

Monthly Current Affairs

SEPTEMBER - 2019

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POLITY

1. Association of World Election Bodies (A- WEB)

- It is the largest association of Election Management Bodies (EMBs) worldwide
- A-WEB was established in 2013 in Song-do, South Korea.
- The permanent secretariat of A-WEB is located at Seoul.
- A-WEB's vision is to foster efficiency and effectiveness in conducting free, fair, transparent and participative elections worldwide.
- Its activities are guided by its mission to identify latest trends, challenges and developments in democratic electoral management and electoral processes and to facilitate appropriate exchange of experience and expertise among members with the objective of strengthening electoral democracy worldwide.

Context

- Election Commission of India hosted the 4th General Assembly of Association of World Election Bodies (A-WEB)

India and AWEB

- Election Commission of India had been closely associated with the formation process of the A-WEB and was one of the founding members of AWEB in 2013.
- India continues to promote AWEB's mission wholeheartedly to promote partnership among Electoral Management Bodies (EMBs) around the world.
- India is all set to take over as Chair now for the 2019-21 term.

2. Electors Verification Programme (EVP)

Context

- The Election Commission of India launched a nation-wide Electors Verification Programme

National Voters Service Portal (NVSP)

- The portal was developed with an aim to provide single window service electors.
- Through NVSP, a user can avail and access various services such as access the electoral list, apply for voter id card, apply online for corrections in voter's card, view details of Polling booth, Assembly Constituency and Parliamentary constituency, and get the contact details of Booth Level officer, Electoral Registration Officer, among other services.

What is the purpose of the EVP?

- It aims to provide better electoral services, improve communication between voters and the Commission, and the overall health of electoral rolls in general.
- The purpose is to improve the health of electoral rolls and augment enrolment of all eligible citizens during special summary revision of the electoral rolls.
- Voters can use the NVSP, app, common service centres or the voter facilitation centre to avail facilities like verification and correction of details, authentication, updating details of family members and giving feedback, among others.

3. One Nation, One language

Context

- Home Minister Amit Shah said that the country should come together to promote Hindi.

Details

- During an event associated with the Hindi Divas, the Minister said that Hindi is the only language that can unify the country and the language needs to be promoted.
- At the same time, he also mentioned that India is home to 122 languages and over 19,500 dialects, and every language has its own importance.
- He appealed the citizens to increase the use of their mother tongue and Hindi

Need for Promoting Hindi

The Minister stated the following reasons for the promotion of Hindi:

- It is very important to have a language of the whole country which should become the identity of India globally.
- Hindi can unite the country since it is the most spoken language.
- 'One language for the country' was the dream of Mahatma Gandhi and Sardar Patel.
- There is a huge influence of English on the citizens of India. Loss of languages due to foreign influence is a cultural issue. A language can survive only if the new generation feels proud in speaking it.

Hindi Divas

- September 14 is celebrated as Hindi Divas to mark the anniversary of the day in 1949 when the Constituent Assembly adopted Hindi as the official language of India.

- It was first observed in 1953.
- As per the Official Languages Act, 1963, Hindi and English are languages to be used in correspondence between ministries and State governments.

Promotion of Hindi

343. Official language of the Union

(1) The official language of the Union shall be Hindi in Devanagari script

- The form of numerals to be used for the official purposes of the Union shall be the international form of Indian numerals

351. Directive for development of the Hindi language:

It shall be the duty of the Union to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions used in Hindustani and in the other languages of India specified in the Eighth Schedule, and by drawing, wherever necessary or desirable, for its vocabulary, primarily on Sanskrit and secondarily on other languages

Should Hindi be promoted? Yes

- India is a country of different languages and every language has its own importance but it is very important to have a language of the whole country which should become the identity of India globally
- Hindi is the mother tongue of 43.6% of the Indian population, or nearly 53 crore Indians, according to the 2011 census.
- Many follow the Devnagri script, and native languages have many words in common - their structure and rules also bear similarities

No

- The Constitution clearly respects India's diversity as it recognises 22 languages spoken by a large number of people
 - * What connects Indians is the Constitution, our history and some epoch-making phenomena, whether it is the Buddha, the Bhakti movement or the freedom struggle
- It dismisses India's federal structure and diversity.
 - * The need today is to respect, protect and nurture diversity of our nation so that unity is ensured
- The 2011 Census listed 1,369 'mother tongues' in the country. Hindi is only one among them.
- Shashi Tharoor in the parliamentary debate asks a question what if hypothetically one day some Southern Indian Language becomes a majority speaking language. Are we going to promote that language?

- There are international lessons that can be drawn that show the superimposition of one regional language over the other as being counterproductive to national coherence: an obvious example can be found in India's immediate neighborhood, Pakistan.

- * The dominant Punjabiified imposed Urdu language and culture onto the rest of the country, and problems began to erupt from there.
- * The Bengalis and Balochs were the first to be offended by this blatant destruction of their indigenous cultural in the name of unity, and independent factions soon took to the streets.

- India probably survived because the country never tried to enforce anything like One Unit Program

- * English is the most commonly used medium in higher education. It enables the students to go for higher education and research in major developed countries.
- * The people of non-Hindi speaking states fear that the plan to promote Hindi might make them secondary citizens and undermine the country's integrity.

Way forward

- The Centre needs to realise that the reorganisation of States on linguistic lines has already obviated the need for a campaign against a "foreign language" allegedly fostering a slave mentality.
 - * There is no question of English gaining priority over regional languages as argued by Mr. Shah.
- Because regional languages have become the official languages of the States, and the continued usage of English is only for utilitarian and practical purposes.
- While the development and promotion of Hindi is no doubt a constitutional mandate which cannot be ignored by the Centre, but the manner in which it is implemented should not give the impression to the States that there is a creeping and unilateral imposition of Hindi.

Conclusion

C. Rajagopalachari once wrote in Swarajya: "Hindi is undoubtedly a beautiful language; it is the language of the vast majority. But I strongly protest against making Hindi the official language of India, I equally strongly recommend the inclusion of it in the school curriculum everywhere. English is compulsory in many European states on account of its importance. So Hindi be studied by people of all parts of India on account of its importance. But this does not mean that the great injustice should be perpetrated of imposing Hindi as official language of the administration of India." It should be left to one's wish to learn a particular language. As long as people in the South are not comfortable with Hindi, there is no point in making learning it compulsory. It would be better to leave the matter as it stands today instead of kindling a simmering fire.

4. Madras High Court Chief Justice V.K. Tahilramani

Transfer

Context

- Justice Tahilramani, the senior most among the Chief Justices of High Courts in the country, was proposed to be transferred to Meghalaya High Court by Supreme Court collegium.
- The transfer of a Chief Justice from one of the bigger High Courts to one of the smallest High Courts in the country is an obvious case of downgrading and amounts to public humiliation of the highest judicial officer in a State. Her response to this humiliation has been graceful but resolute — resignation.

Constitutional Position on transfer

- Article 222 of the Constitution makes provision for the transfer of a Judge (including Chief Justice) from one High Court to any other High Court.

While the Constitution does provide for such transfers from one high court to another, it is extremely rare that the senior-most Chief Justice in the country is shifted from a large court with a complement of 75 judges to one of the newest courts, which has a strength of only three judges.

Process followed for transfer of High Court CJI and Judges

After a spate of “punishment transfers” of upright judges by the Central government during the Emergency in 1975, the judiciary arrogated to itself the power in order to preserve judicial independence.

- The initiation of the proposal for the transfer of a Judge should be made by the Chief Justice of India whose opinion in this regard is determinative.
 - * In the formation of his opinion for the transfer of a Judge, other than the Chief Justice, the Chief Justice of India is expected to take into account the views of the Chief Justice of the High Court from which the Judge is to be transferred, as also the Chief Justice of the High Court to which the transfer is to be effected.
 - * The Chief Justice of India should also take into account the views of one or more Supreme Court Judges who are in a position to offer his/their views which would assist in the process of deciding whether or not a proposed transfer should take place.
- And in the case of a Chief Justice of a High Court, the CJI needs to take into account, “only the views of one or more knowledgeable Supreme Court Judges” while proposing a transfer.
- In the Second and Third Judges cases, the Supreme Court felt that the fact that the proposal is initiated by the CJI and recommended by a plurality of judges is enough as a safeguard against arbitrary transfers.
- Consent of a Judge for his first or subsequent transfer would not be required.

- All transfers are to be made in public interest i.e. for promoting better administration of justice throughout the country.
- After the recommendation of a transfer is received from the Chief Justice of India, the Union Minister of Law, Justice and Company Affairs would submit the recommendation along with relevant papers to the Prime Minister who will then advise the President as to the transfer of the Judge concerned

However, the apex court's power to transfer is not unfettered and absolute

- The Supreme Court can order a judge's transfer to improve the functioning of either of the High Courts or if there are close relatives of the judge practising in the same Court.
- The apex court can also do so if the judge has litigation or property interest in the State or has become controversial and so her continuance in the same High Court is not conducive.

Arguments considered for transfer

- One high court is as good as any other
- Transfers should not be seen as a ‘demotion’
- Chief Justice of India (CJI) should be free to transfer the head of any high court in the interest of “better administration of justice”.

This leads to some unanswered questions and non-transparent nature of collegium working

- There are no known complaints about her performance or any public controversy around her judicial or personal conduct.
- In the case of Justice Tahilramani, though the collegium's recommendation stated that the transfer was made “in the interests of better administration of justice,” the lack of public interest is glaring.
- The judge has conducted herself with dignity befitting the high office, has not been mired in any controversy, and does not have any close relatives practising in Tamil Nadu.
- It is possible that the transfer is based on an internal performance assessment, if it is performance-related, a question arises as to whether all judges are being assessed on the same criteria.
- The collegium is not a creation of the Constitution, but of the court itself. Yet, when the collegium's decisions are called into question for having been influenced by extraneous considerations, there is no institutional check.
- The controversy once again brings under focus the flawed collegium system of appointments and transfers.
- Any arbitrary transfer by the Supreme Court collegium reduces the High Court judges to a subordinate status. Further, the collegium system, by its opacity, has failed to build a fearless and strong judiciary and serve the public interest. Quis Custodiet Ipsos Custodes (Who will guard the guards themselves)?

Immediate attention towards administrative structure is the need of the hour

- The Supreme Court cannot function as a sentinel of justice unless it puts its own house in order.
- Its functions, both judicial and administrative, have to be transparent and accountable.
- Courts have in the past held illegal executive orders passed without reason. The same should apply to the administrative actions of the apex court's collegium.

Conclusion

- Retired Supreme Court judge, Justice Ruma Pal, had in 2011 called the functioning of the body a "mystique" shrouded in "secrecy".
- Later, the government's attempt to have a National Judicial Appointments Commission (NJAC) was rejected by the Supreme Court in 2015 and the system of collegium has continued with its inconsistencies.
- However, the Tahilramani controversy shows that the systemic faults of the collegium system — opaqueness and the scope for personal opinions colouring decision-making — remain unaddressed.

5. NCST recommends 'tribal area' status for Ladakh

Context:

The National Commission for Scheduled Tribes (NCST) has written to Home Minister Amit Shah and Tribal Affairs Minister Arjun Munda, recommending that Ladakh be declared a tribal area under the Sixth Schedule of the Constitution.

Details:

- The Home Ministry is the central authority for declaring an area as a "tribal area".
- The NCST's recommendation comes against the backdrop of growing demand from a predominantly tribal population and political leaders of Ladakh for according "tribal area" status to the region.
- Though Ladakhis have welcomed the Centre's decision to revoke the special status of Jammu and Kashmir, and make Ladakh a Union territory, they fear an influx of outsiders would lead to a change in the region's demography, jeopardising their culture and identity.
- It is estimated that more than 90 percent of Ladakh's population is tribal.
- The NCST opines that, including Ladakh under Schedule 6 will help in:
 - * Democratic devolution of powers.
 - * Preserving and promoting distinct culture of the region.
 - * Protection of agrarian rights including rights on land and.
 - * Enhancing transfer of funds for speedy development of the region.

6. No life-long bungalows or facilities to ex-CMs, says Rajasthan HC

Context

- In a landmark verdict, the Rajasthan High Court has ruled that former chief ministers of the state cannot avail life-long facilities like government bungalow, telephone, and car
- The High Court termed the Rajasthan Ministers' Salaries (Amendment) Act 2017 as "illegal" and 'unconstitutional'.

What did the law say?

- To individuals who have served as Chief Minister for five consecutive years, section 7BB of the Act guaranteed for the remainder of their lives, a government residence of the same type and the same facilities and concessions to which a serving CM is entitled either in Jaipur or in any district headquarter.
- In case a government residence is not available or the individual does not use the residence, they would be reimbursed a fixed monthly amount.
- Such individuals were also entitled to a car provided by the state for use by them and the members of their family, a phone, and secretarial and other staff.

Background

- The High Court judgement came on a plea by veteran journalist Milapchand Dandiya who had challenged the law that gave life-long facilities to former CMs.
- According to the plea, former Chief Ministers of Rajasthan are given lifelong facilities such as government bungalow, car, driver, telephone services and a staff of 10.
- Dandiya's plea, however, questioned the Rajasthan law referring to a Supreme Court order that quashed a similar Uttar Pradesh legislation, which granted permanent accommodation to the state's former chief ministers.
 - * A former Chief Minister is only a commoner and not a "special class of citizen" who can enjoy privileges, perks and official bungalows at taxpayers' expense for his entire lifetime, the Supreme Court had ruled.
 - * The court observed that "the Chief Minister, once he/she demits the office, is at par with the common citizen, though by virtue of the office held, he/she may be entitled to security and other protocols. But allotment of government bungalow, to be occupied during his/her lifetime, would not be guided by the constitutional principle of equality."
- He had said that a financially backward state did not have the required resources, and that it would be unfair to spend public money on "luxurious lifestyles" of politicians.

- Counsel for the petitioner argued that “having regard to the egalitarian principle underlined by Article 14,... ‘freebies’ would be distribution of largesse, not based on any rationale”.

Court’s observation

- The court observed that Rajasthan is an economically backward state and such life-long facilities for former CMs was virtually a ‘misuse of public funds’.
- The court observed: “All power is public trust, to be held for and on behalf of the people and for their benefit. Once the holders of such power stray from the path of rectitude and help themselves to public largesse, the essence of the democratic principle and equality is violated. One is reminded of George Orwell’s apocryphal portrayal of a distorted meaning of equality in his much-celebrated Animal Farm—that all animals are born equal but some are more equal than others.” Assuring former CMs “significant largesse for life amounts to saying that such individuals are more equal than the other public servants and citizens of India”, the court said.

7. Public Safety Act

Context:

- Farooq, the chairman of Jammu & Kashmir National Conference has been detained for 12 days under Jammu and Kashmir’s Public Safety Act.
- This is the first time that a former chief minister of Jammu and Kashmir has been booked under the PSA.

What is Jammu and Kashmir’s Public Safety Act?

- The Jammu & Kashmir Public Safety Act, 1978 is a preventive detention law.
- Under the Act, a person is taken into custody to prevent him or her from acting in any manner that is prejudicial to “the security of the state or the maintenance of the public order”.
- It is very similar to the National Security Act that is used by other state governments for preventive detention.
- By definition, preventive detention is meant to be preventive, not punitive.
- It comes into force by an administrative order passed either by Divisional Commissioner or by the District Magistrate and not by a detention order by police based on specific allegations or for specific violation of laws.
- In 2015 new rules were notified and some authority was given to the Home Department to issue such orders that were earlier done by the Divisional Commissioner or District Magistrate.

Why is it considered draconian?

- The PSA allows for detention of a person without a formal charge and without trial.
- It can be slapped on a person already in police custody; on someone immediately after being granted bail by a court; or even on a person acquitted by the court.

- Detention can be up to two years.
- Unlike in police custody, a person who is detained under the PSA need not be produced before a magistrate within 24 hours of the detention.
- The detained person does not have the right to move a bail application before a criminal court, and cannot engage any lawyer to represent him or her before the detaining authority.
- The only way this administrative preventive detention order can be challenged is through a habeas corpus petition filed by relatives of the detained person.
- The High Court and the Supreme Court have the jurisdiction to hear such petitions and pass a final order seeking quashing of the PSA.
- However, if the order is quashed, there is no bar on the government passing another detention order under the PSA and detaining the person again.
- The District Magistrate who has passed the detention order has protection under the Act, which states that the order is considered “done in good faith”. Therefore, there can be no prosecution or any legal proceeding against the official who has passed the order.
- Also, a recent amendment by the Governor, persons detained under the PSA in Jammu & Kashmir can now be detained in jails outside the state.
 - * As per the latest order, the issuing authority cannot mention the period of detention in the order, which earlier used to be six month- one year.
- The default is 12 days detention now, after that the Home department has to ratify the notification and present the case before the Advisory Board.
 - * If the department concurs he could be released after 12 days or can be kept in detention for minimum three months. Beyond that, the department will have to seek the permission of the advisory board.

What happens once the PSA is slapped?

- Generally, when a person is detained under the PSA, the DM communicates to the person within five days (ten days in exceptional circumstances), in writing, the reason for the detention.
- This communication is important because it is on the basis of it that the detained person gets an opportunity of making a representation against the order.
- However, the DM also has the discretion not to disclose all the facts on the basis of which the detention is ordered, if he or she thinks that these facts are against “public interest”.
- The DM has to place the detention order within four weeks before an advisory board, consisting of three members including a chairperson who is a former judge of the High Court.

- The DM also has to place the representation made by the detained person. The detained person too can make a representation before this advisory board.
- Within eight week from the date of detention, the board submits its report to the government, which will determine if the detention is in public interest.
- This report is binding on the government.

8. Regional Supreme Court Benches

Context

- Vice-President M Venkaiah Naidu has suggested that the Supreme Court institute four regional Benches to tackle the enormous backlog of cases, and to ensure their speedy disposal.
- Naidu also endorsed the recommendation of the Law Commission of India that the top court should be split into two divisions

History of constitutional courts

- The world's first constitutional courts were set up in Europe — in Austria in 1920 and in Germany after World War II.
- Today, 55 countries have constitutional courts, including most European or civil law jurisdictions.
- In the early decades of the Republic, the Supreme Court of India, too, functioned largely as a constitutional court, with some 70-80 judgments being delivered every year by Constitution Benches of five or more judges who ruled, as per Article 145(3) of the Constitution, on matters "involving a substantial question of law as to the interpretation of [the] Constitution".
- This number has now come down to 10-12.

The problem of pendency of cases

- Due to their heavy workload, judges mostly sit in two- or three-judge Benches to dispose of all kinds of cases; these include several non-Constitutional and relatively petty matters such as bans (or lifting of bans) on films, or allegations that a Commissioner of Police is misusing his powers.
 - * On some occasions, even PILs on demands such as Sardar jokes should be banned come before the Supreme Court.
- This heavy workload is due to the fact that India's Supreme Court is perhaps the world's most powerful court, with a very wide jurisdiction.
- It hears matters between the Centre and states, and between two or more states; rules on civil and criminal appeals; and advises the President on questions of law and fact. On the question of violation of fundamental rights, anyone can approach the Supreme Court directly.
- The result: more than 65,000 cases are pending in the Supreme Court, and disposal of appeals takes many years. Several cases involving the interpretation of the Constitution by five or seven judges have been pending for years.

What the Law Commission said?

