd

Shaheed Udham Singh

- Udham Singh, a revolutionary freedom fighter was just 20 years old when he witnessed such brutality.
- This incident shaped his future as it made him a part of the armed resistance that was unfolding in and outside of India and soon he made his way to the United States of America.
- While in San Francisco, Singh came across some members of the Ghadar party-a revolutionary movement organised by immigrant Punjabi-Sikhs to secure India's independence.
- In 1927, Singh who was highly influenced by Bhagat Singh was asked to head back to India to help out with the revolution back in the country.
- Upon returning he was imprisoned for four years for running Ghadr party's radical publication 'Ghadr Di Gunj'.
- Even though Singh was released in 1931, he was under constant surveillance of the police because of his association with Bhagat Singh.

DISASTER MANAGEMENT

1. Gas leak in Vizag pharma plant kills two

Context

- A gas leak at Sainor Life Sciences Pvt Ltd, Jawaharlal Nehru Pharma City, in Visakhapatnam has claimed two lives and injured four people.

Details:

- Hydrogen sulphide vapours leaked from the reactor of a pharmaceutical company's plant.
- According to the Commissioner of Police, the leak has been brought under control.
- This is the second incident in the Sainor Life Sciences plant since it began operations at JNPC.
 - * In 2015, two workers were charred to death and five others injured in a reactor blast.
 - * Cases were booked against the company and it was allowed to resume operations only after the management paid a hefty fine.
- There have been about 40 industrial accidents in Visakhapatnam district, over 20 in pharma and chemical units alone, since 1997. About 130 lives have been lost and hundreds injured.

Hydrogen Sulfide:

- Hydrogen sulfide (H_2S) is a colorless chalcogen hydride gas with a characteristic foul odour.
- It is very poisonous, corrosive, and flammable.
- The gas can irritate the eyes, nose, throat, and lungs.
- Too much H_2S can halt the breathing centre in the brain, which can cause death.
- It dissolves in water and oil, and it may be released when these liquids are heated, depressurized, or agitated. Because it is heavier than air, it may settle in low spots.
- It occurs in volcanic gases, natural gas, and in some sources of well water.

Uses:

- Hydrogen sulfide is used primarily to produce sulfuric acid and sulfur.
- It is also used to create a variety of inorganic sulfides used to create pesticides, leather, dyes, and pharmaceuticals.
- Hydrogen sulfide is used to produce heavy water for nuclear power plants.

2. 'Negligence to blame for styrene leak'

Context

- The high-power committee (HPC) formed by the government to investigate the styrene vapour leak at LG Polymers in Visakhapatnam submitted its 4000-page report to the Chief Minister.
- It stated that human negligence and serious lapses in safety and security led to the accident.

Background:

- A gas leak in Visakhapatnam in Andhra Pradesh had claimed at least 11 lives and affected thousands of residents in five villages. The source of the leak was a styrene plant owned by South Korean electronics giant LG.

Key findings of the report:

- The panel found fault with the management for the lack of proper safety response preparedness at the plant.
- Poor design of the storage tank, inadequate refrigeration and faulty cooling system, absence of circulation and mixing systems, inadequate measures and parameters, poor safety protocol and inadequate safety awareness were found to be the reasons that led to the accident.
- Inadequate risk assessment response, poor process safety management system and insufficient knowledge among staff about the chemical properties of styrene during storage conditions were also highlighted.
- The company had failed in activating the emergency siren system and did not keep sufficient stock of inhibitors, other terminating chemicals to control the runaway reaction.
- The report also noted that the protocols pertaining to emergency response and safety were not followed by the authorities during the lockdown period.

GOVERNANCE

1. Atmanirbhar Bharat App Innovation Challenge

- This has been launched by the Ministry of Electronics & Information Technology along with the Atal Innovation Mission (AIM) and NITI Aayog.
- The chief aim of the challenge is to identify the best Indian Apps that are already being used by citizens and have the potential to scale and become world class Apps in their respective categories.

This innovation challenge will run in two tracks:

- Promotion of existing apps
 - * For promotion of existing apps and platforms across the categories of e-learning, work-from-home, gaming, business, entertainment, office utilities, and social networking, the government will provide mentoring, hand-holding and support.
 - * Track-01 will work in mission mode for identifying good quality apps for the leader-board and shall be completed in around a month.
 - * Track-01 is being launched in 8 categories: office productivity & work from home; social networking; e-learning; entertainment; health and wellness; business including agri-tech and fin-tech; news; games.
- Development of new apps
 - * For incubating new apps and platforms, Track-02 initiative will work to help create new champions in India by providing support in ideation, incubation, prototyping and roll out along with market access.

Expected outcomes of the challenge:

- Give better visibility and clarity to existing apps to achieve their goals.
- Create tech products to find solutions to tech conundrums with the help of mentorship, tech support and guidance during the entire life-cycle.
- The Innovation Challenge will be available on the MyGov portal.
- A specific jury for each track with experts from Private Sector & Academia will evaluate the entries received.
- Shortlisted Apps will be given awards & will also feature on Leader boards for the information of citizens.
- The Government will also adopt suitable Apps, guide them to maturity and list on Government e-Marketplace (GeM).
- Some of the key evaluation parameters will include Ease of use (UI/UX), Robustness, Security and Scalability.

Context:

- PM urges tech community to participate in Atmanirbhar Bharat App Innovation Challenge.

2. Criminalization in politics

- Criminalization of politics implies criminals entering the election fray and contesting elections and even getting elected to the Parliament and state legislatures.
- Criminals need the patronage of politicians to continue their criminal activities and politicians need the money and muscle power of the criminals in their elections. In course of time, this nexus led the criminals themselves to contest elections.

A look at stats

- In 2004, 24% of the Members of Parliament had criminal cases pending against them.
- In 2009, that number went up to 30%.
- In 2014 it further rose to 34% and in 2019 as many as 43% of MPs had criminal cases pending against them.
 - * Worryingly, 13% of the candidates who contested the election in 2019 are accused of heinous crimes that include murder, attempt to murder, kidnapping, rape and other crimes against women.

Previous attempts to cleanse the electoral system:

Supreme Court Judgments

- The Supreme Court has come up with a series of landmark judgments to address the issue of criminalization of politics.
- In 2002, Supreme Court ruled in the Union of India (UOI) vs. Association for Democratic Reforms case, that every candidate, contesting an election to the Parliament, State Legislatures or Municipal Corporation, has to declare their criminal records, financial records and educational qualifications.
- Under Section 8 of the Representation of the People (RP) Act, 1951, lawmakers cannot contest elections only after their conviction in a criminal case. The SC removed this statutory protection of convicted legislators from immediate disqualification via the Lily Thomas v. Union of India case in 2013.
- The incorporation of the 'None of the Above' (NOTA) option in the voting machines was a landmark step in empowering the voters to force the political parties to field better candidates, even though there are associated concerns with NOTA.
 - * This was done via the 2013 judgment in People's Union for Civil Liberties vs. Union of India case.
 - * Supreme Court asked the Election Commission

to provide 'none of the above' choice to voters to exercise their right to express no confidence against all candidates in the fray.

- Observing the long delays in the cases involving politicians, the SC in 2014 directed the completion of trials involving elected representatives within a year.
- In 2017, the SC asked the Centre to frame a scheme to appoint Special Courts to exclusively try cases against politicians, which would ensure speedy justice.
- In 2018, the SC directed the political parties to publicize pending criminal cases faced by their candidates. This was considered necessary in the light of the right of the voters to know any criminal antecedents of the candidates.

Election Commission Efforts

The Election Commission too has tried several measures to curb criminalization of politics but to no avail.

- The Election Commission of India (ECI) has always voiced the need for a legislation that excludes candidates against whom charges had been framed by a court of law for heinous offences punishable by imprisonment of five years and more.
- However, the Parliamentary Committee that had been set up to examine the proposal unanimously ruled against the ECI recommendation. Political parties and candidates have often voiced their concern that cases tend to be foisted on them by political opponents.
- It has achieved considerable success in containing the role of muscle power through measures such as the effective implementation of the model code of conduct and the setting up of the expense monitoring cell.
- Mandatory declaration of assets and existing criminal charges in self-sworn affidavits to the ECI prior to elections has brought in some transparency.

Public Interest Foundation & Others Vs Union of India case:

- Given the fact that previous attempts by the SC and the ECI had no effect on reducing the criminalization of politics, a petition was filed in the SC asking the apex court whether disqualification for membership of candidates with criminal antecedents can be laid down by the Court.
- In 2018, a Constitution Bench of the Supreme Court directed political parties to publish online the pending criminal cases against their candidates. The Court sought to enforce greater disclosure norms about electoral candidates.
- The five-judge Bench had held that the rapid criminalization of politics cannot be arrested by merely disqualifying tainted legislators but should also involve the cleansing of political parties.
- The judgment had also urged Parliament to bring a strong law to cleanse political parties of leaders facing trial for serious crimes.
- A contempt petition has been filed in the SC, seeking

action against the authorities and political parties for not complying fully with the September 2018 judgment.

Criminalization of Politics is a structural problem in Indian democracy:

The voters, political parties and the law and order machinery of the state are all equally responsible for this.