- Back in March 1984, the Tenth Law Commission of India (95th Report) under Justice K K Mathew recommended that "the Supreme Court of India should consist of two Divisions, namely (a) Constitutional Division, and (b) Legal Division", and that "only matters of Constitutional law may be assigned to the proposed Constitutional Division".
- The Eleventh Law Commission under the chairmanship of Justice D A Desai (125th Report, 1988) "reiterate (d) that the recommendation for splitting the (Supreme) Court into two halves deserves to be implemented".
- Thereafter, the Eighteenth Law Commission under Justice A R Lakshmanan (229th Report, 2009) recommended that "a Constitution Bench be set up at Delhi to deal with constitutional and other allied issues", and "four Cassation Benches be set up in the Northern region/zone at Delhi, the Southern region/zone at Chennai/Hyderabad, the Eastern region/zone at Kolkata and the Western region/zone at Mumbai to deal with all appellate work arising out of the orders/judgments of the High Courts of the particular region".
- Indeed, many countries around the world have Courts of Cassation that decide cases involving non-Constitutional disputes and appeals from the lower level of courts. These are courts of last resort that have the power to reverse decisions of lower courts.

Argument for multiple Benches

- It has been pointed out that Article 39A says that "the state shall secure that the operation of the legal system promotes justice, on a basis of equal opportunity, and shall... ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities".
- It is obvious that travelling to New Delhi or engaging expensive Supreme Court counsel to pursue a case is beyond the means of most litigants.
- Standing Committees of Parliament recommended in 2004, 2005, and 2006 that Benches of the court be set up elsewhere.
- In 2008, the Committee suggested that at least one Bench be set up on a trial basis in Chennai. But the Supreme Court has not agreed with the proposal, which in its opinion will dilute the prestige of the court.
- Article 130 says that "the Supreme Court shall sit in Delhi or in such other place or places, as the Chief Justice of India may, with the approval of the President, from time to time, appoint".
- Supreme Court Rules give the Chief Justice of India the power to constitute Benches — he can, for instance, have a Constitution Bench of seven judges in New Delhi, and set up smaller Benches in, say, four or six places across the country.

9. Childhoods lost in a troubled paradise

Context:

- This article speaks about incidents of Illegal detention, violence and torture in the valley region of Jammu and Kashmir and how this has led to mental trauma in the children and stress in Adults.

Stats

- Between 1990 and 2005, a total of 46 schools were occupied by the armed forces
- In 2018, the Jammu & Kashmir Coalition of Civil Society (JKCCS) found through Right to Information applications that hundreds of children had been detained under the PSA between 1990 and 2013.

A look at reports

- A report by economist Jean Dreze has chilling details of illegal detention and torture of boys.
- A recent report by the Indian Federation of Indian Women and other organisations gave a first-hand account of the haunting spectre of mothers standing at their doorsteps in the desperate hope of their children's return, not knowing where they are.

These disappearances are in clear breach of the Supreme Court's directions in the D.K. Basu case

- The court in this case said that the next of kin have to be informed of every such arrest and the reasons thereof.
- The police officer carrying out the arrest shall prepare a memo of arrest at the time of arrest and such memo shall be attested by at least one witness, who may be either a member of the family of the arrestee or a respectable person of the locality from where the arrest is made.

* It shall also be counter signed by the arrestee and shall contain the time and date of arrest.

Kashmir's children have become Pawns in a political game

- A report by the UN High Commissioner for Human Rights found that children in Kashmir, many of whose ages were wrongly recorded, were being detained and mistreated for several days in police lock-up, without any charge, mostly under the Public Safety Act (PSA)
- In many of these cases, the police/magistrates had no procedure to verify the age of the detainees and minors were kept in custody along with adult criminals and released only after judicial intervention. About 80% of these detentions were held illegal by courts.

Such unlawful detentions, leaves a lifelong impact on children, perpetuating a cycle of trauma, fear and bitterness.

Such treatment of children is undoubtedly in violation of multiple laws and conventions.

- To begin with, all of them violate Article 14(4) of the International Convention on Civil & Political rights which states that "all proceedings against juveniles shall take into account their age and the desirability of promoting their rehabilitation."
- The UN Convention on the Rights of the Child, ratified by India, provides that the arrest/detention of a child shall be in conformity with the law and used only as a last resort and for the shortest appropriate period.
- The guidelines of the National Commission for Protection of Child Rights clearly state that a blanket characterization of adolescent boys as security threats during civil unrest should be avoided and authorities should investigate and take action against personnel involved in arbitrary detentions, mistreatment or torture of children.

Various court rulings against detention of Juvenile's

- In 2003, the Madras High Court in Prabhakaran v. State of Tamil Nadu held that the Juvenile Justice Act is a comprehensive law and overrides preventive detention laws enacted for national security.
- Earlier, in 1982, the Supreme Court had in the Jaya Mala case condemned the preventive detention of a student and observed that young people, even if their acts are misguided, cannot be punished with a sledgehammer.

However, none of these laws and directives seem to be followed in Kashmir.

How it harms Children?

- Parents are too scared to send their children to school, lest they be picked up by authorities or get caught in a crossfire. This leads to lack of Education
- Children in Kashmir grow up caged and under the shadow of a gun. As the parents of many of them go missing, they are also forced to assume the responsibility of caregivers for their siblings.
- The strain on social structures due to the loss of family environment, safe spaces and education and health facilities severely traumatises many of them and snatches their childhood away.

Conclusion

- No curbs on democratic rights on the promise of development can justify inhumane treatment of children.
- The civil society needs to speak out for the children of Kashmir or we will also be complicit in the 'aggravated crime' by the state apparatus.
- The preventive arrests should be stopped lest the children of Kashmir go missing forever.

10. Right to Internet Access

Background

- A petition was filed by Faheema Shirin, a third-semester B.A. English student of the Sree Narayana College at Chelanur in Kerala
- As per the rules of the girls' hostel, students were restrained from using mobile phones from 6 p.m. to 10 p.m. every day.
 - * They were informed by the authorities that those not willing to abide by the hostel rules would be required to vacate their hostel rooms.
- She was expelled for not adhering to restrictions on the use of mobile phone.

Context

- Shirin then approached the High Court, saying the restrictions have affected her learning as she could not access Internet using her mobile phone.
- A bench of Kerala High Court was acting upon a petition moved by college student Faheema Shirin, questioning the restrictions imposed on use of mobile phones at her college hostel.

What did petitioner say?

- The curbs on the use of mobile phones amounted to a violation of fundamental right to freedom of speech and expression under Article 19(1) (a) of the Constitution of India
- The petitioner also highlighted that the mobile restriction was discriminatory on the grounds of gender as such restrictions were not imposed in the boys Hostel
 - * The petition had also referred to Clause 3.2.(13) of UGC (Prevention, Prohibition and Redressal of Sexual Harassment of Women Employees and Students in Higher Educational Institutions) Regulations, 2015
- Anjitha K Jose v State of Kerala
 - * The High Court of Kerala had struck down gender discriminatory rules in a hostel, observing that girls have equal freedom as boys.
 - * The girls were restricted from attending political meetings, going for movies etc.

Kerala High Court

- The Kerala High Court declared the right to Internet access as a fundamental right forming a part of the right to privacy and the right to education under Article 21 of the Constitution.
 - * The Judge observed that the action of the college authorities infringed the fundamental freedom as well as privacy and would adversely affect the future and career of students who want to acquire knowledge and compete with their peers, such restriction could not be permitted to be enforced.

- "When the Human Rights Council of the United Nations have found that right to access to Internet is a fundamental freedom and a tool to ensure right to education, a rule or instruction which impairs the said right of the students cannot be permitted to stand in the eye of law"
- Mobile phones, once a luxury, have now become "part and parcel of the day to day life and even to a stage that it is unavoidable to survive with dignity and freedom"
- The court added that the hostel authorities were expected to enforce only those rules and regulations for enforcing discipline.
 - * Enforcement of discipline shall not be by blocking the ways and means of the students to acquire knowledge
- The court further said that college authorities as well as parents should be conscious of the fact that the students in a college hostel are adults capable of taking decisions as to how and when they have to study.

S.Rengarajan and others v. P. Jagjivan Ram (1989) case

- The court while citing the observations of the Supreme Court in this case said "the fundamental freedom under Article 19(1) (a) can be reasonably restricted only for the purposes mentioned in Article 19(2) and the restriction must be justified on the anvil of necessity and not the quicksand of convenience or expediency."
 - * 19 (2) imposes reasonable restrictions on the exercise of the right conferred in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence

Kerala first Indian state to declare Internet a basic human right

- Kerala - the most literate state in India, had declared Internet access as a basic right for every citizen just like food, education and water.
- Finland was the first country in the world to recognise 'the right to Internet access'

Why Internet Matters?

- We are now moving to a global economy where knowledge of digital processes will transform the way in which people work, collaborate, consume information, and entertain themselves.
- This has been acknowledged in the Sustainable Development Goals as well as by the Indian government and has led to the Digital India mission.
- Offering services online has cost and efficiency benefits for the government and also allows citizens to bypass lower-level government bureaucracy.

- Digital literacy allows people to access information and services, collaborate, and navigate socio-cultural networks. In fact, the definition of literacy today must include the ability to access and act upon resources and information found online.

Digital inequality

- According to the Deloitte report, 'Digital India: Unlocking the Trillion Dollar Opportunity', in mid-2016, digital literacy in India was less than 10%.
- In recent times, several government and private sector services have become digital. Some of them are only available online. This leads to a new kind of inequality, digital inequality, where social and economic backwardness is exacerbated due to information poverty, lack of infrastructure, and lack of digital literacy.
- However, in the absence of Internet access and digital literacy enabling that access, there will be further exclusion of large parts of the population, exacerbating the already existing digital divide.
- Moving governance and service delivery online without the requisite progress in Internet access and digital literacy also does not make economic sense
 - * For instance, Common Service Centres, which operate in rural and remote locations, are physical facilities which help in delivering digital government services and informing communities about government initiatives.
 - * While the state may be saving resources by moving services online, it also has to spend resources since a large chunk of citizens cannot access these services.
- The Bharat Net programme, aiming to have an optical fibre network in all gram panchayats, is to act as the infrastructural backbone for having Internet access all across the country. However, the project has consistently missed all its deadlines
- Similarly, the National Digital Literacy Mission has barely touched 1.67% of the population and has been struggling for funds.

This is particularly worrying because Internet access and digital literacy are dependent on each other, and creation of digital infrastructure must go hand in hand with the creation of digital skills.

Responsibility of the state

- In this framework the state would have
 - * A Positive Obligation to create infrastructure for a minimum standard and quality of Internet access as well as capacity-building measures which would allow all citizens to be digitally literate and
 - * A negative obligation prohibiting it from engaging in conduct that impedes, obstructs or violates such a right.

- * Recognizing the right to internet access and digital literacy will also make it easier to demand accountability from the state, as well as encourage the legislature and the executive to take a more proactive role in furthering this right

- A right to Internet access would also further provisions given under Articles 38(2) of the Constitution.

- * The State shall, in particular, strive to minimize the inequalities in income, and endeavor to eliminate inequalities in status, facilities and opportunities, not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations

Conclusion

- Therefore, Unequal access to the Internet creates and reproduces socio-economic exclusions.
- It is important to recognise the right to Internet access and digital literacy to alleviate this situation, and allow citizens increased access to information, services, and the creation of better livelihood opportunities

11. Throttled at the grass roots

73rd and 74th Constitutional Amendments:

- 73rd and 74th Constitutional Amendments were passed by Parliament in December, 1992.
- Through these amendments local self-governance was introduced in rural and urban India.
- It was meant to provide constitutional sanction to establish "democracy at the grassroots level as it is at the state level or national level".
- Establishment of panchayats and municipalities as elected local governments, devolving a range of powers and responsibilities, made them accountable to the people for their implementation.

Details:

- The Constitution mandates that panchayats and municipalities shall be elected every five years and enjoins States to devolve functions and responsibilities to them through law.
- Given diverse habitation patterns, political and social history, it makes sense to mandate States to assign functions to local governments.
- A study for the Fourteenth Finance Commission by the Centre for Policy Research, shows that all States have formally devolved powers with respect to five core functions of water supply, sanitation, roads and communication, streetlight provision and the management of community assets to the gram panchayats.

Issue Area:

- Over 25 years after the 73rd and 74th constitutional very little and actual progress has been made.
- Local governments remain hamstrung and ineffective; mere agents to do the bidding of higher-level governments.

Concerns:

- Democracy has not been enhanced in spite of about 32 lakh peoples' representatives being elected to them every five years, with great expectation and fanfare.
- Devolution, envisioned by the Constitution, is not mere delegation. It implies that precisely defined governance functions are formally assigned by law to local governments, backed by adequate transfer of a basket of financial grants and tax handles, and they are given staff so that they have the necessary wherewithal to carry out their responsibilities.
- Above all, local governments are to report primarily to their voters, and not so much to higher level departments. Yet, none of this has happened.
- The constraint lies in the design of funding streams that transfer money to local governments.
 - * The volume of money set apart for them is inadequate to meet their basic requirements.
 - * Much of the money given is inflexible; even in the case of untied grants mandated by the Union and State Finance Commissions, their use is constrained through the imposition of several conditions.
 - * There is little investment in enabling and strengthening local governments to raise their own taxes and user charges.
- Local governments do not have the staff to perform even basic tasks. As most staff are hired by higher level departments and placed with local governments on deputation, they do not feel responsible to the latter; they function as part of a vertically integrated departmental system.
- In violation of the constitutional mandate of five-yearly elections to local governments, States have often postponed them.
 - * In 2005, a Supreme Court constitutional bench held that under no circumstances can such postponements be allowed.
 - * Supreme Court rejected alibis for election postponement, such as delays in determining the seat reservation matrix, or fresh delimitation of local government boundaries.
 - * Yet, in Tamil Nadu, panchayat elections have not been held for over two years now, resulting in the State losing finance commission grants from the Union government.
- The current Union government has further centralised service delivery by using technology, and panchayats are nothing more than front offices for several Union government programmes.
- The 'Smart City' programme does not devolve its funds to the municipalities; States have been forced to constitute 'special purpose vehicles' to ring fence these grants lest they are tainted by mixing them up with municipality budgets.

Corruption in panchayats and municipalities:

- Criminal elements and contractors are attracted to local government elections, tempted by the large sums of money now flowing to them. They win elections through bribing voters and striking deals with different groups.
- A market chain of corruption operates, involving a partnership between elected representatives and officials at all levels.
- Yet, there is no evidence to show that corruption has increased due to decentralisation.

Way forward:

- The gram sabhas and wards committees in urban areas have to be revitalised.
- Cosmetic reforms of the gram sabha by videography of their meetings, does little for democracy. Consultations with the grama sabha could be organised through smaller discussions where everybody can really participate.
- Even new systems of Short Message Services, or social media groups could be used for facilitating discussions between members of a grama sabha.
- Local government organisational structures have to be strengthened. Panchayats are burdened with a huge amount of work that other departments thrust on them, without being compensated for the extra administrative costs.
- Local governments must be enabled to hold State departments accountable and to provide quality, corruption free service to them, through service-level agreements.
- Local governments are reluctant to collect property taxes and user charges fully. The connection between tax payment and higher accountability is well known. These lessons must not be ignored.

Conclusion:

- India's efforts in decentralisation represent one of the largest experiments in deepening democracy. Decentralisation is always a messy form of democracy, but it is far better than the operation of criminal politicians at the higher level who appropriate huge sums of tax-payer money, without any of us having a clue. Life must be given to this structure, through the practice of a robust democratic culture. It is important for us to hold our local governments to account.

12. Need not pick incriminatory dying declaration, rules**Supreme Court****Context:**

In a recent judgement, the Supreme Court has said that in a case of divergent and multiple dying declarations, the court need not invariably pick the one that incriminates the accused person. Instead, it is for the court to find out which of the dying victim's statement is true.

Details:

- A Bench of Justices S.K. Kaul and K.M. Joseph observed “When there are divergent dying declarations, it is not the law that the court must invariably prefer the statement which is incriminatory and must reject the statement which does not implicate the accused. The real point is to ascertain which contains the truth.”
- The bench summarized the principles to be followed in cases where dying declaration is the sole evidence available. It said:
 - * Conviction of a person can be made solely on the basis of a dying declaration which inspires confidence of the court.
 - * If there is nothing suspicious about the declaration, no corroboration may be necessary; No doubt, the court must be satisfied that there is no tutoring or prompting;
 - * The court must also analyse and come to the conclusion that imagination of the deceased was not at play in making the declaration. In this regard, the court must look to the entirety of the language of the dying declaration.
 - * Considering material before it, both in the form of oral and documentary evidence, the court must be satisfied that the version is compatible with the reality and the truth as can be gleaned from the facts established.

13. Credibility deficit

Context:

- The Supreme Court (SC) Collegium has modified its recommendation concerning Justice A.A. Kureshi's appointment as the Chief justice of Tripura High court as against the previous recommendation to appoint the senior judge as the Chief Justice of the Madhya Pradesh High Court.

Background:

- Justice Kureshi was first recommended to be appointed as Madhya Pradesh Chief Justice in May 2019, but the government had not cleared the name of Justice Kureshi for the post, even when all other recommendations of the collegium were agreed to by the government.
- The government not acting on the recommendation raised the suspicion that it was blocking his appointment.
- The Collegium stated that it has modified its earlier decision after considering letters from the Department of Justice and accompanying material.
- Justice Kureshi's elevation had become a subject of controversy after the Gujarat High Court Advocates Association filed a writ petition in the Supreme Court alleging Central Government of selectively blocking his elevation due to extraneous considerations.

- It is possible that the Collegium and the Centre have arrived at a compromise wherein the government dropped its opposition to his appointment as Chief Justice on the condition that he is sent to a smaller HC.

Concern:

- Until Kureshi's appointment as head of the Tripura HC is notified, there will be a lurking doubt on whether the latest resolution is in line with the Centre's approval or not which might result in a head off between the judiciary and the executive. This tussle for supremacy between the country's executive and judiciary can be detrimental and injurious to the country's democratic polity.
- The SC collegium has not stated the exact reasons for the modification of its earlier recommendations. Though it is acceptable that the Collegium and the government resolve their differences through consultation and correspondence. But the final decision shouldn't be opaque and mysterious. The Collegium has just stated that it modified its decision after considering letters from the Department of Justice and accompanying material. What exactly was the government's concerns are not clear.
- If the Law Ministry had a bona-fide objection to Justice Kureshi, it could have disclosed its opinion on his suitability. As for the Collegium, it is unclear why it couldn't have disclosed what the government had wanted in its communications. This has brought in the avoidable opacity which has resulted in rumours being spread.
- Under the current procedure of appointment and transfer in case of lack of consensus between the executive and the collegium, the Collegium may reconsider a recommendation and the government is bound to implement the reiterated decision. The current episode is indicative of judiciary yielding to executive pressure.
- This episode makes a dent in the narrative that the Collegium system is a shield against executive interference in the judicial appointments as envisaged in various cases like the third judge's case and the more recent quashing of the National judicial appointments commission act by the SC.
- There is no denying the fact that an independent judiciary is the foundation of democracy because of people's faith in the judiciary, which would totally be eroded if the judicial process of appointment and transfers is not popularly perceived as fair and non-partisan.
- When judges of constitutional courts resign under mysterious circumstances, or their transfer or elevation as chief justice is altered, it throws up several uncomfortable questions to those in the decision-making body of the higher judiciary. This can act as a pressure tactic on the judges to toe the executive line leading to the committed judiciary which can be detrimental to the nation. In such scenarios the judge's will fail to act independently without “fear and favour”.

Related episodes in the past

- This is not the first act of delay in judicial appointments, a similar case was observed in the case of Justice K.M. Joseph earlier in 2018, whose case of recommendation by the Supreme Court collegium for elevation to the apex court was delayed for a considerable period of time. The failure to learn from past is a concern.
- Similar complaints of non-transparency in the appointment and transfers by the collegium was observed in the backdrop of the resignation tendered by the Madras High Court Chief Justice VK Tahiramani following a transfer order issued to her by the Supreme Court Collegium.

What should the collegium look at?

- The Collegium system is in need of urgent reforms to rectify its flaws as held by the SC itself in the NJAC case. The Court also acknowledged the “failings” of the collegium system, taking note of allegations such as side-lining of deserving persons, nepotism, purposeful delay in appointments etc. Supreme Court held that it is open to bringing greater transparency in the collegium system within the following existing four parameters

- * How the collegium can be made transparent?
- * The fixing of the eligibility criteria for a person to be considered suitable for appointment as a judge
- * A process to receive and deal with complaints against judges without compromising on judicial independence
- * Debate on whether a separate secretariat is required, and if so, its functioning, composition and powers

Way forward:

- Need immediate concrete steps to arrest the burgeoning distrust between the two autonomous wings of the democratic polity.
- There is a need for fresh clauses in the existing procedure of appointments under which, The Collegium’s decisions are to implemented within a time-frame and the Government’s objections and reservations if any are to be made public to bring a degree of certainty and transparency in the process.
- The Collegium system is in need of urgent reforms.

ECONOMY

1. Agroecology

What is Agroecology?

- It is recognized worldwide as a system that enhances fertile landscapes, increases yields, restores soil health and biodiversity, promotes climate resilience and improves farmers' well-being.
- Its practices are supported by many agricultural scientists, the Food and Agriculture Organization, the Intergovernmental Panel on Climate Change, farmers' groups and several NGOs.
- It basically makes the best use of nature's goods and services while not damaging it. It works on enhancing healthy ecosystems, and build on ancestral knowledge and customs
- As an agricultural practice, Agroecology mimics natural processes to deliver self-sustaining farming that grows a greater diversity of crops, drastically reduces artificial inputs (pesticides, fertilizers, antibiotics) and recycles nutrients (plant and animal waste as manure).

Context

- National Academy of Agricultural Sciences, based on a brainstorming session that included industry representatives, sent a letter to Prime Minister Narendra Modi opposing Zero Budget Natural Farming (ZBNF).
- ZBNF, developed and publicized by agro-scientist Subhash Palekar, has been adopted by Andhra Pradesh.

National Academy of Agricultural Sciences (NAAS)

- It was established in 1990 and owes its origin to the vision of the late Dr. B. P. Pal, noted Indian agricultural scientist
- The Academy focuses on the broad field of agricultural sciences including crop husbandry, animal husbandry, fisheries, agro-forestry and interface between agriculture and agro-industry.
- The Academy's role is to provide a forum to Agricultural Scientists to deliberate on important issues of agricultural research, education and extension and present views of the scientific community as policy inputs to planners, decision/opinion makers at various levels.
 - * To achieve this, the Academy organizes and supports national and international congresses, conferences, seminars, symposia, workshops and brainstorming sessions on critical issues in the field of agricultural sciences.
- One of its objectives is to promote ecologically sustainable agriculture

Threat to powerful elites

- Farming in India, as in most other countries, is largely under the control of powerful lobbies with vested interests and connections to deep pockets.
 - * These include fossil fuel, fertilizer and seed companies as well as scientists with funding connections to agribusiness.
 - * These lobbies perceive large-scale transitions to agroecology as a substantial threat to their influence on farming systems.

Examples of Corporate Threats and criticisms

- In Britain, when public hearings were held in the early 2000s to discuss Genetically Modified (GM) crops, corporations threatened to pull grants from scientists on the committees if they voted against GM.
- In some parts of Europe and in University of California when individual scientists published articles describing how GM foods and crops affected the health of human beings and insects adversely, they were personally attacked and vilified.
- When glyphosate trials against Monsanto were decided in favour of litigants who accused the company of causing cancer, some voices called to have only scientists on such juries

Disturbing Trends

- With this introduction of fertilizers into the Agricultural ecosystem, there is grave threat to food systems and biodiversity
- As a result of industrial farming, friendly insects are no longer part of the agricultural landscape, water pollution is rampant, depleted soils are commonplace and falling groundwater tables have become the norm.
- The opportunity cost incurred from investing only in industrial methods of agriculture is one that has been borne largely by the farming community and the natural systems.
- The constant funding by the corporate groups to the scientists has become an established norm. It includes fields like Agriculture, pharmaceuticals and university research.
 - * These papers published by the scientists funded by the corporates is it always legitimate? The questions are unanswered.
- So, the enemy is being made out to be Mr. Palekar but the real attack is on agroecology, for the threat it poses to entrenched institutions.

Conclusion

- ZBNF experiment is showing success largely because farmers are supporting it.
- The practice may not be all zero budget, may not be fully successful everywhere and will need to be adapted to India's various agroecological zones. But the ZBNF has led to sustainable agriculture
- Farmers appear to be listening to and following Mr. Palekar.
- If policymakers ignore the posturing and stay focussed on improving soil health and quality of life for farmers, while observing and supporting successes, farmers may even double their incomes and India's food security could sow new beginnings.

2. ANGAN (Augmenting Nature by Green Affordable New-habitat)**Context**

- A three-day international Conference on Energy Efficiency in Building Sector was conducted in Delhi

Details

- It was an international conference which focused on Energy Efficiency in Building Sector
- The Conference was organized by the Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India in collaboration with GIZ under the Indo German Technical Cooperation
- Speakers, Delegates, Experts and Policy Makers from 16 countries participated in the event
- The Experts discussed various alternative options and technologies in the field of design and construction of energy efficient Commercial as well as Residential Buildings and suggested the effective ways in implementing the same through policies and programmes.

What was the need of this conference?

- Due to lack of awareness and knowledge about latest technologies, financial assistance, suppliers and purchase of energy efficient equipment, etc. efforts on energy efficiency and conservation in this sector have been moderate and therefore require greater push.
- This event aimed to provide thrust in this direction so as to address such challenges faced by the stakeholders.

Significance

- The International Conference provided a platform to deliberate on interdependence between organizations, systemic sustainability and feedback loops for better resource efficiency.
- It is estimated that an investment of Rs. 2000 billion in Building energy efficiency activities would lead to a cumulative savings of 388 Billion units of electricity for the next ten years with payback of about 2 years.

3. Common Digital Platform for Issuance of Electronic**Certificates of Origin**

- The Common Digital Platform for Issuance of electronic Certificates of Origin (CoO) was launched. This is a digital platform to give single point access to exporters.

Details:

- This platform will be a single access point for all exporters, for all FTAs/PTAs and for all agencies concerned.
- Certificate of Origin will be issued electronically which can be in paperless format if agreed to by the partner countries.
- Authorities of partner countries will be able to verify the authenticity of certificates from the website.
- Further, it provides administrative access to the Department of Commerce for reporting and monitoring purposes.

4. CHC Farm Machinery App

- CHC stands for Custom Hiring Centres.
- Through this app, farmers will be able to select and order the required farm machinery at rates feasible for them from Custom Hiring Centres located in a 50 km radius.
- Over 40000 CHCs have already registered on the app.
- This is a multilingual app and can be downloaded onto any android phone.

Significance

- It is especially helpful for small and marginal farmers who will have easy access to high value and technical agricultural equipment facilitating optimum use of all types of inputs using these farming machines.
- This will help farmers increase their income.
- This will also help increase the rate of mechanisation of farm holdings.

Krishi Kisan App

- This app will provide farmers the information about the best demonstration of high-yielding crops and seeds in their nearby area.
- Any farmer with a high quality of crops can utilise this platform to demonstrate best practices of cultivation to other farmers so that this will help other farmers adopt these methods.
- The app will also help in geo-tagging and geo-fencing of crops and give weather forecast messages to farmers.

Context

- The Union Minister for Agriculture launched two mobile apps for agriculture in New Delhi

5. Corporate Tax

Context:

- The Finance Ministry has announced new corporate tax rates
- It has slashed corporate tax rate for domestic companies to 22% from 30% that don't avail any exemption/incentive (stopped availing themselves of any other tax sops)

Details

- The effective tax rate for these companies shall be 25.17% inclusive of surcharge and cess. Also, such companies shall not be required to pay Minimum Alternate Tax or MAT
- To attract investment in manufacturing, local companies incorporated after October will pay tax at the rate of 15 percent (compared to 25% currently).
 - * The effective tax for these new companies will be 17.01 percent, including cess and surcharge
 - * For new manufacturing firms set up after October 1, 2019, and commencing operations by March 31, 2023, the effective tax rate will fall from 29.1% to 17%.
- A company which does not opt for the concessional tax regime and avails the tax exemption/incentive can continue to pay tax at the pre-amended rate. After expiry of their tax holiday/exemption period, these companies can opt for the new concessional tax regime.
- To provide relief to companies which continue to avail exemptions/incentives, the government has reduced the rate of Minimum Alternate Tax or MAT to 15%, from 18.5%.

Significance

The continuing deceleration of the Indian economy was being blamed both on depressed consumption by private individuals and decline in investment by private businesses

- A lower rate –comparable with Asian peers will make large Indian companies far more competitive, leave them with more cash for investment and expansion and persuade them to stay India
- It restrains India Inc from demanding more sops, putting pressure on them to invest.
- The revised tax rate of Minimum Alternative Tax (MAT) will pave the way for new investments from startups and MSMEs, creating a robust ancillary ecosystem
- The unstated intention could also be to attract foreign investors looking for alternative sites for their global value chains disrupted now by the tariff war between China and the U.S.
- The stock exchanges zoomed within minutes of the news because for most established companies the tax cut would immediately lead to a pro-rata increase in profits.

Concerns

- The revenue foregone for this move will be Rs 1.45 lakh crore annually. The tax revenue may also decline and put pressure on fiscal deficit.
 - * Tax collections have not grown at expected rates. This tax cut will lead to lower tax collection in the short to medium-term.
 - * To meet the fiscal deficit target, the government has pushed a lot of borrowing off-budget, making government agencies borrow more. If the government then borrows to bridge the gap (on-budget or off-budget), it would limit the benefits for firms.
- These stimulus and structural measures and monetary policy may help reviving the economy to some extent in the near future. But, these measures alone may not help in getting higher growth.
- Higher levels of surplus income with corporates will not necessarily translate into a higher level of investment and a consequent spurt in economic growth.
 - * Agriculture and allied sectors and micro, small and medium enterprises (MSMEs) — not corporates — are still the strongest drivers of our economy.
 - * Agriculture and allied sectors which not only contribute to our food security but to approximately over 50% employment have been on the decline in spite of several ad hoc policy pronouncements to revive them.
- The Chief Economic Advisor also mentions that we need long-term structural reforms for investment-led growth. we need to focus on three structural issues:
 - * Physical infrastructure development,
 - * raising human capital
 - * revival of rural economy
- In a recent book Dani Rodrik an economist discusses two challenges faced by countries like India.
 - * The “fundamentals challenge” relates to development of broad capabilities such as
 - * We can't have higher growth without tackling this fundamental challenge.
 - * So the medicine to the plaguing disease is Infrastructure, Infrastructure, and Infrastructure!!!
- A lot of progress has been made in all Infrastructure Sectors. However, almost all indicators score poorly if one looks at India's urban and rural infrastructure particularly compared with South East Asian countries and China.
- The second structural issue is raising Human Capital for higher growth. Health and education achievements are essential for human capital. Yet the country's progress on both these aspects leaves much to be desired.

- * There are islands of excellence that can compete internationally in education while vast majority of them churn masses of children with poor learning achievement and unemployable graduates.
- * The Niti Aayog says that only 2.3 per cent of Indian workers have formal skill training compared to 70 to 80 per cent in other countries.

Steps that can be taken

- The report of the expert committee on MSMEs that was set up by the Reserve Bank of India has made significant recommendations.
 - * These include constituting a government-sponsored "fund of funds" to support venture capital funds and a credit guarantee fund which would go a long way in enabling their growth.
- Disinvestment, reducing non-merit subsidies, increasing tax base and shifting from revenue to capital expenditures are some of the measures for raising government investment.
- The construction sector was an important source of job creation during 2004-05 to 2011-12. This sector has to be revived in order to create growth and employment. Need of the hour is structural reforms in land acquisition
- Both immediate and long-term structural reforms are needed to achieve higher economic growth. Physical infrastructure development, tackling fundamental challenge of raising human capital and stimulus and reforms in rural economy are needed to achieve a sustainable 7 per cent to 8 per cent growth.
 - * Higher levels of public spending for creating much-needed infrastructure in several sectors would not only generate employment but also create productive assets.
 - * For instance, spending on buildings, roads, bridges, schools, hospitals and waterbodies would have multiple benefits to the economy.

Conclusion

- If swiftly and efficiently implemented, these mundane measures could pull the sagging economy out of the quagmire, especially in the near term, and hopefully incentivise and facilitate the much anticipated spurt in corporate investment which apparently the government was aiming at while announcing the tax bonanza.

6. Economic Slowdown

Context

- India's real or inflation-adjusted Gross Domestic Product (GDP) grew at 5 per cent in the June 2019 quarter of financial year 2019-20 (Q1FY20), the slowest growth in six years (25 quarters).

- In nominal terms, the growth stood at 7.99 per cent, lowest since December 2002.

What is a cyclical slowdown?

- A cyclical slowdown is a period of lean economic activity that occurs at regular intervals. Such slowdowns last over the short-to-medium term, and are based on the changes in the business cycle.
- Generally, interim fiscal and monetary measures, temporary recapitalisation of credit markets, and need-based regulatory changes are required to revive the economy.

What is a structural slowdown?

- A structural slowdown, on the other hand, is a more deep-rooted phenomenon that occurs due to a one-off shift from an existing paradigm.
- The changes, which last over a long-term, are driven by disruptive technologies, changing demographics, and/or change in consumer behaviour.

Dissecting India's slowdown

- A slowdown in consumption demand
- The farm sector is still stuck in a low income trap and 2019's mercurial monsoon rains, has left some parts flooded and others still facing deficits and engendering a shortfall in kharif sowing, rural demand is unlikely to return
- Decline in manufacturing
 - * The slowdown in the auto sector has worsened, with leading car manufacturers posting up to a 50 per cent drop in sales for August 2019 as against the corresponding month last year. Sales are down across segments — passenger vehicles, commercial vehicles, and two-wheelers.
- inability of the Insolvency and Bankruptcy Code (IBC) to resolve cases in a time-bound manner, and
- rising global trade tension and its adverse impact on exports are some of the factors affecting India's growth
- The health of real estate is a massive indicator of the state of Indian economy. It has links with about 250 ancillary industries — bricks, cement, steel, furniture, electrical, paints etc — and affects them all if there is a boom or gloom in the sector.
 - * Reports are that the volume of unsold houses over the past one year has increased in the top cities of the countries.
- It is also attributed to two mega policy decisions — demonetisation in November 2016 and the rollout of the Goods and Services Tax (GST) in July 2017 — disrupted the Indian economy.
 - * Aimed at greater formalisation of the Indian economy, the twin disruptions struck a big blow to the informal sectors that employ the maximum number of the workforce.

- * The policy disruption hangover still continues and is accentuated by the crisis in banking and non-banking financial sectors.
- * This hit the small and medium scale businesses more adversely than expected in the wake of the collapse of Infrastructure Leasing and Financial Services (ILFS).
- * Money just stopped flowing into the market. The net result was a huge job loss.

A look at key economic Parameters

- the mainstay of demand — Private Consumption Spending — slumped to an 18-quarter low, with the expansion decelerating sharply to 3.1%, from 7.2% in the preceding quarter and 7.3% a year earlier.
- Gross fixed capital formation (GFCF), a proxy for investment activity, grew a meagre 4%, less than a third of the 13.3% growth it posted 12 months earlier.
- With demand for Manufactured Products ranging from cars and consumer durables to even biscuits having sharply diminished, manufacturing GVA growth plunged to an eight-quarter low of 0.6%.

Govt Initiatives

- The government is cognizant of the gravity of the situation has initiated policy pronouncements including
 - * tweaks to investment norms to draw more Foreign Direct Investment,
 - * moves to relieve the debilitating sales slump in the auto sector and
 - * A sweeping consolidation of public banks.
- As part of its measures to boost economic growth, the government has lifted the ban on its departments buying new vehicles, announced a tax benefit for automakers, deferred the application of the one-time registration fee till June 2020, and assured that the government would consider a scrappage policy for old vehicles
- Any beneficial impact from these measures will, however, take time to feed into the economy

Steps that can be taken up

- To give a boost to the export sector supply-side measures like trade facilitation, removing bottlenecks, reducing the GST refund period delay, or even managing the exchange rate, but fundamentally if the global slowdown is a reality, then export demand cannot pick up quickly.
- It should identify the cause of the structural slowdown and address it directly. Indirect instruments would not work in the case of structural constraints.
- To pull India out of the current economic slowdown, the government can loosen its purse strings, make pending payments, give GST refunds quickly, and revamp MGNREGA to put more money in the hands of rural consumers

- * Make MGNREGA truly demand-driven, make the wage indexation meaningful and involve social audits which were successful in some States like Andhra and Rajasthan.
- * Involve social audits to ensure effectiveness, and also focus on the dual objective of asset creation wherever possible.
- * But primarily it should be about putting some income in the hands of rural consumers.

- The unorganised sector has been hit now for a long time and unless rural incomes are revived, and that is where 70% of our population is, consumer demand is not going to grow
 - * If the Government intends to fix that structural break, it needs to bring back rural income to some semblance of normalcy.

Conclusion

- The government must lose no time in consulting with the widest possible spectrum, including the Opposition, and then implement the agreed-on reforms prescriptions to reinvigorate demand and investment.

7. Ethanol Blended Petrol Programme (EBP Programme)

- Ethanol is an agro-based product, mainly produced from a by-product of the sugar industry, namely molasses.
- Ethanol can be mixed with gasoline to form different blends. As the ethanol molecule contains oxygen, it allows the engine to more completely combust the fuel, resulting in fewer emissions and thereby reducing the occurrence of environmental pollution.
- Since ethanol is produced from plants that harness the power of the sun, ethanol is also considered as renewable fuel.
- Ethanol Blended Petrol (EBP) programme was launched in January, 2003. The programme sought to promote the use of alternative and environment friendly fuels and to reduce import dependency for energy requirements.

Context

- The Union Cabinet has approved a higher procurement price for ethanol purchased by Oil Marketing Companies (OMC) for the Ethanol Blended Petrol (EBP) programme which will come into effect from December 1, 2019 for a period of one year.

Details

- According to the new decision, the price of ethanol from C-heavy molasses will be increased from ₹43.46 per litre to ₹43.75 per litre.
- The price of ethanol from B-heavy molasses will be increased from ₹52.43 per litre to ₹54.27 per litre.
- The price of ethanol from sugarcane juice, sugar, and sugar syrup has been set at ₹59.48 per litre.

- The oil marketing companies will also pay the Goods and Services Tax and transportation tax associated with the ethanol supply — a provision that existed in the previous plan as well.
- OMCs have been advised to fix realistic transportation charges so that long distance transportation of ethanol is not disincentivised.
- OMCs are advised to continue according priority of ethanol from (in order of priority)

Significance:

- Ethanol availability for EBP programme is expected to increase significantly due to higher price being offered for procurement of ethanol from all the sugarcane based routes, subsuming 'partial sugarcane juice route' and '100% sugarcane juice route' under 'sugarcane juice route' and for the first time allowing sugar and sugar syrup for ethanol production.
- Increased ethanol blending in petrol has many benefits including
 - * Reduction in import dependency
 - * Support to agricultural sector
 - * More environmental friendly fuel
 - * Lesser pollution
 - * Additional income to farmers.
- Ethanol can be mixed with gasoline to form different blends. As the ethanol molecule contains oxygen, it allows the engine to more completely combust the fuel, resulting in fewer emissions and thereby reducing the occurrence of environmental pollution.