Lack of intent on the part of political parties:

- Researchers have found that candidates with criminal records seem to do well despite their public image, largely due to their ability to finance their own elections and bring substantive resources to their respective parties. This tends to give rise to a patronage system.
- The ADR analysis shows that candidates facing criminal charges had double the chances of winning as compared to those with a clean record. The winnability of candidates is an important factor for the political parties in choosing their candidates.
- Hence, political parties that ought to be cleansing the system with legislation and internal organizational reforms have done little.

Lack of interest among the voters:

- Given the relatively weak state institutions and the lackadaisical attitude in governance and delivery of public goods, cynical voters tend to elect candidates with criminal antecedents, as the voters tend to view such candidates as being able to represent their interests better and getting work done.
- Voter behaviour is most often conditioned by their own immediate needs.
- These unhealthy tendencies in the democratic system reflect a poor image of the nature of India's state institutions and the quality of its elected representatives.

Possible solutions

Amending the Representation of the People Act, 1951:

- There is the need for a rule that disallows candidates facing charges for serious offences from contesting in elections. The Parliament needs to consider such an amendment to the Representation of the People Act, 1951.

General citizenry's role:

- While several Supreme Court judgments make it difficult for criminal candidates to contest, only enhanced awareness among the citizens and increased democratic participation could create the right conditions for the decriminalization of politics.
- The electors have to take up a greater responsibility by resisting the lure of money for votes, pushing aside the caste as well as religious factors, increasing the participation with higher turn-out at the polling stations, and thereby exert enormous pressure on the political parties to field candidates with a clean image.

Political party's role:

- It must be underscored that the decriminalization of politics cannot be achieved by judicial fiat alone. The political class has to respond to the challenge. A more effective option would be for parties to refrain from giving tickets to such candidates.

Role of the judiciary:

- Given the fact that undue delay in the criminal justice system is helping candidates with criminal antecedents with a longer time frame to establish themselves electorally, there is the need to address this lacuna. It takes on an average 15 years for a criminal case to be finally disposed of by the courts.
- Notably, not more than 6 percent of the criminal cases against Indian MPs and MLAs ended in a conviction, as per the data submitted by the Centre to the Supreme Court. This, when compared with the conviction rate of crimes under the Indian Penal Code in the country which stands at 46% at the national level, points to the possibility of the elected representatives misusing their positions.
- Fast-track courts should decide the cases of tainted legislators faster within set deadlines.

Broader reforms:

- Ensuring greater transparency in election funding will make it less attractive for political parties to encourage candidates with criminal antecedents.
- Broader governance reforms should be targeted to ensure lesser reliance of voters on criminal politicians.

Context:

- February 2020 Supreme Court judgment on criminalization in politics.
- It will first be implemented in the coming Bihar elections in October 2020.

Details:

- Noting the increasing criminalization of politics, the SC invoking Article 129 and Article 142 of the Indian Constitution has come out with some mandatory guidelines for the political parties.
 - * Under the stated guidelines, it shall be mandatory for political parties [at the Central and State election levels] to upload on their website detailed information regarding individuals with pending criminal cases (including the nature of the offences, and relevant particulars such as whether charges have been framed, the concerned Court, the case number, etc.) who have been selected as candidates.
 - * The political party will also have to state the reasons for the selection of such a candidate and also as to why other individuals without criminal antecedents could not be selected as candidates.

- * The reasons as to selection shall be with reference to the qualifications, achievements and merit of the candidate concerned, and not mere winnability at the polls
 - * This information should be published in a local and a national newspaper as well as the party's social media handles.
 - * These details shall be published within 48 hours of the selection of the candidate or not less than two weeks before the first date for filing of nominations, whichever is earlier.
 - * The political party concerned shall then submit a report of compliance with these directions with the Election Commission within 72 hours of the selection of the said candidate.
 - * If a political party fails to submit such a compliance report with the Election Commission, the Election Commission shall bring such non-compliance by the political party concerned to the notice of the Supreme Court as being in contempt of this Court's orders/directions.
- The Election Commission of India proposes to implement the guidelines issued by the SC with suitable modifications in its processes.

Concerns:

- Several laws and court judgments have not helped much, as the data show. One reason is the lack of enforcement of laws and judgments. It is also not clear what penalty would be imposed if the recent orders are not followed.
- Although the recent judgment has decreed that political parties will give much wider publicity to the criminal antecedents of their candidates, it is possible that this alone may not suffice.

Way forward:

- There is the need for monitoring the affidavits of candidates, by the Election Commission to ensure that information is promptly available. There is the need to circulate this information to voters using all the social media tools available.
- There is the need for monitoring compliance with the Supreme Court judgment to see if details of tainted candidates are promptly put up on their websites, and on their social media handles, along with proper reasons for giving them tickets.
- Voters also need to be vigilant about the misuse of money, gifts and other inducements during elections.

ETHICS

1. Social Contract Theory

What is Social Contract Theory?

- Social contract, in political philosophy, is an actual or hypothetical compact, or agreement, between the ruled and their rulers, defining the rights and duties of each.
- The social contract comprises of two distinct agreements; first, people agreed to establish society by collectively and reciprocally renouncing the rights they had against one another in unbridled nature and second, they agreed to confer upon one (or more) among them, the authority and power to enforce the initial contract. Thus, the social contract comprises people agreeing to live as one under common laws and enforcing those common laws justly.
- Social contract theory envisages that consenting individuals have surrendered some of their freedoms and have submitted to the authority in exchange for protection of their remaining rights or maintenance of the social order.
- In moral and political philosophy, the social contract theory concerns the legitimacy of the authority of the state over the individual.

Need for Social Contract:

- The starting point for most social contract theories is an examination of the human condition absent of any political order (termed the "state of nature" by Thomas Hobbes). In this condition, individuals' actions are bound only by their personal power and conscience.
- Thomas Hobbes famously said that in a "state of nature", human life would be "solitary, poor, nasty, brutish and short". In the absence of political order and law, everyone would have unlimited natural freedoms, including the "right to all things" and thus the freedom to plunder, rape and murder; there would be an endless "war of all against all".
- To avoid this, free men contract with each other to establish political community (civil society) through a social contract in which they all gain security in return for subjecting themselves to an absolute sovereign, one man or an assembly of men.
- A social contract would allow people to live together in society in accordance with an agreement that establishes moral and political rules of behaviour. Social contracts provide a valuable framework for harmony in society.

Concerns:

Concentration of power:

- There have been concerns that the adoption of the social contract theory has given rise to a bipolar ruler-and-ruled dynamic of governance structures

across the world and that the social contract is being used by modern governments to justify greater aggrandisement of power in the hands of the sovereign, under the garb of the public good.

Reducing free will:

- There are concerns that the social contract which imbues a centralised sovereign with overreaching powers has reduced the scope for individual free will. There seems to be a bending of individual free will towards the collective will.

Improper for an unequal society:

- There are concerns that, when the source of power in an unequal society is centralised, the response to any crisis in such an unequal society will result in unequal relief to different strata of society.
- The more unequal the society, the more decentralised the response should be. This goes against the ideal of centralised power envisaged by the Social Contract theory.

Moral philosophers

- The Social Contract theory had contributions from philosophers like Thomas Hobbes and Jean-Jacques Rousseau.
 - * Hobbes asserts that without subjection to a common power of their rights and freedoms, men are necessarily at war and hence argues the inevitability of a common authority, while Rousseau argues that the state exists to preserve and protect the natural rights of its citizens and hence takes a utilitarian view.
 - * Hobbes' view was that whatever the state does is just since he believed that all of society is a direct creation of the state, and a reflection of the will of the ruler. Rousseau's view was that the state must in all circumstances ensure freedom and liberty of individuals.
 - * Hobbes' theory of Social Contract supports an absolute sovereign without giving any value to individuals, while Rousseau supports the individual rather than the state or the government. When governments fail in that task, citizens have the right and sometimes the duty to withdraw their support and even to rebel.

Conclusion:

- Hobbes' concept of absolutism is totally a vague concept in the present scenario. Democracy needs to be strengthened.
- Absolute authority to the sovereign goes against the rule of law because absolute power in one authority brings arbitrariness.

2. **Neutrality**

What is Neutrality?

- Neutrality means impartiality.
- Civil service neutrality means that civil servants must be non-partisan. Government servants should remain free from party biases or allegiance. They must serve whoever is the elected government of the day. They must be responsible and responsive to the government's policies. They must obey the lawful political wishes of whoever is in power and serve governments of any party with the same degree of commitment.
- Their own political leanings must not stand in the way of diligent translation of the ruling party's political goals into workable policies and plans.
- When civil servants express their views, they should ensure that their views would not give rise to any conflict of interest with their official duties, or might not be seen to compromise the important principle of maintaining impartiality and political neutrality when discharging their duties.

Need for Neutrality

- Neutrality constitutes an important public or civil service value in Public Administration.
- The neutrality principle has a moral function to prevent public officials from becoming slaves to the government of the day.
- The civil service should be politically neutral to inspire confidence in their functioning under different political masters, often belonging to diverse political parties.
- There is the need to maintain the neutral and apolitical character of the bureaucracy given the fact that the bureaucracy has access to a lot of confidential information, which ministers often do not possess since they lack the time to read all the official documents. The lack of neutrality would affect the performance of the administration.
- The growing tendency on the part of some members of the AIS and the Central Services to join political parties when they are about to retire on superannuation, or immediately after superannuation/resignation from service, shake the confidence of the public in the neutrality and apolitical character of civil servants.