8. Global SME Business Summit

- The Summit is organized every year by the Ministry of MSME and the Confederation of Indian Industries (CII) for bringing together stakeholders and leaders in the MSME sector.
- The summit will help:
 - * Disseminate knowhow on assessing the export potential of the products and services of Indian MSMEs.
 - * Identify suitable markets.
 - * Develop strategies to penetrate new markets through trade associations, multi-lateral agencies, international business forums and E-Commerce platforms.
- The event will also help participating Indian MSMEs to single out avenues for joint ventures, franchising, cross-marketing, buyer-seller meets, etc.

Context

- Union Minister Shri Nitin Gadkari inaugurated the 16th Global SME Business Summit 2019 in New Delhi

Details

- Theme for 2019: "Making Indian MSMEs Globally Competitive".
- The Minister, speaking on the occasion, said that the Government's target is to increase MSME's present share of 29 percent of GDP to 50 percent in the next five years and raise its export contribution from 49 percent to 60 percent.

9. Insurers can tweak health products

Context:

IRDAI has notified a set of guidelines likely to make it easier for health insurers to tweak certain features of the cover provided to individuals.

Details:

- It has allowed insurance companies to do minor modifications such as changes in frequency of premium payments, change in policy wordings on certification basis without waiting for its approval.
- The guidelines include the one permitting collection of premium in installments and another increasing the maximum entry age.
- However, Insurers will have to ensure that the proposed modifications will not impact the benefit structure of the product, including the manner of settlement of the underlying benefits.
- The minor modifications proposed are to be placed before the Product Management Committee (PMC) of the respective insurance company and the PMC will have to approve the proposed minor modifications before they are implemented.
- IRDAI will issue a new Unique Identity Number (UIN) for the modified product.

What is the significance?

- General and standalone health insurers can now make changes in the sum insured options, decrease the minimum or increase the maximum premiums, lower the minimum entry age or increase the maximum entry age.
 - * At present, the maximum entry age for a health insurance policy is 65 years.
- It is believed that this move would help in making the distribution of insurance products better and also help increasing transparency in the product offering.
- These guideline frameworks have also made the implementing process faster for the insurer compared to the earlier longer filing process.

10. Kashmir's famed saffron gets GI tag

- Kashmir's famed saffron has been granted the Geographic Indication (GI) tag.

- Saffron has several names-Zafran, Kesar, Kang, Kang Posh etc.
- Historically, the cultivation of saffron started around three or four centuries back in Arabia and Spain. Thereafter, its cultivation spread as far as Iran, Sweden and India.
- Now, saffron growing is a great commercial activity. In Indian agriculture, this activity is also known as "Golden Zest".
- India is a leading producer of premium and finest quality saffron in the world and Kashmiri saffron has been a recipient of the Great Taste Award, the world's most coveted award for artisan and specialty food producers.

11. Mochi Swabhimaan Initiative

Context:

- The Union Minister for Skill Development and Entrepreneurship, GOI awarded Recognition of Prior Learning (RPL) Certificates to more than one thousand workers from the leather sector in Chennai. He also launched the Mochi Swabhimaan Initiative.

RPL Certificates:

- RPL certificates are given under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) of Skill India to the unorganised semi-skilled and unskilled workers.
- These certificates can help them get assessed and certified on their current competencies as per NSQF levels (National Skills Qualifications Framework).
- RPL also shows them a path to bridge their current knowledge and skill levels to reach a competency level or go for higher skills for professional growth.
- The RPL scheme envisions to impart skill-based training to one crore people between 2016 and 2020.
- The certificates can give workers the chance to go for higher education in their respective fields.
- It will also give them different options in upgrading and upskilling.
- RPL certificates certify skills acquired informally and drive young people to venture into aspirational job roles.
- The industry will also be benefitted because formalizing the skills of employees will give a clear picture of the available skill sets, skill gaps and the need for upgradation to achieve desired quality and productivity benchmarks.

Mochi Swabhimaan Initiative

- It is a nationwide activity in which the Leather Sector Skill Council (LSSC) will extend support to the cobbler community who provide leather-based services, with CSR funds and bring respect to their skills by giving them a better working environment in the form of kiosks/umbrellas.

Leather Sector Skill Council (LSSC)

- It is a non-profit organisation dedicated to meeting the demand for skilled workforce in the leather industry in India.
- The LSSC was set up in 2012 as one of the key sector skill councils approved by National Skill Development Corporation (NSDC).
- The LSSC caters to the training and employment needs of various subsectors in the leather industry such as finished leather, footwear, garments, leather goods, accessories, saddlery and harness sectors.
- It also has a partnership with the Council of Leather Exports (CLE).

12. NERAMAC (North Eastern Regional Agricultural Marketing Corporation) Limited

- The NERAMAC Limited was incorporated in the year 1982 as a Government of India Enterprise and having its registered office at Guwahati and operating under the administrative control of the Ministry of Development of North Eastern Region (DoNER).
- NERAMAC was set up to support farmers/producers of North East getting remunerative prices for their produce and thereby bridge the gap between the farmers and the market and also to enhance the agricultural, procurement, processing and marketing infrastructure of the Northeastern Region of India.

Context

- The Union Minister of State for Development of North Eastern Region (IC) laid the foundation stone of NERAMAC Marketing complex in Guwahati, Assam

13. National Animal Disease Control Programme (NACDP)

- The program is aimed at eradicating foot and mouth disease (FMD) and brucellosis in livestock.
- The NADCP aims to control these two diseases by 2025, and to eradicate them by 2030.
- According to a government release, the programme aims to vaccinate over 500 million livestock heads, including cattle, buffalo, sheep, goats and pigs, against FMD, and some 36 million female bovine calves annually against brucellosis.
- The programme has received 100% funding from the Centre

Foot and Mouth Disease FMD:

- It is a highly infectious viral disease of cattle, swine, sheep, goats, and other cloven-hooved ruminants.
- FMD is generally not fatal in adult animals but leaves them severely weakened, and results in a drastically reduced production of milk and therefore be financially ruinous for dairy farmers.
- Infected animals get a fever, sores in their mouth, on their teats, and between their hooves.

- FMD spreads through excretions and secretions; infected animals also exhale the virus.
- According to the World Organisation for Animal Health, the intergovernmental organisation responsible for improving animal health worldwide, FMD is endemic in several parts of Asia, most of Africa, and the Middle East. Australia, New Zealand, Indonesia, Central and North America, continental Western Europe, and most Latin American countries are FMD-free.
- Measures to stop outbreaks and check FMD transmission include controlled introduction of new animals into existing herds, regular cleaning and disinfection of livestock areas, monitoring and reporting of illness, and use of effective vaccination strategies.

Brucellosis:

- Brucellosis is a zoonotic disease.
- According to the Department of Animal Husbandry and Dairying, it is endemic in most parts of the country.
- Brucellosis causes early abortions in animals, and prevents the addition of new calves to the animal population.
- To control the disease, the World Health Organisation recommends the vaccination of cattle and, in some cases, testing and culling.
- The Brucellosis Control Programme component of the NADCP envisages 100% vaccination coverage of female cattle and buffalo calves (4-8 months of age) once in their lifetimes.

Context:

Prime Minister Narendra Modi launched the National Animal Disease Control Programme (NADCP).

Details:

- India has the world's largest livestock population of 125-crore plus heads, but cattle productivity is low, and animal diseases are a major concern.
- The diseases have resulted in some overseas markets being shut to Indian dairy and meat products, and prevented the industry from realizing its income potential.

14. Govt. unveils package to boost exports, revive housing sector

Context:

- Union Finance Minister Nirmala Sitharaman announced a third wave of economic reforms to revive the economy
 - * First by encouraging Private Sector Investment
 - * Second by bringing further stability into the banking system through several public sector bank mergers.

- As a third step the Govt has initiated
 - * A ₹50,000 crore Export Incentive Scheme
 - * A ₹10,000 crore special window to provide last mile funding for unfinished housing projects easing the plight of home buyers.

What was the need?

- High growth which any country works for is directly correlated to exports is well. Therefore Augmenting, increasing exports is one of the factors which leads to increase in Growth.
 - * India's merchandise exports in August declined for the second time in the current financial year, which began in April
 - * It Provides a fillip to exports, which contracted 6.05% in August 2019
- There are Multiple Ministries involved in the export sector. This includes Commerce ministry, Ministry of finance and Ministry of external affairs
 - * Since there were multiple departments involved it led lack of coordination in implementation
 - * Adding to the woes were the lack of data and coherence for upgradation of Infrastructure in export sector.
 - * To understand these issues of export sector coherence and addressing key issues, this move was a requirement
- A major challenge that has affected the exporters in recent times is lack of liquidity for working capital due to delay in receiving GST refunds under Input Tax Credit.
 - * Which means that tax rebate or partial refunding is not happening on time
 - * This lead to delay in getting clearances at ports.
- Adding to this is Structural and Cyclical Slowdown which the Govt intends to change.

Remission of Duties or Taxes on Export Product (RoDTEP)

- It will replace the Merchandise Exports from India Scheme (MEIS).
- The existing dispensation in textiles of MEIS and the old ROSL (Rebate of State Levies) will continue up to December 31, 2019
 - * Textiles and all other sectors which currently enjoy incentives up to 2% over MEIS will transit into RoDTEP from January 1, 2020
- The previous MEIS and the new RoDTEP are designed to incentivise exports by giving them rewards to offset the duties they pay to export their products.
 - * In effect, RoDTEP will more than adequately incentivise exporters than existing schemes put together.

Details

- An Inter-Ministerial Working Group will be set up to monitor export finance actively
 - * This group will monitor strict implementation of the announcements in a time-bound manner.
- In another move aimed at freeing up the working capital of exporters, the Finance Minister announced a Fully Electronic Refund Module for the quick and automated refund of input tax credits
- The new measures include Priority Lending for exporters to address the liquidity crunch.
 - * The Reserve Bank of India will release additional funds of Rs 36,000 crore to Rs 68,000 crore as export credit under priority sector for the same.
- Logistics Sector Issues will be addressed. Apart from providing credit and incentives to exporters, the reforms package also included ways to make the sector more efficient and globally competitive.
 - * The entire process of export clearances will be digitised and all offline or manual processes will be eliminated to reduce the 'time to export'.
 - * Further, an action plan to reduce the time to export and turn-around time in airports and ports benchmarked to international standards will be implemented
 - * The actual turnaround times will be published in real time for each port and airport and an inter-ministerial group will be made accountable for this.
- Other decisions aimed at making exports more competitive include working with exporters to help them best exploit the advantages of the various Free Trade Agreements India has signed with other countries
 - * Increasing the testing and certification infrastructure in India
 - * Enforcing the time-bound adoption by industry of all necessary mandatory technical standards.
- Among the most interesting announcements was an Annual Mega Shopping Festival that FM Sitharaman said, will be hosted by India in four cities on the lines of the Dubai Shopping Festival.
 - * Countries in the world like UAE, Japan and USA organize fairs, shopping festivals to attract Tourists and Businesses and its people
 - * This would promote their home grown culture, unique textiles and a means of Employment generation and value addition in economy
 - * The same would be practiced in India through these Mega shopping festivals by bringing in weavers, household manufacturers, toy makers to uplift their livelihood means and showcasing them to the world

- To increase bank credit to exporters, the Export Credit Guarantee Corporation (ECGC) will expand the scope of its Export Credit Insurance Scheme to provide a higher insurance cover to banks that are lending working capital for exports.
 - * At present banks are covered for 60% of what they lend to exporters for working capital, this will be increased to 90%.

Housing Sector

- The most notable decision was the setting up of a Special Fund that would provide last-mile funding for housing projects
- The objective is to focus on construction of unfinished units
- The fund would be set up as a Category-II AIF trust and would be professionally run with experts from housing and banking sector.
- Besides the Government, the other investors who are likely to contribute to the fund include LIC and other institutions and private capital from banks and DFIs.
- For the housing sector, Sitharaman also announced that External Commercial Borrowing (ECB) guidelines will be relaxed to facilitate financing of home buyers who are eligible under the PMAY, in consultation with RBI.

Exceptions

- This is applicable to ones that are not categorised as non-performing assets
- They are not undergoing National Company Law Tribunal proceedings.

Conclusion

- With all these changes the growth may reach 6 to 6.5% but we need economy growing at or more than 9% to meet the target of 5 Trillion economy
- Unemployment is at the forty five year high so structural reforms is the need of the hour as the economy is currently run by Gig Economics and technological upgradation. So a transition and relevant investment in Human resource is a must to make the demographic dividend an Asset and not a liability.
- Countries like Cambodia, Vietnam and in fact our neighbor Bangladesh have extracted maximum from the trade war and have expanded their Textile sector. India should learn lessons as well

15. India among top 10 nations in gold reserves

Context:

- According to a release by the World Gold council, India is one among the top countries in terms of Total Gold Reserves. It has surpassed Netherlands to move into the list of top ten countries totaling 618.2 tonnes, which is marginally higher than the Netherlands' reserves of 612.5 tonnes.

- * India's gold reserves have grown substantially in the past couple of decades from 357.8 tonnes in the first quarter of 2000 to the current 618.2 tonnes.

Ranking

- According to the latest release by the World Gold Council, U.S. leads the country list with total gold reserves of 8,133.5 tonnes followed by Germany with 3,366.8 tonnes.
- While the IMF is ranked third with a holding of 2,451.8 tonnes, it is followed by countries such as Italy (2,451.8 tonnes), France (2,436.1 tonnes), Russia (2,219.2 tonnes), China (1,936.5 tonnes), Switzerland (1,040 tonnes) and Japan (765.2 tonnes) before India at the 10th spot.
- Pakistan's position is unchanged at the 45th with total gold reserves of 64.6 tonnes.

World Gold Council

- The World Gold Council or the WGC is a nonprofit association of the world's leading gold producers.
- It is a market development organization for the gold industry
 - * The World Gold Council includes 25 members and many members are gold mining companies.
 - * The WGC was established to promote the use of and demand for gold through marketing, research and lobbying.
- The WGC aims to maximize the industry's potential growth by monitoring and defending existing gold consumption.
- It is Headquartered in London

16. Longest Electrified Rail Tunnel

Context

- Vice-President M Venkaiah Naidu dedicated the longest electrified railway tunnel in the country between Rapuru and Cherlopalli in Andhra Pradesh to the nation

Details

- The 6.6 km long tunnel is situated between Cherlopalli and Rapuru railway stations and is part of the new Obulavaripalli-Venkatachalam railway line.
- The height of the tunnel is 6.5 metres.

Significance

- At present, a goods train takes an average time of 10 hours to travel from Krishnapatnam Port to Obulavaripalli.
 - * On the newly electrified line, the travel time gets reduced to about 5 hours, thereby resulting in a saving of travel time by 5 hours.
- The tunnel is a game changer in the freight operations of the zone.

17. National Infrastructure Pipeline

Context

- In a bid to further give a push to the country's infrastructure, government has constituted a high-level task force to identify infrastructure projects for Rs 100 lakh crore investment by 2024-25 as India aims to become a USD 5 trillion economy.

Composition

- The task force will be headed by the economic affairs secretary
- The task force will comprise secretaries from different ministries, other senior officials and Niti Aayog CEO.

What was the need?

- The challenge is to step up annual infrastructure investment so that lack of infrastructure does not become a binding constraint on the growth of the Indian economy,
- These will include social and economic infrastructure projects.

Details

- This would include greenfield and brownfield projects
- It will identify technically feasible and financially/economically viable infrastructure projects that can be initiated in 2019-20.
- Further, it has been asked to list the projects that can be included in the pipeline for each of the remaining five years between fiscals 2021-25.
- As per the terms of reference (ToR) of the task force,
 - * it has also been asked to estimate annual infrastructure investment/capital costs,
 - * guide ministries in identifying appropriate sources of financing and
 - * Suggest measures to monitor the projects to minimize cost and time over runs.
- Each ministry/department would be responsible for monitoring of projects so as to ensure their timely and within-cost implementation

18. NBFC loan pricing under RBI lens

Context:

- After mandating banks to implement external benchmarking for retail loan pricing, the Reserve Bank is currently looking at the loan pricing regime of Non-Banking Finance Companies to make the practice more transparent.

Issue:

- It has often been noticed that lending rates of banks and NBFCs, including housing finance companies, are not responsive to changes in the RBI's policy rate or the repo rate.

- As a result, the banking regulator has mandated banks that floating rate retail loans for homes, vehicles and loans to small and medium enterprises should be linked to an external benchmark like repo rate or Government of India T-bills, for example.
- The main objective behind linking loans to an external benchmark was for faster transmission of monetary policy rates, particularly in a declining interest regime.

Details

- At present, there is no anchor rate for NBFCs, similar to banks that is linked to the lending rate of a particular loan.
 - * For example, banks have the marginal cost of fund based lending rate (MCLR) — the anchor rate — and all the loans are linked to such a rate. Earlier, the base rate acted as an anchor rate.
 - * Banks were not allowed to lend below the base rate or the MCLR rate.
 - * However, banks are allowed to add a spread, based on the risk assessment, to the anchor rate.
- The way banks set interest rates is critical for the smooth transmission of policy rates.
- To make this process transparent, RBI has over the years directed banks to price their loans against their benchmark prime lending rate (BPLR), base rate and then MCLR.
- However, this is the first time banks have been asked to link their lending rates to an external benchmark.
- The primary advantage of an external benchmark over an internal rate is transparency. While certain costs such as business strategy and operating costs were part of the anchor rate under the MCLR regime, the external benchmark ensures all those are part of the spread and not built into the anchor.
- The central bank is keen on greater transparency and order in the rate-setting process at non-banking financial companies (NBFCs) and housing finance companies (HFCs), which are not bound by RBI regulations.
- One of the concerns is that only a handful of large NBFCs are supervised by the RBI.

External Benchmarking

Background

- The W • All loans such as for car and home disbursed from April 1, 2016 are linked to marginal cost of funds-based lending rate (MCLR). The MCLR-based regime had replaced the earlier base rate regime to provide transparency in the transmission of monetary policy decisions.
- MCLR is an internal benchmark rate that depends on various factors such as fixed deposit rates, source of funds and savings rate.

- The price of loan comprises the MCLR and the spread or the bank's profit margin.

The problem with MCLR-based system

- The biggest problem with the current system is the lack of required transmission of policy rates.
 - * They are insensitive to changes in the policy interest rate or repo rate
 - * When the RBI cuts repo rate there is no guarantee a borrower will get the benefit of the rate cut or that it will be transmitted down to him.
 - * Due to internal benchmarking of loan price, policy rate cuts often don't reach the borrowers.
- Secondly, the MCLR system is opaque since it's an internal benchmark that depends on the way a bank does its business.
- Banks deviated in an ad hoc manner from the specified methodologies for calculating the base rate and the MCLR to either inflate the base rate or prevent the base rate from falling in line with the cost of funds.
- Borrowers, who have taken loans on a floating rate basis, suffer an immediate increase when interest rates are hiked by the RBI but do not get much relief when rates go down. This makes a mockery of the very concept of 'floating' rates.
- Dr Janak Raj Committee in its report, "Internal Study Group to Review the Working of the MCLR System" had provided a shocking account of how wide and deep banking malpractices are with regard to floating rate loans.

How the new system will work?