Way forward

- Civil servants shall at all times ensure that their behaviour would not impede their performance of official duties in a fair and professional manner. They shall not allow their own personal political affiliation or beliefs to determine or influence the discharge of their official duties and responsibilities.
- To ensure that civil servants remain politically neutral, they should not be given any post-retirement appointments as members/chairpersons of statutory commissions, quasi-judicial tribunals, or even in constitutional authorities.

- There should be a cooling off period of at least two years after retirement or even resignation of a civil servant, before he/she can join a political party and contest elections for any political office.
- Those who deviate from the core values of the civil service such as honesty, integrity and political neutrality must be ostracized by the general body of civil servants.
- In a parliamentary democracy, the civil service has to be politically neutral and this tradition of political neutrality has to be nurtured at all levels. It has to be zealously guarded by the political executive and by the senior officials like the Chief Secretaries and Director Generals of Police.

Context

- Recently, West Bengal Governor Jagdeep Dhankhar, addressing the IAS and the IPS officers of West Bengal, expressed concern over what he termed as "rampant disregard and violations" of the All India Service (Conduct) Rules.
- Referring to the rules, Dhankhar pointed out that political neutrality, accountability and transparency, and commitment to uphold the supremacy of the Constitution and democratic values must be observed by IAS and IPS officers.

MISCELLANEOUS

1. CII-ITC Sustainability Awards

- The Sustainability Awards were instituted by the CII-ITC Centre of Excellence for sustainable development in 2006.
- These awards recognize and reward excellence in sustainability practices.
- It is considered to be the most credible platform for sustainability recognition in the country.
- They were instituted for:
 - * Identifying and recognising exemplary performance in economic, social and environmental dimensions of Indian business.
 - * Promoting role models in the Indian industry and recognising excellence achieved by businesses in mainstreaming Sustainability with business practices.
 - * Imparting knowledge by which the Centre builds capacity in Indian businesses to adopt sustainability practices.

Context:

- NTPC wins prestigious CII-ITC Sustainability Awards 2019.

Details:

- NTPC Ltd, a central PSU under the Ministry of Power and India's largest power generation company, has won the prestigious CII-ITC Sustainability Award 2019, under Outstanding Accomplishment in Corporate Excellence Category.

2. Corosure

- Corosure is the name given to a COVID-19 diagnostic kit developed by IIT Delhi.
- It is claimed as the world's most affordable COVID-19 diagnostic kit.
- The Corosure Kit has been developed indigenously and is much cheaper than other kits.
- The probe-free diagnostic kit has received approval from the DCGI and the ICMR.

3. Kayapo Tribe

- They live alongside the Xingu River in the eastern part of the Amazon rainforest, in several scattered villages ranging in population from one hundred to one thousand in Brazil.
- The Kayapo use intricate black body paint covering their entire bodies. They believe that their ancestors learned their social skills from insects, so they paint their bodies to mimic them and to better communicate with the Spirit that exists everywhere.

- Older generations of Kayapo men wear disks in their lower lips.

4. Russia accused of trying to steal vaccine data

- Britain, the U.S. and Canada have accused Russia of trying to steal information from researchers seeking a COVID-19 vaccine.
- The three nations alleged that hacking group APT29, also known as Cozy Bear and said to be part of the Russian intelligence service, is attacking academic and pharmaceutical research institutions involved in vaccine development.
- Cozy Bear and Fancy Bear are the names that cybersecurity firms have given to two separate — and possibly competing — computer espionage groups based in Russia.
- Cozy Bear has been identified by Washington as one of two Russian government-linked hacking groups that broke into the Democratic National Committee computer network and stole emails ahead of the 2016 presidential election.

5. Snakebite deaths in India

Context:

- According to a study conducted by the Centre for Global Health Research (CGHR) at the University of Toronto, Canada, with Indian and U.K. partners, India recorded a staggering 1.2 million snakebite deaths in the 20-year period from 2000 to 2019.

Concerns:

- About 58,000 deaths were caused by snakebite annually.
- Around 70% of these deaths occurred in low altitude, rural areas of eight States — Bihar, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, Andhra Pradesh, Telangana, Rajasthan and Gujarat.
- The study also points out that half of all the snakebite deaths occurred during the monsoon period from June to September.
- In the largest ever such survey published in 2011 and titled 'Snakebite Mortality in India: A Nationally Representative Mortality Survey', researchers of the Million Death Study project estimated 46,000 annual snakebite deaths in India.
- Indian anti-venoms neutralise venom from only the spectacled cobra (there are three other Indian cobra species), common krait (there are seven other krait species), Russell's viper and saw-scaled viper, whereas there are 12 other snake species causing fatal bites in the country.

Details:

- The World Health Organization (WHO) recognizes snakebite as a top-priority neglected tropical disease.
- Since deaths are restricted mainly to the lower altitude, intensely agricultural areas, during a single season of each year, this should make the annual epidemics easier to manage.
- Experts suggest that targeting certain areas and educating people with simple methods such as 'snake-safe' harvest practices — using rubber boots and gloves, mosquito nets and rechargeable torches (or mobile phone flashlights) — could reduce the risk of snakebites.

6. Swachh Survekshan 2021**Context:**

- A new category of awards titled 'Prerak Dauur Samman' announced as part of Swachh Survekshan 2021.

Details:

- The Prerak Dauur Samman has a total of five additional subcategories – Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze), Aarohi (Aspiring) – with top three cities being recognized in each.
- In a departure from the present criteria of evaluating cities on 'population category', this new category will categorize cities on the basis of six select indicator-wise performance criteria which are as follows:
 - * Segregation of waste into Wet, Dry and Hazard categories
 - * Processing capacity against wet waste generated
 - * Processing and recycling of wet and dry waste
 - * Construction & Demolition (C&D) waste processing
 - * Percentage of waste going to landfills
 - * Sanitation status of cities

Background:

- To encourage cities to improve urban sanitation, the Ministry of Housing and Urban Affairs has been conducting the Swachh Survekshan since 2016.
- The competition has been able to imbibe a spirit of healthy competition among the citizens with respect to improving the cleanliness of their cities.
- In the 2020 Swachh Survekshan, an unprecedented 1.87 crore citizens participated. The results for 2020 are yet to be released by the Ministry.
- While Mysuru had won the award for the Cleanest City of India in the first edition of the survey, Indore has retained the top position for three consecutive years (2017, 2018, 2019).

7. Zoram Mega Food Park in Mizoram**Context:**

- Union Minister inaugurates the Zoram Mega Food Park in Mizoram.

Details:

- The Food Park is spread over 55 acres and is expected to benefit more than 25000 farmers.
- It is also expected to provide employment opportunities to over 5,000 people in the region.
- This is the first Mega Food Park operationalized in the state of Mizoram.
- The North-East region has the potential to become the Organic Destination of the world due to its rich agricultural and horticultural produce.
- Sikkim has already been declared as an Organic State.

PRACTICE QUESTIONS

1. Consider the following statements with respect to Attorney General (AG) of India:

1. AG enjoys all the privileges and immunities that are available to a Member of Parliament.
2. AG's remuneration is fixed by the Parliament.
3. AG has the right to take part in a meeting of any committee of the Parliament of which he is named as a member, but without a right to vote.
4. The Indian Constitution mentions the procedure and grounds for the removal of the Attorney General.

Which of the given statement/s is/are correct?

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

2. Wari-Warkari tradition is mostly associated with the state of:

- A. Karnataka
- B. Maharashtra
- C. Gujarat
- D. Odisha

3. Consider the following statements with respect to Hydrogen Sulfide:

1. It is a colourless and odourless gas.
2. It is poisonous, corrosive and inflammable.
3. It is used to produce heavy water for nuclear power plants.

Which of the given statement/s is/are incorrect?

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

4. Consider the following statements:

1. IUCN classifies both Javan and Sumatran Rhinos as Critically Endangered in its Red List.
2. Greater one-horned rhinoceros is classified as Vulnerable on the IUCN Red List.

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

5. "Striped Hairstreak" and "Elusive Prince" recently seen in news are:

- A. Species of butterflies spotted in the Western Ghats.
- B. Species of butterflies spotted in Arunachal Pradesh.
- C. Species of non-venomous snakes identified in Arunachal Pradesh.
- D. Species of venomous spiders identified in Arunachal Pradesh.

6. Consider the following statements with respect to Central Zoo Authority:

1. It is a statutory body chaired by the Environment Minister.
2. It regulates the exchange of animals of the endangered category listed under Schedule – I and II of the Wildlife (Protection) Act, 1972 among zoos.
3. The exchange of animals between an Indian and a foreign zoo is also approved by the Authority.

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

7. Birbal Nath committee recommendations are associated with which of the following?

- A. Formation of Special Protection Group (SPG).
- B. Allowing private train operators in Indian Railways.
- C. Establishment of Central Zoo Authority.
- D. Launch of Special Liquidity Scheme to help low rated finance companies to raise debt.

8. Consider the following statements with respect to Namdapha National Park:

1. Situated in Arunachal Pradesh, it is also a tiger reserve.
2. It is located between the Patkai range and the Dapha Bum range of Mishmi Hills.

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

9. Which of the following initiatives is/are established under the United Nations Convention on the Law of the Sea (UNCLOS)?