- Under the new system which will come into effect from April 1, 2019, banks will have to link their lending rates with an external benchmark instead of MCLR.
- The RBI has given these options to banks: RBI repo rate, the 91-day T-bill yield; the 182-day T-bill yield; or any other benchmark market interest rate produced by the Financial Benchmarks India Pvt. Ltd.
- One of these benchmarks will be used to decide the lending rate in addition to the spread, Banks will be free to decide their spread value but it will have to be fixed for the tenure of the loan.
- However, it can change if the credit score of the borrower changes. The interest rates under the new system will change every month.

How it will benefit borrowers?

- First, it will help better transmission of policy rate cuts which means an RBI rate cut will immediately reach the borrower in the current system in which internal benchmark is not influenced solely by the policy rate cut but depends on a variety of factors.
- Second, it will make the system more transparent since every borrower will know the fixed interest rate and the spread value decided by the bank.

- * It will help borrowers compare loans in a better way from different banks.
- Under the new system, a bank is required to adopt a uniform external benchmark within a loan category so that there is transparency, standardization and ease of understanding for the borrowers.
- * This would mean that same bank cannot adopt multiple benchmarks within a loan category.

Concerns

- Bankers have cautioned that the external benchmarking of new floating rate loans by banks may bring volatility in interest rates, leading to frequent changes in customers' monthly instalments.
- The lack of depth in T-Bill and CD (Certificate of Deposit) markets can make such benchmarks potentially susceptible to manipulation

19. Onion Prices Rises

Context

- Onion prices have skyrocketed owing to incessant rains. A significant number of onions were spoilt following the rain. This coupled with a lesser yield this year, has led to an increase in its price

Onion growing States and Period

- Maharashtra, Karnataka, Gujarat, Madhya Pradesh, Rajasthan, Bihar, Uttar Pradesh and West Bengal account for almost 90 per cent of onion production in the country.
- Maharashtra, with its onion-belt districts like Nashik, Pune, Ahmednagar and Aurangabad, contributes nearly one third of the country's production of the vegetable.
- Farmers across the country take three crops of onions and this ensures uninterrupted supply across the year.
 - * kharif (sown between May and July and harvested in October-December)
 - * Late kharif (sown in August- September and harvested in January- March) are not amenable for storage as they have higher moisture content.
 - * The third, rabi crop (sown in October-November and harvested after April), can be stored for a long period.

Why onion prices have increased?

- A combination of factors has led to the increase in prices; while the cultivation area under rabi crop has decreased in Maharashtra, neighbouring Karnataka has received heavy rain during the harvest period for kharif crop.
- The current increase in onion prices is also due to 2018's drought and the delayed monsoon in 2019.

Issue Area

- Both the consumers and the farmers are disheartened.
 - * The consumers are concerned about the sharp increase in prices
 - * The farmers are worried about the lack of proper infrastructure to store the produce.

Initiatives taken by Central Government to contain onion prices

In view of the continuing high price of onions in the market, the Central Government took several steps to contain the prices namely:

- The Central Government imposed stock limits on onion traders to facilitate the release of stocks in the market and prevent hoarding by traders.
 - * The stock limit of 100 quintal on retail traders and 500 quintals on wholesale traders has been imposed all over India.
 - * The Centre has also asked the State Governments to enforce the stock limits strictly and carry out anti-hoarding operations against unscrupulous traders by organising raids, etc.
- The Government has also banned export of onions with immediate effect till further orders for improving domestic availability. The ban on export of onions is expected to improve domestic availability and cool prices.
- The reported export below Minimum Export Price (MEP) to Bangladesh & Sri Lanka will be immediately stopped and strict action will be initiated against those who are found to be violating this.
 - * MEP is the price below which an exporter is not allowed to export the commodity from India.
 - * MEP is imposed in view of the rising domestic retail / wholesale price or production disruptions in the country. MEP is a kind of quantitative restriction to trade.
 - * Government fixes MEP for the selected commodities with a view to arrest domestic price rise and augment domestic supply. This is intended to be imposed for short durations and is removed when situations change.
 - * The removal of MEP helps farmers / exporters in realizing better and remunerative prices and would also help in earning valuable foreign exchange for the country.

Concerns

- It takes years to build export markets but with such abrupt export restrictions, India becomes an unreliable exporter, which adversely hits its unit value of exports. This damage is far greater compared to the short-term gains the government is eyeing.

What else should the Govt do?

- The Ministry of Food Processing Industries (MoFPI) should be at the forefront to extensively promote the use of dehydrated onions (flakes, powder, granules) among domestic households and institutions like the armed forces, hospitals, restaurants and schools (mid-day meals). This will take the pressure off fresh onions during the lean season.
 - * Currently, India exports 85 per cent of its dehydrated onions, and is the largest exporter of dehydrated onions in the world.
 - * Dehydrated products are much cheaper to store and are more durable. They can help check the spikes in onion prices.
 - * This will reduce wastage and help farmers get a fair price and consumers can switch to these dehydrated onions in the lean season at affordable prices.
- Overhaul of the APMCs is overdue.
 - * An analysis of onion value chains reveals that onion farmers get a mere 29 per cent share of the consumer's rupee.
 - * The rest constitutes costs and margins of middlemen, with retailers apportioning the highest share.
 - * With the majority of onions traded through the APMC markets, the auctioning procedure is controlled by powerful traders and commission agents with much less bargaining power for farmers.

20. PM's Economic Advisory Council reconstituted

- Economic Advisory Council is a non-constitutional and non-statutory, non-permanent and independent body.
- It is constituted to provide sound policy advice in key areas such as reviving economic growth and creating enabling conditions for gainful employment.
- The body comprises of economists of high repute and eminence.
- The body is constituted to provide advice on economic issues to the government, specifically to the Prime Minister.
- The advice of the EAC-PM would be either on reference from the PM or suo-motu.
- It submits periodic reports to PM related to macroeconomic developments and issues which will have implications of the economic policy.

Context:

- The government announced that it has reconstituted the Prime Minister's Economic Advisory Council (EAC-PM) for a period of two years.

Details:

- Government of India has reconstituted the Economic Advisory Council to the Prime Minister (EAC-PM) for a period of two years with effect from September 26, 2019.
- Bibek Debroy and Shri Ratan P. Watal will continue to be the chairman and member secretary, respectively, of the reconstituted EAC-PM.
- The release added that the EAC-PM would have two part-time members apart from the two full-time members.

21. Pradhan Mantri Kisan Maan-Dhan Yojana (PM-KMY)

- It is an old age pension scheme for all land holding Small and Marginal Farmers (SMFs) in the country.
- It is voluntary and contributory for farmers in the entry age group of 18 to 40 years and a monthly pension of Rs. 3000/- will be provided to them on attaining the age of 60 years.
- The farmers will have to make a monthly contribution of Rs.55 to Rs.200, depending on their age of entry, in the Pension Fund till they reach the retirement date i.e. the age of 60 years.
- The Life Insurance Corporation of India (LIC) shall be the Pension Fund Manager and responsible for Pension pay out.
- The farmers, who are also beneficiaries of PM-Kisan Scheme, will have the option to allow their contribution debited from the benefit of that Scheme directly.
- In case of default in making regular contributions, the beneficiaries are allowed to regularize the contributions by paying the outstanding dues along with prescribed interest.

How will it work?

- In case of death of the farmer before retirement date, the spouse may continue in the scheme by paying the remaining contributions till the remaining age of the deceased farmer.
 - * If the spouse does not wish to continue, the total contribution made by the farmer along with interest will be paid to the spouse.
 - * If there is no spouse, then total contribution along with interest will be paid to the nominee.
- If the farmer dies after the retirement date, the spouse will receive 50% of the pension as Family Pension.
- After the death of both the farmer and the spouse, the accumulated corpus shall be credited back to the Pension Fund.

- The beneficiaries may opt voluntarily to exit the Scheme after a minimum period of 5 years of regular contributions.
- * On exit, their entire contribution shall be returned by LIC with an interest equivalent to prevailing saving bank rates.

Pradhan Mantri Laghu Vyapari Maan Dhan Yojana:

- Pradhan Mantri Laghu Vyapari Maan Dhan Yojana is a pension scheme for shopkeepers and retail traders.
- Under the scheme beneficiaries between 18 and 40 years will get Rs. 3,000 per month after completing 60 years of age.

Swarajgar Pension Scheme

- Swarajgar pension scheme is a scheme for the self-employed.
- Under this scheme, similar to Pradhan Mantri Laghu Vyapari Maan Dhan Yojana, the beneficiaries between 18 and 40 years will get Rs 3,000 per month after completing 60 years of age.

22. PACEsetter Fund programme

- The PACEsetter fund was constituted by India and the USA in 2015 as a joint fund to provide early-stage grant funding to accelerate the commercialization of innovative off-grid clean energy products, systems, and business models.
- The mission of the PACEsetter Fund is to accelerate the commercialization of innovative off-grid clean energy access solutions by providing early-stage grant funding that would allow businesses to develop and test innovative products, business models and systems.
- The Fund's main purpose is to improve the viability of off-grid renewable energy businesses that sell small scale (under 1 megawatt) clean energy systems to individuals and communities without access to grid connected power or with limited/intermittent access.

Context

- The Ministry of New and Renewable Energy awarded Grants to the awardees of the second round of PACEsetter fund programme

23. Punjab and Maharashtra Cooperative Bank Ltd (PMC Bank)

Context

- The Reserve Bank of India has placed Mumbai-based Punjab and Maharashtra Cooperative Bank (PMC Bank) a Leading Cooperative Bank headquartered in Mumbai under directions and has slapped restrictions on its operations
- RBI imposed curbs on the activities of PMC for a period of six months.

Background

- Founded in 1984, PMC Bank was the youngest bank to get the status of a scheduled bank in 2000 and a licence of authorised dealer category 1 in the year 2011 for forex business by the RBI.
- The bank has several small businesses, housing societies and institutions as its customers.

Why was it placed under restrictions?

- The decision came after the central bank discovered certain irregularities in the bank, including the under-reporting of non-performing assets (NPAs).
 - * The bank had suppressed the sticky assets and under-reported them
- The bank was funding a clutch of companies, mainly in the troubled real estate sector, led by Housing Development & Infrastructure Ltd (HDIL). Commercial banks have already declared HDIL a defaulter.
- In the case of PMC Bank, as per RBI, there are three problems — major financial irregularities, failure of internal control and systems, and underreporting of exposures.

Concerns

- This episode, once again, raises questions on not only the governance structures at these cooperative banks, but also on their supervision.
 - * Cooperative banks are under joint supervision of the RBI and states.
 - * And while the RBI has signed MoUs with state governments, unless state governments cooperate in effecting regulations, supervision is likely to be ineffective.
 - * Clearly, there were no early warning signs of trouble in this case.

Steps taken by RBI

- The RBI has appointed J B Bhoria as administrator of PMC Bank; he is expected to take appropriate measures to bring the bank back on the rails.

Restrictions imposed by the regulator can do more harm than good?

- The constraints imposed by RBI, under section 35A of the banking Regulation Act, are aimed at safeguarding depositors interest, and preventing a run on the bank, such moves, which are seen as penalising depositors, can end up having the opposite effect, denting trust in cooperative banks and increasing the risk of a contagion.

Way forward

- Instances such as these are likely to raise calls for reviewing this regulatory framework and giving more powers to the RBI to oversee these entities. These need to be attended to.
- The RBI should also examine the long-term feasibility of their business models in light of the rapid technological changes in the financial sector.

- The RBI could also explore the option of merging PMC with another healthy cooperative bank to avoid any instability
- The RBI has announced a scheme for voluntary transition of urban cooperative banks into small finance banks, in line with the recommendations of a high-powered committee chaired by former Deputy Governor of the RBI, R. Gandhi. This would enable them to have most of the products available with commercial banks, and help get a pan-India presence.

Cooperative banks

It is defined as small-sized units in the co-operative sector, operate both in urban and non-urban centres. These banks have mostly been centered on communities and localities lending to small borrowers and businesses. Traditionally, the co-operative structure is divided into two parts—rural and urban.

The Rural Cooperative Credit system in India is primarily mandated to ensure flow of credit to the agriculture sector. The short-term co-operative credit structure operates with a three-tier system –

- Primary Agricultural Credit Societies (PACS) at the village level,
- Central Cooperative Banks (CCBs) at the district level and
- State Cooperative Banks (StCBs) at the State level.

Primary Cooperative Banks (PCBs), also referred to as Urban Cooperative Banks (UCBs), cater to the financial needs of customers in urban and semi-urban areas.

How are they regulated?

- Cooperative Banks are registered under the Cooperative Societies Act.
- The Registrar of Cooperative Societies (RCS) is in control of management elections and many administrative issues as well as auditing.
- The RBI brought them under the Banking Regulation Act, 1949 as applicable to cooperative societies, which included all the regulatory aspects, namely, the granting of the licence, maintaining cash reserve, statutory liquidity and capital adequacy ratios, and inspection of these banks.

* The banking laws were made applicable to cooperative societies in 1966 through an amendment to the Banking Regulation Act, 1949.

- Therefore banking related functions are regulated by the RBI and management related functions are regulated by respective State Governments
- Powers have also been delegated to National Bank for Agricultural and Rural Development (NABARD) to conduct inspection of State and Central Cooperative Banks.
- However, do note that Primary Agricultural Credit Societies fall outside the purview of the Banking Regulation Act, 1949 and hence are not regulated by the RBI.

Regulatory checks in place

Many of the regulatory norms applicable to a commercial bank also apply to cooperative banks, which is comforting.

- For instance, cooperative banks too have to set aside 4 per cent of their total deposits as CRR (cash reserve ratio) with the regulator.
- They also need to invest another 18.75 per cent of their total deposits in government securities, which are highly liquid and can be easily pledge (or sold) to raise money.
- Also RBI had put in place a Supervisory Action Framework (SAF) in 2012, much like the Prompt Corrective Action (PCA) on commercial banks.
 - * Here too, trigger points for initiating corrective action on banks is based on certain financial parameters such as capital adequacy, gross non-performing assets, concentration of deposits and profitability.

Why people save their money in cooperative banks over commercial banks?

- One of the biggest draw for people to park money in cooperative banks is the relatively higher rates these banks offer on deposits than commercial banks.

Non Compliance a major Problem

- Despite the regulatory check in place, weak corporate governance, lack of professionalism, reluctance in technology adoption are some of the concerns that continue to plague the sector
- Urban cooperative banks have been under the radar of the RBI, but because of dual regulation, one always had a feeling that one did not have as much control over these banks in terms of supercession of boards or removal of directors, as the RBI has over private sector banks.

24. Teaser Loan

Context

- State Bank of India's (SBI) plan to offer teaser loans is likely to hit a regulatory hurdle as the Reserve Bank of India (RBI) is uncomfortable with such products.

Meaning

- Teaser loans are fixed-cum-floating home loan rates.
- Teaser loans are those which charge comparatively lower rates of interest in the first few years after which the rates are increased.

What is the issue?

- SBI's decision to ponder over such products came after RBI mandated banks to link floating rate retail and MSME loans to an external benchmark.
- RBI is of the view that some borrowers may find it difficult to service the loans once the normal interest rate, which is higher than the rate applicable in the initial years, becomes effective.

- In addition, a bank, while extending the loan, does not take into account the borrowers' repayment capacity after lending rates increase.
- While such teaser products are not banned by the regulator, the standard asset provisioning requirement is higher for such loans.
- RBI had increased the provisioning by five times for such loans since these loans are perceived as more risky.
- Higher provisioning discourages banks from offering such products. Following the introduction of higher risk weights, banks had discontinued those products.

25. Travel and Tourism Competitiveness Report

- It was first published in 2007 by the World Economic Forum.
 - * It is Published biennially
- The index is a measurement of the factors that make it attractive to develop business in the travel and tourism industry of individual countries, rather than a measure of a country attractiveness as a tourist destination.
- The study scored countries on four indicators — enabling environment; travel and tourism policy and enabling conditions; infrastructure; natural and cultural rankings.
 - * The four broad indicators looked at 14 variables, which were further subdivided into 90 indicators such as property rights, efficiency of the legal framework, quality of electricity supply, female labour force participation, visa requirements and the number of World Heritage cultural sites.
- The Travel & Tourism Competitiveness Index (TTCI), that covered 140 economies, measures the set of factors and policies that enable sustainable development of travel and tourism sector which contributes to the development and competitiveness of a country.

India's Ranking

- India has moved up six places to rank 34th

HOW INDIA COMPARES WITH THE BEST (SCORE IN BRACKETS)

Basis	Rank 1 in 2019	India rank in 2019	India rank in 2017
Enabling Environment	Switzerland (6.2)	98(4.4)	108(4.1)
T&T policy and enabling conditions	New Zealand (5.1)	69(4.5)	79(4.1)
Infrastructure	United States	(5.8) 55(3.8)	58(3.7)
Natural and cultural rankings	China (6.1)	9(5.0)	12(4.8)
Overall rank	Spain (5.4)	34(4.4)	40(4.18)

Countries Ranking

- Spain held on to the top spot
- Spain was followed by France, Germany and Japan, with the United States replacing the UK in the top five.
 - * Japan remains Asia's most competitive travel and tourism economy, ranking 4th globally
- Others in the top 10 list include the United Kingdom at the 6th place, Australia (7th), Italy (8th), Canada (9th) and Switzerland (10th).
- The report further added that Asia-Pacific was one of the fastest-growing travel and tourism regions in this year's ranking.
- Pakistan (121st) remains the least competitive country in South Asia when it comes to T&T, including the region's least favourable safety and security (134th) conditions.

26. Task force recommends online loan sale platform

Context:

- A task force set up by the Reserve Bank of India (RBI) has submitted its report on the development of a secondary market for corporate loans.

Details:

- The task force was headed by Canara Bank chairman T.N. Manoharan
- It recommended setting up of a Self-Regulatory Body (SRB), which will oversee the proposed secondary market.
 - * The SRB may be set up as an association by scheduled commercial banks, public financial institutions and other related entities, and may be incorporated as a Section 8 company under the Companies Act, 2013.
 - * The SRB's role will be to standardize loan documentation and covenants, periodically review the documentation, ensure standardization of practices, and promote growth, liquidity, efficiency and transparency of the proposed secondary market.
 - * It will also be responsible for setting up a central loan contract registry, which will finalize the detailed design structure, infrastructure, technological aspects and nature of incorporation, to ensure legal sanctity of its operations and for executing agreements with other agencies.
 - * It said the SRB may stipulate minimum 5-10% of the loan outstanding as the threshold limit for the loan size eligible for sale.
- The Task Force also recommended setting up of an online loan sales platform to conduct auctions of secondary market loans.

- * It said term loans have to be prioritized for the auction and, subsequently with experience, other categories of loans, such as revolving credit facilities (cash credit, credit card receivables, etc.), assets with bullet repayment and non-fund based facilities, could be introduced.
- Other recommendations of the Task Force include linking the pricing of all loans to an external benchmark as the current Marginal Cost of Funds Based Lending Rate (MCLR) may not be comparable across banks.
- Amendment of the regulations with respect to securitisation and assignment of loans, asset reconstruction, foreign portfolio investment and external commercial borrowings were also recommended.
- The committee also said that amendments in regulations issued by SEBI, IRDA and PFRDA were needed to enable participation of non-banking entities such as mutual funds, insurance companies and pension funds.