1. International Tribunal for the Law of the Sea (ITLOS)
2. International Seabed Authority
3. Commission on the Limits of the Continental Shelf (CLCS)

Choose the correct option:

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

10. Consider the following statements with respect to UN Convention Against Torture (UNCAT):

1. It aims to prevent torture and other acts of cruel, inhuman, or degrading treatment or punishment around the world.
2. India has signed and ratified the 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

11. Which of the following Tiger Reserves are located in Uttar Pradesh?

1. Amangarh Tiger Reserve
2. Pilibhit Tiger Reserve
3. Rajaji Tiger Reserve
4. Dudhwa Tiger Reserve
5. Dampa Tiger Reserve

Choose the correct option:

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

12. Consider the following statements about the Integrated Disease Surveillance Program (IDSP):

1. It was launched with the assistance of the World Health Organisation.
2. It is a unit under the National Centre for Disease Control (NCDC).

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

13. Consider the following statements with respect to Nagarhole National Park:

1. It is a part of the Nilgiri Biosphere Reserve.
2. It is also a tiger reserve.
3. River Kabini separates Bandipur National Park from Nagarhole National Park.

Which of the given statement/s is/are correct?

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

14. Consider the following statements with respect to the Tiwa tribe:

1. They are recognized as Scheduled Tribes in Assam and Meghalaya.
2. They follow the "Slash and Burn" method of farming.
3. Wanchuwa festival is one of the most important celebrations for the Tiwa tribe.

Which of the given statement/s is/are correct?

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

15. "Dharma Guardian" is

- A. A bilateral annual military exercise between India and Japan.
- B. A bilateral annual naval exercise between India and the U.S.
- C. An annual military exercise between India, Japan, Australia and the U.S.
- D. An annual naval exercise between India, Japan and the U.S.

16. 'Prerak Dauur Samman' awards are announced as a part of:

- A. Swachh Survekshan
- B. Atma Nirbhar Abhiyaan
- C. Atal Innovation Mission
- D. Uchhatar Avishkar Yojana

17. Which of the following statement/s is/are correct?

1. Infant mortality rate (IMR) is the number of deaths per 1,000 live births of children under five years of age.
2. India's average IMR for rural areas is higher as compared to urban areas.
3. Madhya Pradesh has the highest IMR among Indian states.

Options:

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

18. The Logistics performance index is released by which of the following?

- A. World Bank
- B. World Economic Forum
- C. World Trade Organization
- D. UNCTAD

19. The Kanger Valley National Park is situated in which of the following state?

- A. Jharkhand
- B. Madhya Pradesh
- C. Chhattisgarh
- D. Uttarakhand

20. Which of the following correctly describes the term 'Ophiocordyceps'?

- A. Algae
- B. Arthropod
- C. Bacteria
- D. Fungi

21. Consider the following statements with respect to Global Environment Facility (GEF):

1. It was established on the eve of the 1992 Rio Earth Summit.
2. GEF Trust Fund is administered by the World Bank.
3. It serves as a financial mechanism for the Convention on Biological Diversity and UN Convention to Combat Desertification.

Which of the given statement/s is/are correct?

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

22. Consider the following statements:

1. Compulsory License is the grant of permission by the government to entities to use, manufacture, import or sell a patented invention without the patent owner's consent.
2. Indian Patent Act, 1970 deals with compulsory licensing.
3. The TRIPS Agreement does not allow for the use of compulsory licences.

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

23. Arrange the following Indian states in the ascending order of the length of boundary shared with Bhutan:

1. Sikkim
2. Assam
3. West Bengal
4. Arunachal Pradesh

Choose the correct option:

- A. 1, 3, 4, 2
- B. 1, 4, 3, 2
- C. 3, 1, 4, 2
- D. 1, 3, 2, 4

24. Which of the following pairs of cyclone and naming country is/are correctly matched?

1. Cyclone Nisarga – India
2. Cyclone Amphan – Thailand
3. Cyclone Fani – Bangladesh

Options:

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

25. Consider the following statements:

1. Golden Triangle is located in the area where the borders of Thailand, Myanmar and Laos meet at the confluence of the Ruak and Mekong Rivers.
2. Golden Crescent overlaps between the mountain ranges of Iran, Afghanistan and Pakistan.
3. Golden Crescent area has been producing opium since much earlier than the area marked by the Golden Triangle.

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

26. Consider the following statements:

1. Zardozi is an art patronised by the Mughals that involves weaving metallic threads on fabric to create intricate patterns.
2. Bhopal Zardozi has a Geographical Indication tag.

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

27. Consider the following statements with respect to Humayun's tomb:

1. Humayun's garden-tomb is an example of the charbagh.
2. It is the first garden-tomb built in India.
3. It is included in UNESCO's list of World Heritage Sites in India.

Which of the given statement/s is/are correct?

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

28. Which of the following is/are Green House Gas/es:

1. Ozone
2. Carbon dioxide
3. Nitrous oxide

Choose the correct option:

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

29. Which of the following is India's largest butterfly?

- A. Female golden birdwing
- B. Southern birdwing
- C. Quaker
- D. Elusive Prince

30. Consider the following statements with respect to Daulat Beg Oldie:

1. It is the northernmost corner of Indian Territory in Ladakh.
2. It has the world's highest airstrip.
3. It is to the west of the Line of Actual Control at Aksai Chin.

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

31. "Idlib Province" frequently in the news is located in:

- A. Syria
- B. Iran
- C. Israel
- D. Afghanistan

32. Consider the following statements with respect to Strategic Forces Command (SFC):

1. It works on the directives of the Nuclear Command Authority.
2. It is responsible for the management and administration of India's tactical and strategic nuclear weapons stockpile.

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

33. Which of the following countries are parties to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)?

1. United States of America
2. Malaysia
3. Japan
4. Australia
5. Brunei
6. Chile

Choose the correct option:

- A. 1, 2, 3 and 4 only
- B. 2, 4, 5 and 6 only
- C. 2, 3, 4, 5 and 6 only
- D. 1, 2, 3, 4, 5 and 6

34. Labour Force Participation Rate is:

- A. Section of the working population in the age group of 16-64 in the economy currently employed or seeking employment.
- B. Section of the working population in the age group of 16-64 in the economy currently employed.
- C. Section of the working population in the age group of 18-60 in the economy currently employed or seeking employment.
- D. None of the above.

35. Consider the following statements:

- 1. Member countries of the World Health Organisation South-East Asia Region have resolved to eliminate measles and rubella by 2023.
- 2. Both Sri Lanka and the Maldives have eradicated Measles and Rubella ahead of the target.
- 3. Both Measles and Rubella are caused by an RNA virus.

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

36. Consider the following statements:

- 1. India has an open skies policy with SAARC countries and countries within the 5,000-km radius.
- 2. Open sky air service agreement allows for airlines from the two countries to have an unlimited number of flights as well as seats to each other's jurisdictions.

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

37. Consider the following statements with respect to Malabar Exercise:

- 1. It is a biannual trilateral naval exercise between the navies of India, Japan and the USA.
- 2. It began as a bilateral exercise between India and Japan and included the US in 2015.
- 3. Australia has participated in the exercise as a non-permanent member in the past.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 3 only

C. 1 and 3 only

D. 1, 2 and 3

38. Consider the following statements with respect to Working Mechanism for Consultation & Coordination (WMCC) on India-China Border Affairs:

- 1. It was established in 2017 as an institutional mechanism for consultation and coordination for the management of India – China border areas.
- 2. It is headed by joint secretary-level officials from India and China.

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

39. "Bhashan Char Island" is a part of:

- A. Malaysia
- B. Myanmar
- C. Bangladesh
- D. India

40. "Mongolian Kanjur" recently in the news is:

- A. A Buddhist canonical text which is the most important religious text in Mongolia.
- B. Critically Endangered ground squirrels endemic to Mongolia.
- C. A Mongolian percussion instrument found in Buddhist monasteries.
- D. A form of performing art involving ritual singing, drumming and dancing performed in Buddhist monasteries.

41. Consider the following statements:

- 1. The Western Ghats have high endemism of orchids.
- 2. In India, the highest number of orchid species is recorded from Arunachal Pradesh.

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

42. Consider the following statements with respect to ASEEM digital platform:

- 1. It is an AI-based platform designed to bridge the demand-supply gap of skilled workforce across sectors.

2. It is developed and managed by the National Skill Development Corporation (NSDC).
3. It was launched by the Ministry of Human Resource and Development.

Which of the given statement/s is/are incorrect?

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

43. Consider the following statements with respect to AH-64 Apache:

1. It is the world's most advanced multi-role combat helicopter.
2. India has procured AH-64 Apache from Russia.
3. It is also used by the US Army.

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. 2 and 3 only

44. Consider the following statements with respect to the recently inaugurated Rewa Solar project:

1. It is India's first renewable energy project to supply to an institutional customer outside the State.
2. It is Asia's largest solar power project.
3. It is located in Madhya Pradesh.

Which of the given statement/s is/are correct?

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

45. Which of the following statement/s is/are incorrect with respect to Capital to Risk (Weighted) Assets Ratio (CRAR)?

1. The lower the CRAR of a bank the better capitalized it is.
2. The Basel III norms stipulated a capital to risk-weighted assets of 8%.
3. In India, scheduled commercial banks are required to maintain a CRAR of 7% while Indian public sector banks are emphasized to maintain a CRAR of 6% as per RBI norms.

Options

- A. 1 and 2 only
- B. 2 and 3 only

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

46. Which of the following statement/s is/are correct with respect to 'Countering America's Adversaries Through Sanctions Act' (CAATSA)?

1. CAATSA's stated purpose is to counter aggression by the Governments of Iran, the Russian Federation, and North Korea.
2. There are provisions in the law for secondary sanctions on persons that engage in significant transactions with Iran, Russia and North Korea.
3. There is a CAATSA waiver for India as part of the John S. McCain National Defense Authorization Act (NDAA) for fiscal year 2019.

Options:

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

47. Which of the following statement/s is/are correct?

1. As per the recent all India Tiger Estimation survey of 2018, the number of tigers reported from India have increased as compared to the previous survey.
2. India accounts for less than 25% of wild tiger population of the world.

Options:

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

48. Hagia Sophia, is located in which of the following country?

- A. Syria
- B. Turkey
- C. Iran
- D. Kazakhstan

49. Consider the following statements with respect to Fundamental Duties:

1. The concept of Fundamental Duties has been borrowed from the Irish Constitution.
2. Fundamental Duties were added to the Indian Constitution on the recommendations of the Swaran Singh Committee.
3. While the 42nd Amendment added 8 Fundamental Duties to the Indian Constitution, the rest were added through the 86th Amendment.

Which of the given statement/s is/are correct?

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

50. Which of the following chillies have been granted the GI Tag in India?

- 1. Bydagi Chilli
- 2. Guntur Sannam Chilli
- 3. Mizo Chilli
- 4. Bhiwapur Chilli

Options:

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

51. Consider the following statements with respect to faults:

- 1. Faults are discontinuities or cracks that are the result of differential motion within the earth's crust.
- 2. While a downthrown block between two normal faults is called graben, upthrown block between two normal faults is called horst.

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

52. Consider the following statements with respect to NATGRID project:

- 1. It is an integrated intelligence grid connecting databases of core security agencies of the Government of India.
- 2. The office of NATGRID is attached to the Ministry of Defence.
- 3. The intelligence gathering mechanism relates to immigration, banking, individual taxpayers, air and train travels.

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. 2 and 3 only

53. Consider the following statements:

- 1. INS Vikrant is an Indigenous Aircraft Carrier.
- 2. INS Vikramaditya was bought from Russia.
- 3. The Indian Navy currently operates one aircraft carrier only.

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

54. Consider the following statements with respect to the 73rd Constitutional Amendment Act:

- 1. The Seventh Schedule was inserted in the Constitution of India by the 73rd Amendment.
- 2. Constitutional status was accorded to Panchayati Raj Institutions through the 73rd Amendment Act.
- 3. It provided that one-third of the seats in all Panchayat councils, as well as one-third of the Pradhan (chairperson) positions, be reserved for women.
- 4. It fixed the minimum age for contesting in elections to Panchayat at 25 years.

Which of the given statement/s is/are incorrect?

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

55. Consider the following statements with respect to Bandar-e-Jask port:

- 1. Bandar-e-Jask port lies to the west of Chabahar.
- 2. It is located in the Hormozgan province of Iran.

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

56. Consider the following statements:

- 1. RBI purchases G-Secs under its Open Market Operations to reduce excess liquidity in the system.
- 2. G-Secs are risk-free gilt-edged instruments.
- 3. G-Secs are issued by both the Central as well as the State Governments.

Which of the given statement/s is/are incorrect?

- A. 1 only
- B. 3 only

- C. 2 and 3 only
- D. 1 and 3 only

57. Consider the following statements:

1. Cytokine storm is an overproduction of immune cells and their activating compounds.
2. Cytokines can be pro-inflammatory or anti-inflammatory.

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

58. Consider the following statements:

1. The lake is located in the Zabarwan mountain valley.
2. It is surrounded by Shankaracharya hills on three sides.

The lake being talked about is:

- A. Tso Moriri Lake
- B. Dal Lake
- C. Loktak Lake
- D. Chilika Lake

59. Which of the following statement/s is/are incorrect about Kaziranga National Park:

1. It is a "Mixed World Heritage Site" on the UNESCO World Heritage List.
2. It is recognized as an Important Bird Area by BirdLife International for the conservation of avifaunal species.
3. It has been declared a tiger reserve.

Choose the correct option:

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

60. "PRAGYATA Guidelines" refer to the recently released:

- A. Guidelines for obtaining collateral-free MSME loans, as a part of Atmanirbhar Bharat.
- B. Guidelines on digital education.
- C. Set of procedural guidelines for use in India in cases of sexual harassment.
- D. Guidelines regarding the preparation of coal blocks before bidding.

61. Consider the following statements with respect to Asian Development Bank (ADB):

1. It is headquartered in Manila, Philippines.
2. The bank admits the members of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and non-regional developed countries.
3. It issues Special Drawing Rights (SDR) monetary reserve currency that operates as a supplement to the existing money reserves of member countries.

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

62. Total Fertility Rate is:

- A. The average number of children born to women during their reproductive years.
- B. The fertility rate at which a population exactly replaces itself from one generation to the next, without migration.
- C. The fertility rate at which a population exactly replaces itself from one generation to the next.
- D. The number of live births per thousand of population per year.

63. Consider the following statements with respect to Chiang Mai Initiative:

1. It is a multilateral currency swap arrangement.
2. It involved ten members of ASEAN, the People's Republic of China including Hong Kong, Japan, and South Korea.

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

64. Which of the following committees or commissions dealt with Centre-State relations?

1. Sarkaria Commission
2. Puncchi Commission
3. Rajamannar Committee

Choose the correct option:

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

65. Consider the following statements with respect to the International Court of Justice (ICJ):

1. It is the principal judicial body of the UN.
2. It is composed of 15 judges elected to five-year terms of office by the United Nations General Assembly and the Security Council.
3. Its judgements are final and without appeal.

Which of the given statement/s is/are incorrect?

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

66. Which of the following conventions has/have NOT been ratified by India?

1. UN Convention on Rights of the Child
2. United Nations Convention on the Rights of Persons with Disabilities
3. UN Convention Against Torture (CAT)

Choose the correct option:

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

67. Consider the following statements:

1. Maternal Mortality Ratio (MMR) is defined as the number of maternal deaths per one thousand live births.
2. Sustainable Development Goal has set a target for the reduction of MMR to fewer than 70 by 2030.
3. The Government of India launched the LaQshya Initiative with the objective of reducing Maternal Mortality.

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

68. Consider the following statements with respect to Afghanistan–Pakistan Transit Trade Agreement:

1. It allows for both countries to use each other's airports, railways, roads, and ports for transit trade along designated transit corridors.
2. This agreement does not permit Indian goods to be loaded onto trucks for transit back to Afghanistan, except at the Wagah border.

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

69. Consider the following statements with respect to Indian Pangolin (Manis crassicaudata):

1. It is the only species of pangolin occurring in India.
2. It is listed in Schedule I of the Wildlife (Protection) Act, 1972.
3. It is classified as Endangered on the IUCN Red List.

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

70. Consider the following statements with respect to Pradhan Mantri Fasal Bima Yojana (PMFBY)?

1. It is mandatory for loanee farmers to take insurance cover under this scheme.
2. It does not cover losses occurred due to war or similar hazardous activities.
3. Losses occurred after harvesting crops are also covered under the scheme.

Which of the given statement/s is/are correct?

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

71. Kish Island, recently in news, is located in:

- A. Persian Gulf
- B. South China Sea
- C. Philippine Sea
- D. Gulf of Oman

72. Arrange the following from East to West:

1. Kedarnath
2. Badrinath
3. Gangotri
4. Yamunotri

Options:

- A. 2, 1, 3, 4
- B. 1, 2, 3, 4
- C. 2, 1, 4, 3
- D. 3, 4, 1, 2

73. Which of the following statement/s is/are correct?

1. Malabar exercise has been a trilateral exercise between India, U.S. and Japan since its inception in 1992.
2. Malabar exercise has always been conducted in Indian waters.
3. Australia has never participated in the Malabar exercise.

Options:

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

74. Equalisation levy is associated with which of the following?

- A. Inter-country transfer of assets
- B. Digital services
- C. Wealth tax imposed on transfer of assets from parents to children
- D. Tax on companies for use of natural resources like water

75. Which of the following statement/s is/are correct?

1. National Disaster Response Fund supplements the State Disaster Response Fund in case of a disaster of severe nature, provided adequate funds are not available in the State Disaster Response Fund.
2. The States have to submit utilisation certificates, pending which no future allocation is made from the National Disaster Response Fund to State Disaster Response Fund.

Options:

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

76. The Solar Orbiter mission is associated with which of the following organization/s?

1. NASA
2. European Space agency
3. ISRO

Options:

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

77. India has ratified which of the following conventions?

1. Convention against Torture
2. Convention on Cluster Munitions
3. Chemical Weapons Convention

Options:

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

78. With reference to the Unlawful Activities Prevention Act, which of the following statement/s is/are correct?

1. The provisions of this Act apply to citizens of India outside India.
2. Under the UAPA, the investigating agency can file a charge sheet in a maximum of 90 days after the arrests.

Options:

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

79. Consider the following pairs:

1. Jim Corbett National Park: Uttarakhand
2. Gumti Wildlife Sanctuary: Sikkim
3. Silent Valley National Park: Kerala

Which of the above pairs is/are correctly matched?