27. VAHAN Database

- VAHAN is a digital national vehicle registry portal.
- It collates all the information available with road transport authorities for easy access by both citizens and regulators.
- The portal allows access to all details about vehicles such as registration number, colour, chassis/engine number, body/fuel type, manufacturer and model and provides various online services to citizens.
- Driving Licence and related information are automated through another application called 'Sarathi'.
- VAHAN offers the following services:
 - * Vehicle registration (new/renewal/transfer, etc.)
 - * Permit (issuance/renewal)
 - * Taxes (calculation and payment)
 - * Fitness (Fitness Certificate issuance and renewal)
 - * Enforcement (issue of challan, settlement of penalty amount)

Context:

- The Ministry of Road Transport & Highways has asked all PUC Centres (Centres that issue Pollution under Control Certificates/PUC Certificates to on-road vehicles) to link emission test data with the VAHAN Database.

28. What is the economics behind e-vehicle batteries?

Background

- NITI Aayog, in May 2019, proposed to ban the sale of all internal combustion engine (ICE) powered three-wheelers post March 2023.

- It also suggested that all new two-wheelers below 150cc sold after March 2025 should be electric.
- In consonance with these proposals, the Union Budget presented on July 5 2019 announced tax incentives for early adopters.

Drivetrain

- The system in a motor vehicle which connects the transmission to the drive axles
- The drivetrain includes the transmission, the driveshaft, the axles, and the wheels.

How are cost structures of conventional vehicles and electric vehicles different?

- The portion of the costs of the drivetrain of EVs — in comparison to the cost of the entire vehicle is four percentage points lower when compared to ICE vehicles.
 - * This is primarily due to less parts in the electric drivetrain.
- However, the battery pack takes up nearly half the cost of an electric vehicle.
 - * For any meaningful reduction in the physical value of EVs, the cost of battery packs needs to reduce significantly

What are the components of a battery pack and how much do they cost?

- The predominant battery chemistry used in EVs is lithium-ion batteries (Li-ion). No new technologies are on the horizon for immediate commercial usage.
- The cost of the materials or key-components of the battery, namely the cathode, anode, electrolyte, separator, among others, contribute the most (60%) to the total cost.
- Labour charges, overheads and profit margins account for the rest.
 - * Labour is a relatively minuscule component of the overall cost.
- Any reduction in the cost of the battery pack will have to come from a reduction in materials cost or the manufacturing overhead.
 - * Manufacturing overhead includes such things as the electricity used to operate the factory equipment, lubricants, depreciation on the factory equipment and building

How has the cost of the Li-ion battery pack cost evolved in the last decade?

The price of these battery packs has consistently fallen over the past few years.

- This decrease is in part due to technological improvements, economies of scale and increased demand for lithium-ion batteries.
- Fierce competition between major manufacturers has also been instrumental in bringing down prices.

Where does India stand on EV adoption?

- According to the NITI Aayog, 79% of vehicles on Indian roads are two-wheelers.
- In India, EV adoption will be driven by two-wheelers rather than cars in high numbers on because India's mobility market is driven more by two wheelers.
- Three-wheelers and cars that cost less than ₹10 lakh account for 4% and 12% of the vehicle population, respectively.
- Two-wheelers will also need smaller batteries when compared to cars and hence the overall affordable cost.

Current status of battery manufacturing

- India needs to manufacture Li-ion cells in-house.
- Now, cells are imported and "assembled" into batteries.
- Setting up a Li-ion manufacturing unit requires high capital expenditure. But battery manufacturing in India is expected to grow as electric vehicles grow.

Are EV vehicles completely environment friendly?

- Presently, most of India's electricity is generated using conventional sources.
- In 2018-19, over 90% of India's electricity was generated from conventional sources, including coal, and around 10% was produced from renewable sources such as solar, wind and biomass.
- While the rate of electricity generated from renewable sources has increased over the years, more needs to be done for their adoption.
- This is because the EV-charging infrastructure needs to be powered through renewable sources to make it truly sustainable.

29. USA- China Trade War

Context

- The trade war between the U.S. and China has seen a significant escalation.
- Recently, the U.S. administration notified its decision to impose 15% tariffs, in two phases, on imports valued at \$300 billion.
- The latest round of tariff increases implies that the country has imposed tariffs on almost all of its product imports from China, totaling nearly \$540 billion in 2018.
- Pharmaceutical imports are the only major exception.

China announces additional tariffs

- Immediately after the U.S. administration issued the notification, China increased tariffs on more than 5,000 products imported from the U.S. valued at \$75 billion.
- The sensitive sectors of agriculture and forestry were targeted.

- Tariffs were also hiked for the first time on crude oil.
- China has raised the ante further by initiating a dispute in the World Trade Organization (WTO) against the U.S.'s unilateral tariff increases.

USA targets China for violations of IPR

- Earlier, the U.S. administration had targeted China primarily for what it perceived to be violations by the latter of intellectual property rights (IPRs) of American companies.
- The administration's argument was that Beijing was forcing these companies to transfer their proprietary technologies.
- In fact, on this issue, the U.S. became the judge and the jury by indicting China for indulging in "forced technology transfer" and then bringing penal provisions against its imports using the provisions of the Trade Act of 1974.
- The provisions of this Act (like Section 301) allow the U.S. to "investigate" any country which, in its opinion, has violated IPRs of American companies.
- If found "guilty", the violating countries can be sanctioned with trade retaliation. The tariff increases against Chinese products were tantamount to trade retaliation. It needs to be further mentioned here that Section 301 actions are a violation of WTO rules as disputes must be resolved by the organisation's dispute settlement mechanism.

'Currency Manipulator' Label

- However, while triggering the most recent escalation, the U.S. administration not only violated the spirit of multilateralism, it also shifted the goalposts.
- The action was triggered when the U.S. Secretary of Treasury invoked the provisions of Section 3004 of the Omnibus Trade and Competitiveness Act.
- This Section authorizes the Treasury Secretary to examine whether the U.S.'s trade partners are manipulating the "rate of exchange for purposes of preventing effective balance of payments adjustments or gaining unfair competitive advantage in international trade".
- It was based on a report presented to the U.S. Congress in 2018 that concluded that China's "exchange rate practices continue to lack transparency, including its intervention in foreign exchange markets", although it found that "direct intervention in foreign exchange markets by the People's Bank of China" over the past several months was limited.

The latest action by the Trump administration raises at least two sets of issues.

The first concerns its pursuit of unilateralism. The country has challenged the framework of multilaterally agreed rules in two ways —

- By not allowing WTO members to conduct negotiations so that the rules respond to the needs of the members, especially the lesser developed countries;

- By making the dispute settlement mechanism non-functional.
 - * A critical component of the dispute settlement mechanism is the Appellate Body, which needs seven members to function effectively.
 - * But the U.S. administration has refused to allow retiring members of the Appellate Body to be replaced by new members, and this has brought the dispute settlement mechanism to the brink.

Second, nearly a year and a half after the trade war was officially announced in Washington, one question that begs an answer is:

- Have the American people gained anything from the exertions of the administration?
- Are there any signs that President Trump's vision of 'Making America Great Again' is gaining further traction?

This could spell disaster for US economy

- There is hardly any doubt that the latest round of tariff increases would hurt the U.S. economy even more since China has targeted agriculture and crude oil, two of the most sensitive sectors.
- An impact on these sectors could adversely affect President Trump politically because people and companies associated with these areas are among the President's major funders.
- Further, since the current round of tariffs target products like garments, toothbrushes, footwear, toys and video games, the U.S.'s consumer goods markets would be impacted quite considerably.
- Clearly, the administration is worried about the price increases following the imposition of tariffs on some of these goods, a reason it has postponed the tariff increases until after the Christmas purchases.

Conclusion

- The timing of the latest escalation could not have been worse; it could bring the global economy closer to an economic slowdown, much earlier than its predicted onset in 2020.

30. Factoring in safety: on stronger worker safety law

Context

- India's Industrial and work environment is based on productivity benefits but in promoting occupational and industrial safety remains weak even with years of robust economic growth

Examples

The consequences are frequently seen in the form of a large number of fatalities and injuries

- Deaths of four people, including a senior officer, in a fire at the Oil and Natural Gas Corporation gas facility in Navi Mumbai

- The tragedy that killed nearly two dozen people at a firecracker factory in Batala, Punjab

Such incidents make it imperative that the Central government abandon its reductionist approach to the challenge, and engage in serious reform.

The Occupational Safety, Health and Working Conditions Code, 2019

- The bill introduced in the Lok Sabha in July to combine 13 existing laws relating to mines, factories, dock workers, building and construction, transport workers, inter-State migrant labour and so on, pays little attention to the sector-specific requirements of workers.
- One of its major shortcomings is that formation of safety committees and appointment of safety officers, the latter in the case of establishments with 500 workers, is left to the discretion of State governments.
- Evidently, the narrow stipulation on safety officers confines it to a small fraction of industries.
- On the other hand, the Factories Act currently mandates appointment of a bipartite committee in units that employ hazardous processes or substances, with exemptions being the exception. This provision clearly requires retention in the new Code.

Steps that need to be taken by the Govt

- A safe work environment is a basic right, and India's recent decades of high growth should have ushered in a framework of guarantees.
- Unfortunately, successive governments have not felt it necessary to ratify many fundamental conventions of the International Labour Organization (ILO) covering organised and unorganised sector workers' safety, including the Occupational Safety and Health Convention, 1981.
- Those ILO instruments cover several areas of activity that the NDA government's occupational safety Code now seeks to amalgamate, but without the systemic reform that is necessary to empower workers.
- It is essential, therefore, that the new Code go back to the drawing board for careful scrutiny by experienced parliamentarians, aided by fresh inputs from employees, employers and experts.
- Industries that use hazardous processes and chemicals deserve particular attention, and the Code must have clear definitions, specifying limits of exposure for workers.

Conclusion

- Compromising on safety can lead to extreme consequences that go beyond factories, and leave something that is etched in the nation's memory as in the case of the Bhopal gas disaster.

31. Futile fines: On traffic violation penalties

Introduction

- The steep penalties for violation of road rules that came into force under the Motor Vehicles (Amendment) Act, 2019 have produced a backlash, with several State governments opting to reduce the quantum of fines, or even to reject the new provisions.
 - * Gujarat has announced a substantial reduction in the fines,
 - * West Bengal has refused to adopt the higher penalties,
 - * Karnataka and Kerala are studying the prospects to make the provisions less stringent, and others are proceeding with caution.
- Motorists have reacted with outrage at the imposition of fines by the police, obviously upset at State governments pursuing enforcement without upgrading road infrastructure and making administrative arrangements for issue of transport documents.

Why has this decision taken by the central Govt?

- India has some of the deadliest roads in the world, and 1,47,913 people died in road accidents only during 2017.
- Union Transport Minister Nitin Gadkari has reiterated that it is left to the States to choose the quantum of fines, since it is their responsibility to bring about deterrence and protect the lives of citizens.
- Mr. Gadkari's argument is valid, and the intent behind amending the Motor Vehicles Act cannot be faulted. After all, the question that has arisen is whether enhanced fines can radically change this record when other determinants, beginning with administrative reform, remain untouched.

Section 198

- It directs designated authorities, contractors, consultants, and/or concessionaires responsible for the design, construction, or maintenance of road safety standards to adhere to prescribed standards laid down by the Central government.
- In case the designated authority, contractor, consultant, or concessionaire are found to have not properly discharged their responsibilities and it results in disability or death, they will be liable to pay a fine of ₹1 lakh.
- It can be enforced through litigation by road users in all States. Since the standards are laid down, compliance should be ensured without waiting for a road accident to prove it.

Way forward

- State governments also cannot escape responsibility for failing to reform their Regional Transport Authorities, since these offices are generally steeped in corruption.

- The Transport Ministry could well have made electronic delivery of RTO services mandatory
- Mr. Gadkari should lose no time in forming the National Road Safety Board to recommend important changes to infrastructure and to enable professional accident investigation.

32. Registration of steel and iron imports, a must

Context

- The government has made it compulsory for importers to register themselves with Steel Import Monitoring System (SIMS) to be able to import two hundred odd iron and steel products including certain flat-rolled products; some stranded wire, ropes, cables; certain items of springs and leaves for springs of iron and steel; tubes, pipes and hollow profiles; diesel-electric locomotives; and some parts of railways.
- The Directorate General of Foreign Trade (DGFT), under the commerce and industry ministry has said that "import policy" for these 215 items "has been revised from 'free' to 'free' subject to compulsory registration under SIMS".

Background

- The Indian steel and aluminium industries have raised concerns that the trade war between the U.S. and China was leading to the dumping of steel and aluminium products in India that were originally meant for the other two countries.
- According to the data with the Ministry of Commerce, Indian imports of steel and iron had contracted 31% in 2016-17, the financial year before U.S. President Donald Trump imposed higher import duties on steel.
 - * The effect of Mr. Trump's announcement was not fully felt in the subsequent year as the announcement only came towards the end of the 2017-18 financial year.
 - * India's steel and iron imports reversed the contraction of the previous year, and grew 2.8% in 2017-18.
- The full effect of the U.S.' higher tariffs and China's retaliatory tariffs was clearly visible by 2018-19, during which India's imports of steel and iron grew more than 14%.

To ensure that steel and Aluminium are not dumped into India the Government has taken this measure of registration.

How will it work?

- The directorate said that the Steel Import Monitoring System (SIMS) will require importers to submit advance information in an online system for import of these items and obtain an automatic registration number

- This number can be obtained by paying a minimum fee of ₹500 and maximum of ₹1 lakh, depending on the value of the imports.
- The importer can apply for registration not earlier than 60 days before and not later than 15 days before the expected date of arrival of the import, and the registration number will remain valid for 75 days.

Significance

- It will also protect the domestic industry and help in taking anti-dumping actions. The import-export data will bring transparency and will help solve the issue of over-invoicing and under-invoicing.

INTERNATIONAL RELATIONS

1. Eastern Economic Forum (EEF)

Context

- Speaking at the Plenary Session of the 5th Eastern Economic Forum (EEF) in Vladivostok, Prime Minister Narendra Modi announced that India would extend a \$1 billion line of credit towards the development of the Russian Far East.
- This was the first instance of an Indian prime minister attending the East Economic Forum.

Details

- EEF was established by a decree of the President of the Russian Federation, Vladimir Putin, in 2015, with the aim of supporting the economic development of Russia's Far East, and to expand international cooperation in the Asia-Pacific region.
 - * It is a region extending between Lake Baikal - world's largest freshwater lake and deepest lake, and the Pacific Ocean.
 - * This is a region situated in the cold Siberian climate but more significantly, it shares borders with China, Mongolia, North Korea and Japan (maritime).
 - * On its own, it could be the eight largest - just behind India - in terms of area, and fourth least densely populated country.
- The Summits have roundtable conferences, panel sessions, business breakfasts, besides business dialogues and bilateral talks and agreements.

What has the EEF achieved till now?

- There are as many as 17 different countries which have invested in the Far East, according to the EEF website.
- These include regional and global heavyweights like China, Japan, South Korea, Australia, New Zealand, and Vietnam.
- As a result, 20 advanced special economic zones and five free ports have been put in place. A total of 1,780 new investment projects, worth over 3.8 trillion rubles, and 230 new enterprises have become functional, the EEF website says.

Vladivostok

- In Russian, Vladivostok is 'Ruler of the East'. Located on the Golden Horn Bay north of North Korea and a short distance from Russia's border with China, it is the largest port on Russia's Pacific coast, and home to the Pacific Fleet of the Russian Navy.
- It is the eastern railhead of the legendary Trans-Siberian Railway, which connects the Far East of Russia to the capital Moscow, and further west to the countries of Europe.

- At Vladivostok's massive port, shipping and commercial fishing are the main commercial activities. Automobiles are a major item of import at the port, from where they are often transported further inland.

Geostrategic Significance

- Realizing its geostrategic significance, India opened a consulate in Vladivostok in 1992. India was the first country to have a resident consulate in Vladivostok then.
- This Vladivostok-Chennai sea link is somewhat a counter to China's Maritime Silk Route (MSR) plan as part of One Belt One Road project.
 - * Vladivostok-Chennai shipping link is likely to pass through or very close to the South China Sea, which China has turned into an international geostrategic hotspot by claiming exclusive control over the resource rich maritime zone in the Pacific Ocean.
 - * There is an alternate possibility as well that Vladivostok-Chennai link would become an extension of existing India-Japan Pacific to Indian Ocean Corridor, which China considers as a challenge to its maritime OBOR plan in the region
- A busy Vladivostok-Chennai link means India strengthening its checks and balances equation with China.

The investment in the Far East, which is often neglected given that Russia is seen as a European power in the post-Soviet era, also underlines India's desire to draw Russia into its strategic forays in the Indo-Pacific.

Economic Importance

- An area of special interest for India is the exploration of hydrocarbon reserves along the coast of Russia's Far East.
- Russian Far East is a resource rich region in a hostile climate. It is rich in oil, natural gas, timber, gold and diamond among other resources. India requires all of them

Conclusion

- Current engagement of India with this region is limited to select pockets such as Irkutsk where the MiG and Sukhoi fighter planes are built and in Sakhalin where ONGC Videsh has invested over \$ 6 billion in oil and gas and exploration.
- The maiden visit by an Indian prime minister to Vladivostok is set to strengthen India's position in Asia-Pacific that has emerged as the kernel of future geo-strategy.

- This push to 'Act Far East' allows India to demonstrate its commitment to an area of concern for Moscow, thus reassuring its traditional partner that in an increasingly polarised world, India is confident of working with multiple alignments, even if they are at cross purposes with each other.

2. Exercise Maitree

- It is a joint military exercise between Indian Army and Royal Thai Army
- It is an annual training event which is being conducted alternatively in Thailand and India since 2006.
- Exercise MAITREE with Thailand is a significant in terms of the security challenges faced by both the nations in the backdrop of changing facets of global terrorism.
- The joint military exercise will enhance the level of defence co-operation between Indian Army (IA) and Royal Thailand Army (RTA) which in turn will further foster defence cooperation and bilateral relations between the two nations.

Context

- Joint Military Exercise MAITREE-2019 between India and Thailand was conducted at Foreign Training Node, Umroi (Meghalaya)

3. Exercise TSENTR 2019

- Exercise TSENTR 2019 is part of the annual series of large scale exercises that form part of the Russian Armed Forces' annual training cycle.
- The series rotates through the four main Russian operational strategic commands.
 - * Russia holds a major military exercise every year at one of its four military Commands i.e Vostok (East), Zapad (West), TSENTR (Centre) and Kavkas (South).
- The exercise aims at evolving drills of the participating armies and practicing them in the fight against the scourge of international terrorism thereby ensuring military security in the strategic central Asian region.
- The TSENTR-2019 strategic measures will focus on evaluating the level of troop preparedness, the acquisition of the required skills and raising the level of inter- operability and demonstrate the readiness of the participating armies.

Context

- Exercise TSENTR 2019 was conducted by Central Military Commission of Russia.
- The exercise TSENTR 2019 will comprise two modules.
 - * The first module will include counter- terror operations, repelling air strikes, reconnaissance operations and defensive measures

- * The second will focus on offensive operations.

4. Exercise Yudh Abhyas

- It is a joint military exercise between the Indian and US armies.
- The first edition was in 2004 and the exercise is designed to augment cooperation between the two armies while sharing training, cultural exchanges, and building joint operating skills.

Context

- The opening ceremony of Exercise Yudh Abhyas – 2019 was held at Joint Base Lewis MC Chord, Washington, USA.
- This is the 15th edition of the joint exercise.

5. 'Howdy, Modi'

- It was a mega diaspora event.
- The summit, with the tagline of 'Shared Dreams, Bright Futures' highlighted the contributions of Indian-Americans to enrich the American life as well as the key role played in strengthening relations between the two nations.
- The event included cultural program and an address by PM Modi.
 - * A 90-minute cultural program titled, 'Woven: The Indian-American Story' celebrated the contributions of Indian-Americans to the cultural, and social landscape of the United States.
- Modi has previously addressed similar gatherings at Madison Square Garden in New York and the Silicon Valley in California but this was the biggest ever gathering by a global political leader.

Why Houston?

- Beyond New York, the larger San Francisco area (including Silicon Valley) and Chicago, Houston, along with Dallas, has among the largest communities of Indian Americans.
- Modi has already held rallies in New York and San Francisco. Houston or Chicago were the logical next sites.

What is the political significance of the event?

- The White House had issued a statement saying, "It will be a great opportunity to emphasise the strong ties between the people of the US and India, to reaffirm the strategic partnership between the world's oldest and largest democracies, and to discuss ways to deepen their energy and trade relationship."
- The Mega event saw the participation of a large number of elected officials, including senators, congressmen, governors, judges, and business leaders.

How have earlier Prime Ministers of India invested in Indian Diaspora?

- Prime Minister Rajiv Gandhi was the first to appreciate the potential role diaspora could play in advancing national development and improving India's ties with the US.
- As he launched the reform era, P V Narasimha Rao sought investments from the diaspora.
- Atal Bihari Vajpayee formalised India's engagement with the diaspora by institutionalising the Pravasi Bharatiya Divas.
- But few leaders have showered the kind of personal and political attention on the diaspora that Modi has.
 - * Modi went beyond demanding that the diaspora do more for India. He promised that India would do more for them as well.

Role played by the Indian Diaspora

- The Indian diaspora (including non-resident Indians and persons of Indian origin) is estimated to be more than 30 million and growing.
- Its substantive concentration is in the Anglo-American world, the Gulf and the former colonies of the British empire. Its presence is growing beyond these traditional areas. So has its political and economic influence in the host nations.
- But nowhere is the presence of the diaspora more expansive than in the US. As a rich and accomplished minority, the Indian-American community has become influential in all walks of life in the US.
 - * In the last decade for example, the diaspora generated much needed political support in the US Congress for changing the American non-proliferation laws and facilitating civil nuclear cooperation with India.
 - * Today, the diaspora might once again have a critical role in informing the Congress and the wider public about the situation in Kashmir and explaining the historic context and the logic behind India's recent actions.
- In the current context, Mr. Trump's appearance at the rally and his effusive support for India were a reflection of the community's influence in U.S. politics.

Key issues remain unsettled

- The much-vaunted big-bang announcement on trade that was hinted at prior to 'Howdy, Modi' did not materialise.
- Talks may still be in progress over the more troublesome parts of a potential U.S.-India Free Trade Agreement (FTA), including tariffs on medical devices, electronic, telecommunications and dairy products; the expiration of India's preferential trade status under the Generalized System of Preferences

- Visible post-'Howdy, Modi' cracks are appearing in spheres other than trade as well. Mr. Trump characterising of Mr. Modi's remarks on Kashmir or Pakistan as "a very aggressive statement" belies the ostensible warmth that was on display at the stadium between the two leaders

However, Modi's visit to the US showcased some of the emerging problems with India's diaspora diplomacy.

1. First, Islamabad's imitation of Delhi in the mobilisation of Pakistani diaspora is certainly flattering.
 - While it is reasonable for Pakistan to get its diaspora to support the improvement of US-Pak relations, Islamabad is also firing at the Modi government from the shoulders of the Pakistani diaspora.
 - Besides galvanising the Pakistani-Americans, Islamabad is also mobilising the Muslim American communities on Kashmir and other issues.
 - Pakistan organised protests against Modi in both Houston and New York.
 - As India's outreach to the diaspora strengthens, Modi must also give some thought to a broader strategy of connecting with all people of South Asian origin in the future.
2. Second, while India welcomes the opportunity to serenade the American president in front of the diaspora, Delhi should be careful about not crossing some red lines.
 - China, for example, is getting into trouble in many countries for turning its relationship with the diaspora into an active intervention in the domestic politics of the host nation.

Conclusion

- In his embrace of the Indian American community at Houston, the PM reaffirmed the commitment to inclusive development of all Indians, irrespective of their caste or creed and emphasising the new possibilities for the collective progress of the Subcontinent as a whole.
- It also underlined that the main purpose of India's diaspora engagement in America is about elevating the strategic partnership with the US to a higher level.

The Real Deal

Context:

- Contrary to expectations that were generated after the Houston rally of the Indian Prime minister and US president, India and the United States failed to arrive at a trade deal.

Background:

- India shedding its pre 1990 stance of non-alignment has moved decisively towards forging a better relationship with USA. This is in line with the present global geo-political atmosphere and India's immediate needs.

- Following strategic alignment between the USA and India in the domain of defence and security post the signing of security agreements like the COMCASA and BECA, the granting of Strategic Trade Authorization-1 (STA-1) status by the United States, the call for better economic relations between the two for harnessing each other's potentials was gaining ground. A trade deal was thought as necessary.
- Despite similar worldviews on many issues, India and USA have many differences when it comes to trade and investment that has cast a shadow over ties between the two big democracies. Both the countries have also filed cases against each other's trade practices at the WTO dispute settlement board. A trade deal can reduce the chances of recurrence of such disputes.
- Negotiations were on for a trade deal and an announcement was expected during the PM's US visit. Due to numerous sticking points during negotiations instead of a full trade deal, a limited trade deal was targeted. However India and the United States failed to arrive even at a limited trade deal.

Challenges:

- The deal stumbled over duties imposed by India on ICT (information and communication technology) products from the US.
 - * While America wanted the 20% duty on mobile phones and ethernet switches to be reduced or eliminated India didn't oblige keeping in mind the interests of local manufacturing units.
- America demands greater access to the Indian market for its medical devices such as stents and knee implants.
 - * They have demanded for the removal of price control mechanism on these devices. Loosening price controls now is not an option for India as that would push up prices of these products in the country making it unaffordable for millions of needy patients.
- America demands access to the Indian market for its dairy and agricultural products.
 - * Keeping with the precarious position of the Indian agriculture system India has so far resisted such demands fearing the flooding of markets by imported milk and subsequent crash in prices. This would deprive the farmers of an important source of income.
- The US demands for higher level of protection for the intellectual property rights while India considers the need to balance the IPRs and the public needs.
 - * The US has placed India under special 301 list. The Special 301 Report is prepared annually by the Office of the United States Trade Representative (USTR) that identifies trade barriers to United States companies and products due to the intellectual property laws, such as copyright, patents and trademarks, in other countries.
- India has mandated foreign firms to store their payments data locally, hurting US companies such as Mastercard and Visa.
 - * Data protection is another contested issues between the U.S. and India. The United States has been pushing for data flow across borders in several countries including India while India claims that data generated in India is a property of the country and India is well within its right to regulate and tax such data.
- India's new draft policy for its e-commerce sector, focusing on data localisation, improved privacy safeguards and tighter e-commerce foreign investment rules have forced Amazon.com Inc and Walmart Inc to rework their business strategies in the country.
 - * Walmart last year invested \$16 billion in Indian online retailer Flipkart. US has been critical of this move, terming them as most discriminatory and trade-distortive. US has repeatedly raised the American companies concerns about market access and the lack of a level playing field in important sectors in India.
- The H1B visa issue and the fears of the reversal of this scheme has become a sore point between the two countries.
 - * India dragged the US to WTO's dispute settlement body against the latter's measures imposing increased fees on certain applicants for L-1 and H-1B visa categories.
 - * India has stated that the move would impact Indian IT professionals. India has alleged that the US is violating its obligations under General Agreement on Trade in Services (GATS), a binding agreement for all WTO member countries.
- Following The US decision to withdraw special duty benefits under the Generalized System of Preferences (GSP), India has repeatedly asked for restoration of the Generalised System of Preferences which gives preferential market access for its products in the U.S.

Way forward:

- While the strategic partnership between the United States and India remains robust, some analysts see the relationship as becoming significantly strained if current trade disagreements are not managed properly.
- In the backdrop of the escalation of the US- China trade war even a limited deal with India would be beneficial for the US. With Indian economy in the grip of a major slowdown, any concessions from India on imports of American products may not have gone down well both politically and in economic terms.
- There is tremendous potential in India-US trade relations. Bilateral trade between India and US has almost touched \$150 billion and there has been a growth every year in the last few years. To realize the growth potential of this relation will need some give and take from both countries.

- There is a need to narrow down the differences gradually on a case by case approach. Trade negotiations are never easy and for them to succeed, both sides have to believe in a policy of give and take.

6. Impeachment inquiry against Trump begins

Context:

The Speaker of the United States House of Representatives announced that the House would begin a formal impeachment inquiry against President Donald Trump to hold him accountable for betrayal of his oath of office, betrayal of the national security and betrayal of the integrity of elections.

Details:



- Trump is alleged to have tried to enlist a foreign country, Ukraine, on his side in a personal political battle with Joe Biden, the senior Democratic Party leader who was President Barack Obama's vice-president from 2009 to 2017.
- Biden is the frontrunner to be the Democratic party's nominee against Trump in the presidential election of 2020.
- In a telephone conversation, Trump is alleged to have pressured Ukrainian President Volodymyr Zelenskyy to open a corruption investigation in his country against Biden and his son Hunter Biden.
- Before this call, the President issued a personal order to freeze more than \$391 million of US aid to Ukraine.
- The announcement by Pelosi greatly increases the possibility that Trump will become the fourth individual in the 230-year history of the American presidency to face removal from office by impeachment.
- None of the previous three — Andrew Johnson (1865-69), Richard Nixon (1969-74) and Bill Clinton (1993-2001) — was removed as a result of impeachment.

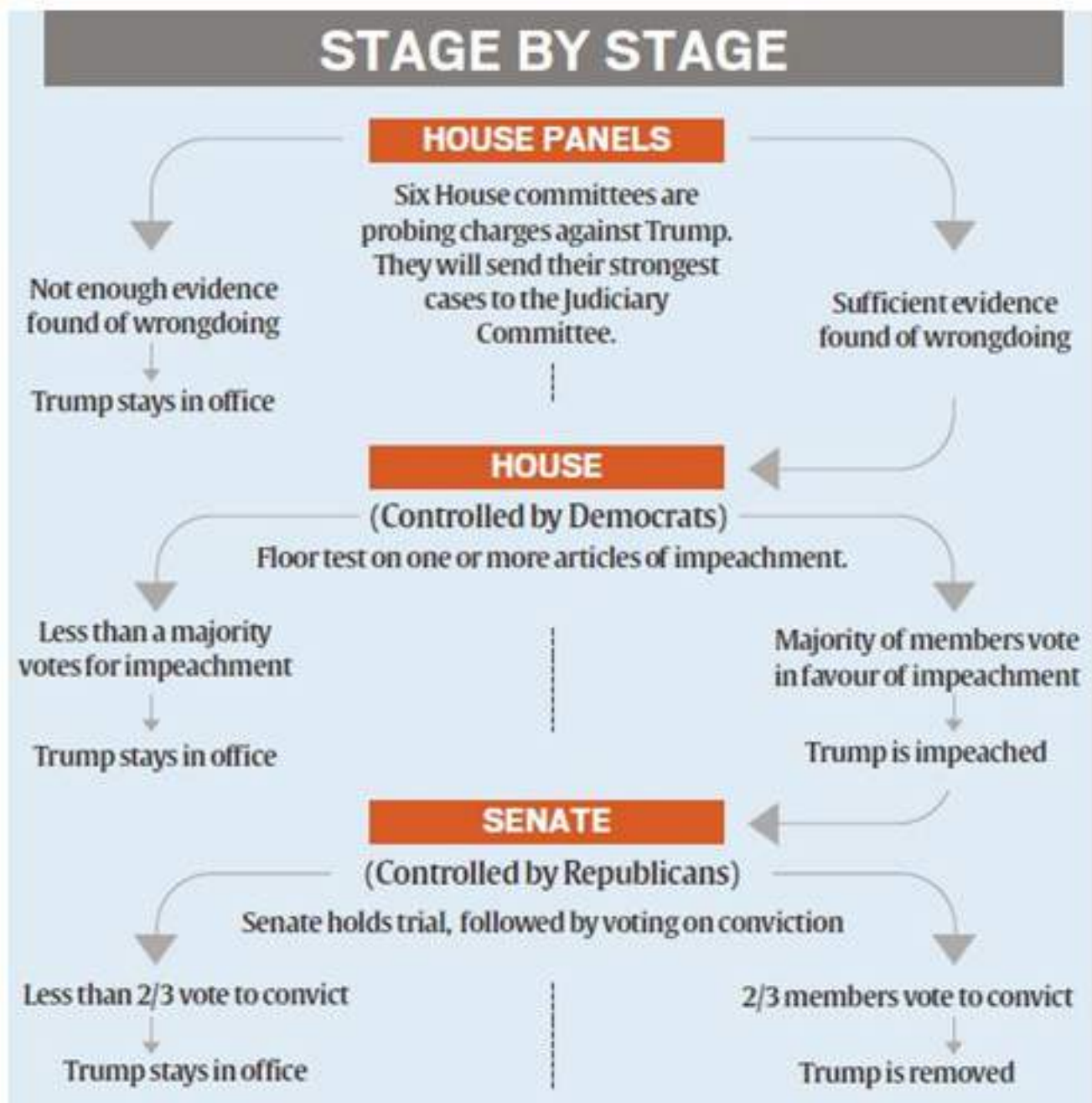
What it means?

- Impeachment is a provision that allows Congress to remove the President of the United States.
- Under the US Constitution, the House of Representatives (Lower House) has the "the sole power of impeachment" while the Senate (Upper House) has "the sole power to try all impeachments".
- The Chief Justice of the US Supreme Court has the duty of presiding over impeachment trials in the Senate.

Grounds for impeachment

- The President can be removed from office for "treason, bribery, or other high crimes and misdemeanors".
- What constitutes these "high crimes" and "misdemeanors" (misdemeanors), however, is not clearly spelt out.
- The New York Times explained that the expression "high crimes and misdemeanors" came out of the British common law tradition.
- Essentially, it means an abuse of power by a high-level public official. This does not necessarily have to be a violation of an ordinary criminal statute.
- Historically, in the US, it has encompassed corruption and other abuses, including trying to obstruct judicial proceedings.

Impeachment process:



7. India-BLEU

Context:

- The 16th session of the Joint Economic Commission (JEC) between India and Belgium Luxembourg Economic Union (BLEU) was convened in New Delhi.

Details:

- The three countries (India – Belgium – Luxembourg) reiterated the importance of the JEC towards the development of bilateral economic and trade relations through facilitating dialogue and enhancing cooperation on a wide range of issues of mutual interest, such as, transportation and logistics, renewable energy, aerospace and satellites, audio and visual industry, agro and food processing industry, life sciences, ICT, traditional medicine, Ayurveda and yoga, and tourism.

- JEC sessions are convened based on an agreement signed in 1990 in New Delhi.
- It is a biennial event (happens once in two years).
- It is held in the capital cities of the three countries alternatively.
- It is the main vehicle for discussing economic and commercial issues between India and BLEU.
- The JEC was set up in 1997.

Facts about the trade between India and Belgium –

Luxembourg:

- The bilateral trade between India and Belgium grew 41% in 2018 – 19 compared to 2017 – 18.

- The bilateral trade between India and Luxembourg grew 150% for the same time period.
- India is Belgium's second-largest export destination and fourth-largest trade partner outside the European Union with a significant contribution from the Indian diaspora.
- Leading exports from Belgium to India:
 - * Gem and jewellery (rough diamonds)
 - * Chemical and chemical products
 - * Machinery and mechanical products
- Major exports from India to Belgium:
 - * Gem and jewellery (finished products)
 - * Base metals and articles
 - * Chemicals and chemical products
- There are around 160 Belgian companies in India.
- Many Indian software companies have established base in Belgium to cater to the Belgian and European markets.

8. India-China Financial Dialogue

- This is a mechanism between India and China with an aim to promote cooperation in the financial sector.
- This is generally held between delegations led by the Secretary, Department of Economic Affairs, Ministry of Finance from the Indian side, and by the Vice Minister, Ministry of Finance from the Chinese side.
- The dialogue is held on various financial matters such as the macroeconomic situation and policy, cooperation in multilateral framework, bilateral investment and financial cooperation.

Context

- The 9th India-China Financial Dialogue was held in New Delhi

Details:

- In 2019 both sides committed to promoting a favorable environment to enable continuous growth of bilateral trade and investment, strengthen their efforts to promote a more balanced and healthier development of trade and economic cooperation and further enhance the closer development partnership between the two countries.
- The next round of India-China Financial Dialogue is to be held in China.

9. IN-RSN-RTN Trilateral Exercise

Context

- A maiden trilateral exercise, involving Republic of Singapore Navy (RSN), Royal Thailand Navy (RTN) and Indian Navy (IN) was commenced at Port Blair

Details:

- It is aimed at bolstering the maritime inter-relationships amongst Singapore Thailand and India, and contribute significantly to enhancing the overall maritime security in the region.
- This would also strengthen the mutual confidence amongst three navies in terms of interoperability and development of a common understanding of procedures.
- Besides fostering co-operation, the maiden IN-RSN-RTN Trilateral exercise would provide an opportunity to participating navies to come together in a spirit of collaboration to nurture stronger ties.

10. India-China Strategic Economic Dialogue (SED)

- It was set up between erstwhile Planning Commission and the National Development and Reform Commission (NDRC), China during the visit of Chinese Prime Minister Wen Jiabao to India in December 2010
- It has served as an effective mechanism for enhancing bilateral practical cooperation.
- Under the aegis of the SED, senior representatives from both sides come together to constructively deliberate on and share individual best practices and successfully identify sector-specific challenges and opportunities for enabling ease of doing business and facilitating bilateral trade and investment flows.

Structure

- It is led by NITI Aayog (earlier Planning Commission) on the Indian side and National Development and Reforms Commission (NDRC) on the Chinese side
- It is held annually alternately at the capital cities of the two countries

Context

- Three day dialogue was held from September 7-9 in New Delhi
- The dialogue comprised of round table meetings of joint working groups (JWG) on infrastructure, energy, high-tech, resource conservation, pharmaceuticals and policy coordination

Mutual agreements:

- Policy Coordination:
 - * The two sides undertook in-depth discussions reviewing trade and investment climates in order to mutually identify complementarities and harness synergies to this effect future engagement.
- Working Group on Infrastructure:
 - * The two sides noted the significant progress made in the feasibility study on Chennai-Bangalore-Mysore railway upgradation project and personal training of Indian senior railway management staff in China, both of which have been completed.

- * The two sides agreed to identify new projects for cooperation as well as support enterprises to expand cooperation in the transport sector.
- Working Group on High-Tech:
 - * The two sides assessed the achievements made since the 5th SED and exchanged views on regulatory procedures of ease of doing business, development of artificial intelligence, high-tech manufacturing, and next-generation mobile communications of both countries.
- Working Group on Resource Conservation and Environmental Protection:
 - * The two sides discussed and reviewed the progress made in the fields of water management, waste management, construction & demolition waste and resource conservation.
- Working Group on Energy:
 - * Both countries identified future areas of collaboration and resolved to work on Renewable Energy space, clean coal technology sector, Smart Grid & Grid integration and Smart meters & E-mobility sectors.
- Working Group on Pharmaceuticals:
 - * It was also decided that both sides should promote pragmatic cooperation, strengthen complementary advantages in pharmaceutical industry and explore cooperation for promoting Indian generic drugs and Chinese APIs.