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

80. Congress had decided to demand "Purna Swaraj" (complete independence) at its

- A. Lahore Session
- B. Bombay session
- C. Benaras Session
- D. Madras Session

81. Consider the following statements with respect to Maldharis:

1. They are religious pastoral communities living in Gir forests.
2. Their settlements are called Nesses.

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

82. In which of the following country/ies does Polio continue to be endemic?

- 1. Pakistan
- 2. Iran
- 3. Afghanistan
- 4. Sri Lanka
- 5. Bangladesh
- 6. Maldives

Choose the correct option:

- A. 1 and 3 only
- B. 3 and 6 only
- C. 2, 3, 4 and 5 only
- D. 1, 2, 3, 4, 5 and 6

83. Consider the following statements with respect to "Al-Amal":

- 1. It is the first Arab space mission to Mars.
- 2. Its objective is to land on Mars and provide a comprehensive image of the weather dynamics in the planet's atmosphere.

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

84. IUCN Red List classifies Asiatic Lion as:

- A. Vulnerable
- B. Endangered
- C. Critically Endangered
- D. Near Threatened

85. Arrange the following areas from West to East:

- 1. Sakteng Wildlife Sanctuary
- 2. Doklam Plateau
- 3. Jakarlung
- 4. Pasamlung

Choose the correct option:

- A. 2, 3, 4, 1
- B. 3, 4, 2, 1

- C. 2, 4, 3, 1
- D. 2, 3, 1, 4

86. Consider the following statements with respect to "Meta Materials":

- 1. Meta Materials are artificially crafted with unique internal microstructures that give them properties not found in nature.
- 2. The constituent artificial units of the Meta Material can be tailored in shape, size, and interatomic interaction.

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

87. The international financing organization, 'Global Fund', works towards accelerating the end of which of the following diseases?

- 1. Tuberculosis
- 2. Malaria
- 3. Swine Flu
- 4. Polio
- 5. AIDS

Choose the correct option:

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

88. Consider the following statements with respect to Trade-Related aspects of Intellectual Property rights (TRIPS):

- 1. It is an international agreement administered jointly by the World Trade Organization and the United Nations Conference on Trade and Development.
- 2. It was negotiated at the end of the Uruguay Round of GATT in 1994.
- 3. TRIPS Agreement applies to all WTO members.

Which of the given statement/s is/are correct?

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

89. Which of the following national parks are located in Assam?

1. Kaziranga National Park
2. Manas National park
3. Orang National Park
4. Dibru-Saikhowa National Park
5. Nameri National Park

Choose the correct option:

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

90. Bharni, Katchni, Tantrik, Godna, and Kohbar are distinctive styles of which of the following folk paintings?

- A. Madhubani Painting
- B. Warli Painting
- C. Kalamkari Painting
- D. Pattachitra Painting

91. Consider the following statements with respect to Fishing Cat:

1. It is the state animal of West Bengal.
2. It is classified as Endangered in the IUCN Red List.
3. Fishing Cats are nocturnal.

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

92. Consider the following statements with respect to "Haloarchaea":

1. It is a bacteria culture, which produces pink pigment.
2. They are found in water saturated with salt.

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

93. In which of the following state/s is the Bru Tribe recognised as a Particularly Vulnerable Tribal Group (PVTG):

1. Tripura
2. Assam
3. Manipur
4. Mizoram

Choose the correct option:

- A. 1 and 2 only
- B. 1 only
- C. 4 only
- D. 1, 2 and 4 only

94. Consider the following statements with respect to the European Union (EU):

1. It is an economic and political union of 27 countries where all the members use the Euro as their official currency.
2. It came into force after the signing of the Maastricht Treaty.
3. Switzerland is a member of the European Union.

Which of the given statement/s is/are correct?

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

95. Consider the following statements with respect to Tianwen-1:

1. It is China's first fully home-grown Mars mission.
2. It is China's first Mars orbiter.
3. It consists of an orbiter and a solar-powered rover.

Which of the given statement/s is/are correct?

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

96. Consider the following statements with respect to General Financial Rules (GFRs):

1. They are a compilation of rules and orders of the Government of India to be followed while dealing with matters involving public finances.
2. They were first issued in 1947 and have not been modified ever since.
3. They are issued by the Department of Financial Services under the Finance Ministry.

Which of the given statement/s is/are correct?

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

97. Consider the following statements with respect to Hagia Sophia Grand Mosque:

1. It is an example of Byzantine architecture.
2. It was built as the Christian cathedral of Constantinople.
3. It was converted into a mosque by Mustafa Kemal Atatürk, the founder of the Republic of Turkey.

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

98. Which among the following treaties established the modern border between Turkey and Greece?

- A. Treaty of Lausanne
- B. Treaty of Alexandropol
- C. Treaty of Sèvres
- D. Treaty of Ankara

99. Which of the following are correctly matched?

1. Kuchipudi – Tamil Nadu
2. Sattriya – Arunachal Pradesh
3. Kathakali – Kerala
4. Odisha – Odissi

Choose the correct option:

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

100. Consider the following statements with respect to the National Human Rights Commission (NHRC):

1. It is a constitutional body established in 1993.
2. President appoints the Chairman and members of NHRC on the recommendation of a high-powered committee headed by Prime Minister.
3. It has the powers of a Civil Court.

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

101. Who of the following were parts of the Thanjavur Quartet?

1. Chinnaiah
2. Ponniah
3. Muthuswami Dikshitar
4. Vadivelu
5. Tyagaraja
6. Syama Sastri
7. Sivanandam

Options:

- A. 1,2,4 and 7
- B. 1,2,3 and 4
- C. 3,4,5 and 6
- D. 2,3,6 and 7

102. Which of the following has a geographical indication (GI) tag?

1. Kashmir saffron
2. Kandhamal Haladi
3. Tirur Betel Leaf
4. Tawlhlohpuan

Options:

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

103. Which of the following statement/s is/are correct?

1. The governor has to always act as per the aid and advice of the Council of Ministers headed by the Chief Minister.
2. The constitution has a provision for reservation of state bills by Governors for President's consideration.

Options:

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

104. Which of the following statement/s is/are correct?

1. Environment Impact Assessment in India is statutorily backed by the Environment Protection Act, 1986.
2. The environmental clearance to projects can be given only by the Central Government.

Options:

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

105. Consider the following statements with respect to Istanbul Convention:

1. It is a Convention on preventing and combating violence against women and domestic violence.
2. India has signed and ratified the Convention.
3. Turkey was the first country to ratify the Convention.

Which of the given statement/s is/are correct?

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

106. Consider the following statements with respect to River Gandak:

1. It is a right-bank tributary of the Ganga.
2. Kali Gandak and the Trishuli are its tributaries.
3. The Burhi Gandak flows parallel to and east of the Gandak River.

Which of the given statement/s is/are correct?

Options:

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

107. "Operation Safed Sagar" refers to:

- A. The world's largest dairy development program and a landmark project of India's National Dairy Development Board.
- B. The codename assigned to the Indian Air Force's strike to support the ground troops during the Kargil War of 1999.
- C. Campaign launched for popularising Blue Revolution in India.
- D. Indian military's capture of the majority of Siachen Glacier.

108. Consider the following statements with respect to the National Institutional Ranking Framework (NIRF):

1. It ranks higher educational institutions across India.
2. 90% of the parameters in NIRF are completely objective and fact-based, while only 10% is based on the subjective parameter of perception by academic peers and employers.

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

109. Consider the following statements with respect to the "Strait of Hormuz":

1. It lies between Iran and Qatar.
2. It links the Persian Gulf to the Gulf of Oman.
3. It contains the islands of Qeshm and Hengam.

Which of the given statement/s is/are correct?

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

110. Consider the following statements regarding Nagarjunasagar Srisailem Tiger Reserve:

1. It is the largest Tiger Reserve in India.
2. It spans across five districts in Andhra Pradesh and Telangana.
3. River Krishna flows through the reserve.

Which of the given statement/s is/are correct?

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

111. Which of the following is the nodal agency for divestment in India?

- A. Department of Revenue
- B. Department of Financial Services
- C. Department of Investment and Public Asset Management
- D. Department of Economic Affairs

112. Consider the following statements with respect to World Migration Report:

1. It is published by the International Labour Organisation.
2. It is released annually since the year 2000.

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

113. Consider the following statements with respect to River Pampa:

1. It is the longest river in Kerala.
2. It originates in the Pulachimalai hill in the Western Ghats.
3. It flows westwards and drains into the Vembanad Lake.

Which of the given statement/s is/are incorrect?

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

114. Consider the following statements:

1. Palamau Tiger Reserve – Jharkhand
2. Buxa Tiger Reserve – Maharashtra
3. Dampa Tiger Reserve – Mizoram
4. Satkosia Tiger Reserve – Odisha

Which of the above is/are correctly matched?

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

115. Consider the following statements with respect to Asian Infrastructure Investment Bank (AIIB):

1. It is headquartered in Beijing, China.
2. India is a member and has the second-largest shareholding and voting rights.
3. Membership is open to members of the International Bank for Reconstruction and Development or the Asian Development Bank.
4. The bank allows non-sovereign entities of member countries to apply for membership.

Choose the correct option:

- A. 1 and 4 only
- B. 1, 2 and 3 only

C. 1, 2, 3 and 4

D. 2 and 4 only

116. The “Five Eyes” alliance comprises of which of the following countries?

1. Canada
2. Russia
3. New Zealand
4. Australia
5. India
6. United Kingdom
7. United States

Choose the correct option:

- A. 1, 3, 4, 6, 7 only
- B. 1, 2, 4, 6, 7 only
- C. 2, 3, 4, 5, 7 only
- D. 3, 4, 5, 6, 7 only

117. Which of the following temples is built in the Pratihara style?

- A. Ghateshwara Temple in Baroli, Rajasthan
- B. Sun Temple in Konark, Odisha
- C. Kamakhya Temple in Guwahati, Assam
- D. Shore Temple at Mahabalipuram, Tamil Nadu

118. Consider the following statements with respect to the International Thermonuclear Experimental Reactor (ITER):

1. It is located in France.
2. It is the largest plasma-based fusion reactor.
3. Both India and China are members of ITER.

Which of the given statement/s is/are correct?

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

119. Consider the following questions with respect to the Budapest Convention:

1. It is the first international treaty seeking to address internet and computer crime.
2. It is open for ratification only to the members of the Council of Europe.
3. India has acceded to the Budapest Convention.

Which of the given statement/s is/are incorrect?

- A. 2 and 3 only

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

120. Consider the following statements:

1. The Aichi Targets were adopted by the Convention on Biological Diversity (CBD) at its Nagoya conference.
2. There are 20 Aichi Targets divided into 5 sections with a ten-year framework for action.
3. India has 12 National Biodiversity Targets in Line with the Aichi Targets.

Which of the given statement/s is/are correct?

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

121. Consider the following statements with respect to Atal Innovation Mission (AIM):

1. It is an initiative of the Ministry of Skill Development and Entrepreneurship.
2. ARISE initiative under the AIM is a national mentor network in collaboration with the public sector, corporates and institutions, to support all the initiatives of the mission.
3. AIM-iCREST is an incubator capabilities enhancement programme for creating high-performance start-ups.

Which of the given statement/s is/are correct?

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

122. Memba Tribe belongs to which of the following regions?

- A. Arunachal Pradesh
- B. Kerala
- C. Nagaland
- D. Gujarat

123. Which of the following committee/s is/are associated with the National Education Policy?

1. T.S.R. Subramanian Committee
2. K. Kasturirangan Committee
3. Madhav Gadgil Committee
4. Bibek Debroy Committee

Choose the correct option:

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

124. Consider the following statements with respect to Assam Rifles:

1. The Assam Rifles is the oldest paramilitary force of India.
2. The administrative control of the Assam Rifles lies with the Defence Ministry, while the operational control is with the Home Ministry.

Which of the given statement/s is/are correct?

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

ANSWER KEYS

1	A
2	B
3	A
4	D
5	B
6	D
7	A
8	C
9	D
10	B
11	A
12	B
13	B
14	C
15	A
16	A
17	B
18	A
19	C
20	D

21	D
22	B
23	A
24	C
25	C
26	B
27	D
28	B
29	A
30	D
31	A
32	D
33	C
34	A
35	D
36	B
37	B
38	A
39	C
40	A

41	C
42	B
43	A
44	C
45	C
46	D
47	A
48	B
49	B
50	D
51	C
52	A
53	D
54	A
55	C
56	A
57	D
58	B
59	A
60	B

61	A
62	A
63	C
64	D
65	B
66	C
67	C
68	A
69	B
70	B
71	A
72	A
73	D
74	B
75	C
76	C
77	B
78	A
79	C
80	A

81	D
82	A
83	A
84	B
85	A
86	C
87	B
88	D
89	D
90	A
91	C
92	C
93	B
94	A
95	C
96	D
97	C
98	A
99	B
100	D

101	A
102	D
103	B
104	A
105	D
106	C
107	B
108	D
109	D
110	C
111	C
112	D
113	A
114	B
115	C
116	A
117	A
118	D
119	A
120	C

121	B
122	A
123	B
124	A

MAINS PRACTICE QUESTIONS

GS Paper 1

Modern History

1. Discuss the major causes for the launch of the Non-Cooperation movement in 1920 and analyze its impacts on the national Independence movement. (15 marks, 250 words) (GS paper 1/Modern History)

Geography

1. Describe the mechanism of the monsoon rains in India with appropriate diagrams. Discuss the significance of a steady, well-spread monsoon rain for the agricultural sector and the Indian economy. (15 marks, 250 words) (GS paper 1/Geography)

Social Issues

1. The recent judgment of the Supreme Court on the entitlement of the disabled people to benefits on par with the SC/STs helps uphold the rights of the disabled as mentioned under the Constitution and the existing legislation. Comment. (10 marks, 150 words) (GS Paper 1/Social Issues)
2. The Government might have sanctioned permanent commission for women officers in the Army, but it must achieve gender equality by establishing professional standards and adhering to them without any bias. Analyze. (10 Marks, 150 Words) (GS Paper 1/Social Issues)

GS Paper 2

Polity and Governance

1. In the light of the recent incident of police violence in Thoothukudi, Tamil Nadu, examine the associated concerns with respect to police violence and suggest suitable policy measures to address these concerns. (15 marks, 250 words) (GS paper 2/ Polity and Governance)
2. The impending reform measures under consideration in the digital services sector in India will have to delicately balance the often contradictory objectives. Comment. (10 marks, 150 words) (GS paper 2/Polity and Governance)
3. Ghastly acts of violence perpetrated by the Police speak volumes about the lack of institutional checks and balances. In the light of the above statement, elucidate the recommendations of various committees and the Judiciary on Police reforms. (15 Marks, 250 Words) (GS paper 2/Polity and Governance)
4. Discuss the existing laws and mechanisms dealing with the issue of custodial deaths in India. Analyze the concerns associated with the draft Prevention of Torture Bill. (10 marks, 150 words) (GS paper 2/Polity and Governance)
5. 'The ends of justice are not served by retributive measures and constitutional justice is non-negotiable'. In light of the given statement, discuss the significance of the due process of law in criminal investigations. (15 Marks, 250 Words) (GS paper 2/Polity and Governance)
6. Money Power, Muscle Power and lack of political will are the major drivers of the Criminalization of Politics. In light of the above statement, elaborate on the various measures taken by the Judiciary and the ECI to cleanse the system. (15 Marks, 250 Words) (GS paper 2/Polity and Governance)
7. Discuss the measures that must be taken by the Centre to address the ongoing fiscal tensions between the Centre and the States. (15 Marks, 250 Words) (GS paper 2/Polity and Governance)
8. Discuss the arguments in favour of a decentralized form of governance. Also analyze what are the challenges in the implementation of such a governance model in the Indian context. (15 marks, 250 words) (GS paper 2/Polity and Governance)
9. The anti-defection law has proved to be ineffective and needs a major overhaul. Discuss. (15 Marks, 250 Words) (GS Paper 2/ Polity and Governance)

10. Analyze the role of a Governor in a responsible and federalism form of government as envisaged by the Indian Constitution. In the light of the recent controversies over the role of the Governors, suggest suitable reforms. (15 marks, 250 words)(GS paper 2/Polity and Governance)
11. Analyze the concerns associated with the criminal contempt law in India. Suggest suitable remedial measures to address these concerns. (15 marks, 250 words) (GS paper 2/Polity and Governance)
12. What is meant by plea bargaining? Discuss the salient provisions of plea bargaining mechanism in India. What are the advantages that this mechanism offers? (15 marks, 250 words) (GS paper 2/Polity and Governance)
13. The migrant workers face challenges in exercising their franchise and remain politically powerless. The 'One Nation One Voter ID' approach ensuring domestic ballot portability would truly empower the migrant voter. Comment. (15 marks, 250 words) (GS paper 2/Polity and Governance)
14. Given that the stringently implemented lockdown has led to a livelihood shock and has had a devastating impact on the poor, suggest suitable measures to address this challenge. (10 marks, 150 words) (GS paper 2/Polity and Governance)
15. Enumerate the major goals of the Sustainable Development Goals (SDGs) and evaluate India's progress in meeting the set targets. (10 marks, 150 words) (GS paper 2/Polity and Governance)

Nutrition

1. The State of Food Security and Nutrition in the World 2020 (SOFI 2020) report observes that the unaffordability of good diets is a major contributor to nutritional insecurity in India. Suggest suitable measures to address this challenge. (10 marks, 150 words) (GS Paper 2/Nutrition)

Education

1. Analyze how the National Education Policy, 2020 aims to address the existing challenges in the educational sector and also rightly acknowledges the 21st century educational needs. (15 marks, 250 words)(GS paper 2/Education)
2. Should the University Grants Commission (UGC) reconsider its decision to conduct final year university examinations? Critically analyze. (10 Marks, 150 words) (GS Paper 2/Education)
3. Discuss the concerns associated with higher education in India and suggest possible reforms to address such challenges. (10 marks, 150 words)(GS paper 2/Education)

Health

1. What is meant by serological survey and herd immunity? Discuss the significance and limitations of serological studies. (10 marks, 150 words)(GS paper 2/Health)
2. Despite considerable progress in reducing Infant Mortality rate (IMR) in India, the set targets seem difficult to achieve. Identify the causative factors for the high IMR in India and suggest remedial measures. (10 marks, 150 words) (GS paper 2/Health)

Government Schemes

1. Analyze how a renewed approach to community canteens would, apart from helping achieve nutritional security for migrant workers, also help create new jobs, save fiscal resources, support economic growth and promote sustainable diets and agriculture. (10 marks, 150 words) (GS paper 2/Government Schemes)

International Relations

1. Iran's decision to drop India from a plan to build a rail link from the strategic Chabahar port to Zahedan on the Afghan border is a wake-up call for Delhi to rethink its strategies towards Tehran. Discuss. (15 Marks, 250 Words) (GS Paper 2/International Relations)
2. The move to include Australia in the Malabar exercises would mark a major shift for India's Indo-Pacific plans. Comment. Also discuss the associated significance and concerns of such a move. (10 marks, 150 words) (GS paper 2/International relations)
3. The benefits or gains for India in the strategic realm would be higher as compared to the cost of participating in the quadrilateral engagement involving the U.S., Japan and Australia. Examine. (15 marks, 250 words) (GS paper 2/International Relations)

4. Discuss the significance of a bilateral trade deal between India and the U.S. for the two countries. Also analyze the challenges in finalizing such a trade deal. (10 marks, 150 words) (GS paper 2/International Relations)
5. China's claims in eastern Bhutan are a cause of concern not just for Bhutan but also for India. Comment. (10 marks, 150 words) (GS paper 2/International Relations)
6. Amid speculation that tensions with China will push India into a stronger alliance with the U.S, India has done well to adopt a new form of non-alignment policy. Comment. (10 marks, 150 words)(GS paper 2/International Relations)
7. The steadily deteriorating ties between the U.S. and China will have implications for other countries too. Analyze. (10 marks, 150 words)(GS paper 2/International Relations)
8. In the light of China increasing its influence in the South Asian region as part of its global expansionism, discuss the need and strategy for India to reinvigorate SAARC to counter Chinese plans for the region. (15 marks, 250 words)(GS paper 2/International Relations)
9. India's upcoming membership of the United Nations Security Council (UNSC) as a non-permanent member would be significant for both India and the UNSC. Comment. (10 marks, 150 words) (GS paper 2/International Relations)
10. What lessons can India learn on the legal and diplomatic domains from its experience in the Italian Marines Case? (10 Marks, 150 Words) (GS paper 2/International Relations)
11. Analyze the importance of structural economic reforms to help close the widening economic gap between India and China, which would help India counter China's assertiveness and also help India meet its immediate economic challenges. (10 marks, 150 words) (GS paper 2/International Relations)
12. Discuss how China's nuclear modernisation and diversified nuclear capabilities present challenges to India and suggest what should be India's short and long term measures to counter this looming threat. (15 marks, 250 words) (GS paper 2/International Relations)
13. Discuss what is India's stake in the South China Sea (SCS) dispute and analyze what should be India's response to the evolving situation in the region. (10 marks, 150 words) (GS paper 2/International Relations)
14. The US decision to withdraw from the WHO will have dire consequences for global public health. Discuss. (10 Marks, 150 Words) (GS paper 2/International Relations)
15. The present circumstances provide an opportune time for India and the EU to build a partnership that is both economic and strategic. Comment. Evaluate the challenges for strengthening the India-EU relationship. (15 marks, 250 words) (GS paper 2/ International Relations)
16. Apart from the economic dimension, India-Iran relation holds immense significance for the political and strategic interests of both countries. Comment. (10 marks, 150 words) (GS paper 2/International Relations)
17. Despite the immense potential of a free trade agreement between India and the EU, there has been minimal progress on this front. Comment. (10 marks, 150 words) (GS paper 2/International Relations)
18. Common vision, values and the prospect of mutual benefits from a vibrant bilateral partnership should be sufficient grounds for strengthening the India-EU relationship. Comment. (15 marks, 250 words)(GS Paper 2/International Relations)
19. India's need to counter the aggressiveness of China by partnering with other powers in the region and also India's desire for strategic autonomy has thrown tough choices for India in respect of its Indo-Pacific maritime alliance. Comment. (15 marks, 250 words)(GS paper 2/International Relations)
20. Analyze the significance of and challenges to the India – Sri Lanka bilateral relationship. Suggest measures to strengthen this relationship further. (15 marks, 250 words)(GS paper 2/International Relations)
21. Despite the current differences between the three nations, the Russia-India-China engagement still holds significance for India. Analyze. (15 marks, 250 words)(GS paper 2/International Relations)
22. Discuss the challenges faced by the South Asian labour force in the GCC countries, especially in the current context of the pandemic crisis and suggest suitable policy measures. (10 marks, 150 words)(GS paper 2/Indian Diaspora)

GS Paper 3**Economy**

1. Enumerate the reforms introduced in India to up-grade, digitize and automate its logistics systems for inter-country trade. Discuss the existing challenges in this sector and suggest suitable measures. (15 marks, 250 words) (GS paper 3/Economy)
2. In the light of the move by the Indian Railways to open up train operations to private entities on select routes, discuss the significance of this move and evaluate the challenges therein. (15 marks, 250 words) (GS paper 3/Economy)
3. Given the fact that the economic fallout from the COVID-19 pandemic would most likely result in higher non-performing assets and capital erosion of banks, discuss the associated concerns and suggest both short and long term measures to help mitigate the crisis. (15 marks, 250 words) (GS paper 3/Economy)
4. In the light of India's commitment to tap solar energy, analyze the significance of solar energy to India. Also examine the concerns associated with the sector in the Indian context and suggest suitable remedial measures. (15 marks, 250 words) (GS paper 3/Economy)
5. Discuss the major types of inflation and their causative factors. Also discuss the commonly used methods to control inflation. (10 marks, 150 words) (GS Paper 3/Economy)
6. Unlike most countries which have announced large fiscal stimulus to revive their economies, India has followed a calibrated approach, which does not lean much on direct fiscal spending, but emphasizes on reforms. Evaluate the significance and concerns associated with such an approach. (10 marks, 150 words) (GS Paper 3/Economy)
7. The planned privatization of select services of the Indian railways though well-intended, the model envisaged for this privatization is a cause for concern. Comment. (15 marks, 250 words) (GS paper 3/Economy)
8. Evaluate India's COVID-19 fiscal response in comparison to other similar developing countries and discuss the associated concerns. (10 marks, 150 words) (GS paper 3/Economy)

Environment and Ecology

1. An unsustainable development model would not only lead to environmental degradation and endanger habitats and lives but also intensify human vulnerability to infectious diseases and related socio-economic shocks. Comment. (10 marks, 150 words) (GS paper 3/Environment and Ecology)
2. Evaluate India's vulnerability to forest fire. Examine the associated challenges and suggest suitable measures to reduce the risk of forest fires. (10 marks, 150 words) (GS paper 3/Environment and Ecology)
3. Apart from the current pandemic, there are two impending dangers to people's health — air pollution and greenhouse gases — and a weak public health system. Comment. (15 marks, 250 words) (GS paper 3/Environment and Ecology)
4. Given the increasing scientific evidence showing strong linkages between the loss of biodiversity, and wildlife trade, with the emergence of epidemics, analyze the need for a more environmentally sustainable development model. (10 marks, 150 words) (GS paper 3/ Environment and Ecology)

Internal Security

1. In light of the growing sophistication, intensity and frequency of cyberattacks, evaluate the need for global collaboration in the cyberspace domain and India's stakes in such collaboration. (15 marks, 250 words) (GS paper 3/Internal Security)

GS Paper 4

1. Discuss the salient aspects of Thomas Hobbes's Social Contract Theory. Evaluate the major differences between the ideas propounded by Thomas Hobbes and Jean-Jacques Rousseau regarding the Social Contract Theory. (15 marks, 250 words) (GS paper 4/Ethics and Integrity)

INTERVIEW TRANSCRIPT

Candidate Details:

- Name: Chandra Mohan Garg
- AIR: 25 (CSE-2015)
- Optional: Sociology

Personal Details:

- Education: B.E. in Instrumentation Engineering From Netaji Subhash Institute of Technology, Delhi
- Home town: Ghaziabad, Uttar Pradesh
- Hobbies: Teaching (Community Project), Sports

Work-experience

- Business Analyst in Deloitte

Chairman of the Interview Board: Mr. Manbir Singh

Questions asked by the interview board:**Education**

- Questions about Instrumentation Engineering and reasons for switch to a software oriented job profile?
- Questions related to issues of engineering education in India and the need to rationalize the number of engineering colleges in India.

Previous Employment

- Job profile in Deloitte?
- Factors to be considered while preparing a marketing strategy?

Questions based on Hobbies

- Questions related to the community project undertaken by the candidate.
 - * Problems encountered while undertaking the community project.
- Questions related to a paper on child labour presented by the candidate.
 - * Reasons behind child labour
 - * Ways to tackle this menace

History

- Questions on Netaji Subhash Chandra Bose and the ideology propounded by him.
- If suppose Netaji would have been alive today, what would have been different in India's development process.

- What is the issue of declassification of Netaji files?

International relations

- Issues in European Union?
- What is sovereign debt crisis?
- The issue with PIGS countries?

Internal Security

- Meaning of proxy war and examples.
- The resolution of Kashmir issue and the bilateral relation between India and Pakistan
- Meaning of non state actors
- Questions related to the Pathankot attack

Environment and ecology

- Environmental initiatives with respect to the Yamuna River. Its significance and the associated challenges.