11. Indo – Thai CORPAT

- * It is a collaborating exercise between the Indian and the Thai navies.
- * It is being conducted twice a year since 2003.
- * This exercise reflects both forces' shared commitment for the peaceful Indian Ocean and international maritime security and cooperation.

Objectives of the Indo – Thai CORPAT

- Ensure effective implementation of United Nations Conventions on Laws of the Sea (UNCLOS) which specify regulations regarding
- Protection and conservation of natural resources
- Conservation of marine environment
- Prevention and suppression of illegal, unregulated fishing activity/ drug trafficking/ piracy
- Exchange of information in the prevention of smuggling, illegal immigration
- Conduct of Search and Rescue operations at sea

Context:

- The 28th edition of the India -Thailand Coordinated Patrol (Indo-Thai CORPAT) between the Indian Navy (IN) and the Royal Thai Navy (RTN) was conducted from 05 – 15 September 2019 at Bangkok.

12. India, South Korea seal logistics pact

Context:

- It is a India and South Korea concluded a military logistics agreement during the visit of Defence Minister Rajnath Singh to Seoul.

Details:

- Defence Minister Rajnath Singh and his South Korean counterpart comprehensively reviewed bilateral defence cooperation and signed two agreements.
 - * To expand defence educational exchanges
 - * To extend logistical support to each other's navies.
- They discussed the ongoing cooperation at Service-to-Service level and prospects for enhanced cooperation between defence industries of India and Korea.
- The two countries also formulated a forward-looking road map to take bilateral defence industry cooperation to the next level.
- On the road map, a number of proposed areas of cooperation in land, aero and naval systems, research and development cooperation and collaboration in testing, certification and quality assurance have been listed.
- Singh also invited the South Korean industry to explore the feasibility of local production of items, used in main weapon systems imported by Defence public sector undertakings (PSUs).

Conclusion:

- This foreign cooperation initiative would greatly help interoperability. India will be able to get assured logistic support when it operates in the Indo-Pacific in the ports of South Korea. Such agreements extend the reach, presence and sustainability of Navy ships when deployed at great distances from home ports.

13. Lotus Tower- Sri Lanka

Context

- Sri Lanka unveiled South Asia's tallest tower, costing over USD 100 million, 80 per cent of which has been funded by China under the Belt and Road Initiative (BRI).

Details

- The 350-metre-tall 17-storey Lotus Tower, located in the heart of Colombo city, comprises a television tower, a hotel, a telecommunications museum, restaurants, auditorium, an observation deck, a shopping mall and a conference centre.
- The tower, which is expected to function as Sri Lanka's 'digital TV tower', is built with fibre optic cables and is fully equipped with necessary telecommunication equipment.

14. Motihari-Amalekhgunj Petroleum Pipeline

Context

- Prime Minister Narendra Modi and his Nepalese counterpart KP Sharma Oli “switched on” the Motihari-Amalekhgunj Petroleum Pipeline from their offices in New Delhi and Kathmandu.

Background

- The Motihari-Amalekhgunj pipeline project was first proposed in 1996, but progress was slow.
- Things began to move after Prime Minister Narendra Modi visited Kathmandu in 2014.
- In 2017, state-owned Indian Oil Corporation (IOC) signed a petroleum trade agreement to supply about 1.3 million tonnes of fuel annually to Nepal with a promise to double the volume by 2020.
- In July 2019, the two countries successfully concluded a “testing transfer” through the oil pipeline.

Details

- The pipeline will transport fuel from Barauni refinery in Bihar’s Begusarai district to Amalekhgunj in southeastern Nepal, situated across the border from Raxaul in East Champaran district.
- The Amalekhgunj fuel depot will have the capacity to store up to 16,000 kilolitres of petroleum products.

Significance

- The 69-km pipeline will drastically reduce the cost of transporting fuel to landlocked Nepal from India.
- The Motihari-Amalekhgunj pipeline will help in tackling the oil storage problem in Nepal and doing away with transportation of petroleum products through tankers

15. Nuclear Suppliers Group (NSG)

- It is a group of nuclear supplier countries that seek to prevent nuclear proliferation by controlling the export of materials, equipment, and technology that can be used to manufacture nuclear weapons.
- NSG is a transnational body comprised of nuclear supplier countries that aims to control the proliferation of nuclear weapons by curbing the export of nuclear weapons development materials and related technology.
- It ensures that the materials and technologies transferred to any nation are not diverted to developing nuclear weapons.
- NSG consists of 48 members which include the five nuclear-weapon states US, UK, France, China, and Russia.
- The guidelines of NSG are not binding.
- Decisions, including on membership, are made unanimously by consensus.

- It is said to have been created as a sequel to India’s first nuclear test conducted in 1974.

Why is India not a part of NSG?

- The NSG controls most of the world’s nuclear trade.
- While the U.S. and other countries support India’s entry into the NSG, China has opposed it saying India has not signed the Nuclear Non-Proliferation Treaty (NPT).
- However, it is important to note that membership of NPT is not a condition for becoming a member of NSG. It is only a guiding principle to which consideration needs to be given.
- Many other countries have also opposed India’s entry into NSG but New Delhi has been making constant efforts to blow away the resistance.
- The opponents argue that granting it membership would further undermine efforts to prevent proliferation and it would also infuriate India’s rival Pakistan.

Why does India want to Join NSG?

- India seeks to significantly expand its nuclear power generation and also enter the export market in the coming years.
- Joining the NSG will give India better access to low-cost, clean nuclear energy important for its economic growth.
- Following intense debates, that considered India’s Nuclear activities and appreciated its commitment to non-proliferation, India got an NSG waiver in 2008.
- Although the 2008 NSG waiver to India does provide significant possibilities for India to engage in civilian nuclear trade with other countries (and indeed, India has entered into such agreements with several countries like Russia, France, UK, USA, Kazakhstan, Australia, and others), membership of the NSG will provide greater certainty and a legal foundation for India’s nuclear regime and thus greater confidence for those countries investing billions of dollars to set up ambitious nuclear power projects in India.
- As India’s international political, economic, military and strategic profile and clout increases, India would like to move into the category of international rule-creating nations rather than stay in the ranks of rule-adhering nations.

Context:

- At the Bloomberg Global Business Forum in New York, Prime Minister Narendra Modi made a pitch for India’s membership of the Nuclear Suppliers Group (NSG).

16. OIC remarks on Article 370

Context:

- The Organisation of Islamic Cooperation (OIC) asked India to “rescind” its actions in Kashmir and abide by the relevant UN Security Council resolutions following New Delhi’s decision to revoke Jammu and Kashmir’s special status.

- The foreign ministers of the OIC Contact Group on Kashmir discussed the Indian government's decision to revoke Article 370 in Jammu and Kashmir and the state's bifurcation into two Union Territories during a meeting on the sidelines of the 74th session of UN General Assembly

Does it have any impact on India?

- From the mid-1990s, when this Contact Group was formed, it has issued several statements on behalf of Pakistan. Countries like Saudi Arabia, Azerbaijan, Turkey, Niger have issued statements criticizing the government's actions.
- But the organisation which boasts of a membership of 57 countries has marginal influence in world Affairs.
- It is also extremely doubtful if the statement issued by the Contact Group reflects faithfully the national positions of the individual member states.
- The United Arab Emirates, for instance, conferred the Order of Zayed, its highest civilian award on Prime Minister Narendra Modi, more than a week after New Delhi's moves on Article 370, and declared that Kashmir was India's internal matter.
- The OIC's record of conflict resolution when it comes to issues between OIC member states is poor

In practical terms, its pointless attempts to meddle in Kashmir, including by appointing a so-called special envoy on Jammu and Kashmir, have amounted to nothing.

Way Forward

- The organisation constituted on religious lines, but seeking to fulfil geopolitical interests, needs reforms from within. It could begin by asking Pakistan to change its state policy on terrorism.
- The OIC would do a lot better if it did something useful to better the lot of its members or mediate between warring Saudi Arabia and Yemen

- New Delhi at the same time must also demonstrate to the world that its new Kashmir policy is in the larger interest of all Kashmiris.

17. Pangong Tso: Face-off between India, China soldiers in Ladakh

- In the Ladakhi language, Pangong means extensive concavity, and Tso is lake in Tibetan.
- Pangong Tso is a long narrow, deep, endorheic (landlocked) lake situated at a height of more than 14,000 ft in the Ladakh Himalayas.
- The western end of Pangong Tso lies 54 km to the southeast of Leh.
- The legendary 19th century Dogra general Zorawar Singh is said to have trained his soldiers and horses on the frozen Pangong Lake before invading Tibet.

Strategic significance

- The LAC cuts through the lake, but India and China do not agree on its exact location.
 - As things stand, a 45 km-long western portion of the lake is in Indian control, while the rest is under China's control.
 - Most of the clashes between the two armies occur in the disputed portion of the lake.
 - By itself, the lake does not have major tactical significance. But it lies in the path of the Chushul approach, one of the main approaches that China can use for an offensive into Indian-held territory.
- * Indian assessments show that a major Chinese offensive, if it comes, will flow across both the north and south of the lake.



- * During the 1962 war, this was where China launched its main offensive — the Indian Army fought heroically at Rezang La, the mountain pass on the southeastern approach to Chushul valley
- Over the years, the Chinese have built motorable roads along their banks of the Pangong Tso.
- It points to the importance accorded by the Chinese to the area.

The dispute in the area:

- The difference in perception over where the LAC lies on the northern bank of the lake, makes this contested terrain.
- In 1999, when the Army unit from the area was moved to Kargil for Operation Vijay, China took the opportunity to build 5 km of road inside Indian Territory along the lake's bank.
- The 1999 road added to the extensive network of roads built by the Chinese in the area, which connect with each other and to the G219 Karakoram Highway.
- From one of these roads, Chinese positions physically overlook Indian positions on the northern tip of the Pangong Lake.

Context:

- Army sources said that the soldiers of India and China were engaged in a face-off near Pangong Tso lake in eastern Ladakh, which ended after a local delegation-level meeting.
 - * In normal course, the two patrols, after coming face to face, would have engaged in a "banner drill", displaying a banner asking the other side to vacate its territory.
 - * This drill could last a few minutes to an hour — but barring some occasional jostling, the two sides would disengage quietly.

Details:

- A delegation-level meeting was immediately called at the Border Personnel Meeting (BPM) point in Chusul, after which the issue was resolved.
- China holds a large part of Pangong Tso, which has seen face-offs in the past both over land and on the water as both sides patrol on speed boats.
- There has been an overall reduction in face-offs between the two armies.
- However, transgressions are a common feature along the unsettled Line of Actual Control (LAC) and the two sides have instituted several mechanisms to resolve such issues

18. Petronet signs MoU with Tellurian

Context

- Petronet LNG Ltd, India's biggest liquefied natural gas importer, has signed a preliminary deal to buy a stake in Tellurian Inc's proposed Driftwood project in Louisiana and import 5 million tonnes a year of Liquefied natural gas (LNG).

Significance

- Petronet will be able to deliver clean, low-cost and reliable natural gas to India from Driftwood.
- Increasing natural gas use will enable India to fuel its impressive economic growth contributing to a cleaner environment
- India's gas demand is expected to be driven by the fertilizer, power, city gas distribution, and steel sectors.

Indian company's board had disfavored the Tellurian deal at a meeting in May 2019. Reasons for the board's disquiet included:

- Major price drops in LNG
- India's demand shortfall given the recent downturn in manufacturing, coal dependence, and the lack of regasification plants and pipeline infrastructure in India.
- Expected LNG supply from the Indian market
- A negative experience with "locking in" contracts for a long period.

19. SCO Military Medicine Conference

Context

- It is the first military cooperation event hosted by India after becoming a full-time member of the SCO.

Details

- The conference will be conducted by the Indian Armed Forces under the aegis of Headquarters Integrated Defence Staff (HQ IDS), with the aim to share best practices in the field of military medicine, build capacities and overcome common challenges.
- During the conference, the Indian Armed Forces will also demonstrate the Rapid Action Medical Team and organise a visit for the delegates to the Army Research and Referral Hospital.
- Deliberations will take place between military medicine experts of SCO Member States on rendering of combat medical support, humanitarian assistance during disasters and measures to improve patient safety.
- The SCO Member States will be represented by senior military medical practitioners.

20. Supreme Court of UK: Suspending Parliament was unlawful

Background

- The prime minister asked Queen Elizabeth II to approve the suspension of Parliament from September 10 to October 14 on the basis of needing time to prepare a new legislative agenda.
- This could allow a "no deal" Brexit to be forced through

- The move to “prorogue” parliament will effectively lock lawmakers out of the building for several days in early September, possibly preventing them from making laws that would force Britain’s exit from the European Union to be delayed or even canceled if a deal cannot be agreed.
- Britain is scheduled to leave the E.U. on Oct. 31, but currently has not accepted a withdrawal agreement which would lessen the shock of its departure.
- Johnson has pledged to leave with or without such a deal
 - * Johnson’s opponents have accused him of proroguing parliament in order to make a “no deal” Brexit more likely.

What is prorogation?

- The prorogation of parliament is when the Queen ends one parliamentary session so that another can begin.
- Prorogation can only happen when the Queen says so and it is only after the Prime Minister has requested it. Lawmakers do not have a say in preventing prorogation.
- In practice, it means sitting lawmakers will not meet for several weeks, meaning they cannot pass laws.

What might ‘no deal’ mean for everyday Brits?

- Britain’s economy is closely tied to the E.U.’s. The bloc is Britain’s biggest trading partner, accounting for 44% of all U.K. exports.
- As a member state, Britain can trade with other members unburdened by customs checks or tariffs.
 - * Common regulations mean goods do not have to be examined when they cross borders. But when Britain leaves, those things will change.
- Without a deal, U.K. trucks arriving from the E.U. will face customs checks the day after Oct. 31.
 - * It might mean exports from the U.K. are subjected to stricter examinations at ports, to check they comply with strict E.U. regulations.
 - * The increased costs to companies will almost certainly mean lines at ports, shortages in shops and raised prices across the board.
 - * Without common regulations, Europeans will have no guarantee that British products have been manufactured to the E.U.’s strict standards.
 - * And with Britain no longer enjoying free trade with the E.U., goods flowing in each direction will have to be tracked.
 - * The result of that could be food rotting in the backs of trucks and reduced choice – and increased prices – for British consumers.

What was Johnson’s Plan?

- In the 2016 Brexit referendum, and in the most recent U.K. election in 2017, no party campaigned to leave the E.U. without a deal.

- But Johnson was advocating leaving on Oct. 31 “do or die,” or in other words, with or without a deal.

Why did the Supreme Court get involved?

- Johnson has been accused of an unlawful “abuse of power.” Judges have been asked to determine whether he misled the queen.
- The politically neutral head of state is required to act upon the advice of the prime minister.

Earlier two British High Courts had come to opposite conclusions.

- First, the High Court in London ruled that the Prime Minister’s advice to prorogue is a political issue and, therefore, not justiciable. The courts cannot look into it.
- Second, the Scottish High Court — more correctly known as the Inner House of the Court of Session — took the opposite view.
 - * It ruled the Prime Minister’s advice can be reviewed, not on ordinary judicial grounds of review but on fundamental constitutional principles.
 - * Parliament’s role scrutinizing government, which it called a central pillar of the British Constitution, is one such principle.
 - * Therefore, any advice motivated by an intention to stymie Parliament is unlawful.

Questions before the Supreme Court of UK

The issue was essentially whether Johnson had the right to prorogue Parliament, and whether Britain’s courts had the power to stop him.

- The Government argued that the courts had no business jumping in because the decision to prorogue Parliament lay “in the territory of political judgment, not legal standards”.
- But the court said it was “firmly of the opinion” that the question of the “lawfulness of the Prime Minister’s advice to Her Majesty is justiciable”.
 - * Courts “have exercised a supervisory jurisdiction over the lawfulness of acts of the Government for centuries”
 - * The Justices reasoned: “Although the United Kingdom does not have a single document entitled ‘The Constitution’, it nevertheless possesses a Constitution, (which) ...includes numerous principles of law, which are enforceable by the courts in the same way as other legal principles... It is (the courts’) particular responsibility to determine the legal limits of the powers conferred on each branch of government, and to decide whether any exercise of power has transgressed those limits. The courts cannot shirk that responsibility merely on the ground that the question raised is political in tone or context.”

What did the SC say?

- A unanimous decision of all 11 judges of the British Supreme Court — the largest constitutional bench possible — has declared Boris Johnson's decision to prorogue the British Parliament "unlawful, void and of no effect".
- The order to prorogue, which was based on Mr. Johnson's advice to the Queen, has been "quashed".

How did the SC come to this conclusion?

- First and foremost, is the advice to prorogue justiciable? The court concluded it is.
- Second they addressed whether the prerogative of a prime minister can be inquired into and, again, concluded that it can be challenged on the grounds of its limits.
- This led to a third question: can the Executive use its prerogative to stop Parliament making laws by exercising that prerogative to determine how long Parliament can function?

It was the answer to this third question that led to the unanimous decision of all 11 judges to declare the prorogation unlawful.

- The judges decided that the power to prorogue is limited by its effect on the rest of the Constitution.
- In this case it "prevented parliament from carrying out its constitutional role".
- Distinguishing between prorogation and a recess, the Supreme Court said that the former meant Parliament cannot "meet debate or question ministers". Its conclusion was blunt: "the effect on the fundamentals of our democracy was extreme".

The case touched on the powers of all the key institutions of Britain's unwritten constitution.

- To start with, it defined the powers of Parliament versus those of the judiciary.
- It determined at what point the jurisdiction of the legislature ends and that of the executive starts.
- It touched upon the constitutional role of the Queen.
- The Supreme Court has underlined that the government and prime minister are the "junior" partners in the British constitution - that Parliament is the "senior" partner - and the junior cannot tell the senior, which acts for the people, what to do.
- The Supreme Court is underlining that if there is an exceptional use of executive powers by the prime minister that infringes on parliamentary democracy, judges have the power to intervene.

Conclusion

- The Supreme Court was set up to resolve the most complicated legal and constitutional questions of the day - and in this judgement it has shown it is not afraid to tread into matters that judges in previous eras would have feared to have been too political.
- And this is why this judgement is so important for the future of the British constitution.

A test for judicial review in India**Context**

- The United Kingdom Supreme Court in its judgment has decided that the prorogation of parliament by the Queen of England, acting on the advice of the Privy Council, was unlawful on the grounds of parliamentary sovereignty and democratic accountability.
- By doing so, the U.K. Supreme Court asserted its majesty in the constitutional framework and functioned as the true guard.

Similar instances in India

- There have been at least two key executive actions in 2019 that have undermined parliamentary processes: Reservation for Economically Weaker Sections and the Bills passed around Jammu and Kashmir (J&K).
- The Constitutional (One Hundred and Third) Amendment Act 2019 providing reservation for Economically Weaker Sections was brought for consideration of Parliament in less than 48 hours from the time the decision was taken by the Centre. By doing so, the government ensured that there was insufficient time for Parliament scrutiny.

Violation of rules

- The Monsoon Session of Parliament was originally scheduled to end in July 26 but was extended to August by the government.
 - * On August 5, the Jammu and Kashmir Reservation (Second Amendment) Bill, 2019 was suddenly introduced to the 'Parliamentary List of Business'.
 - * When the Rajya Sabha convened, Home Minister Amit Shah, moved the Statutory Resolution proposing to nullify all clauses in Article 370 apart from Clause (1). Copies of the Bill and the Resolution were not provided to MPs until it was presented by the Home Minister.
- The conventional practice is that legislative documents are provided at least a few days before they are tabled. This is done for the MPs understand the contents of the legislation, seek views and formulate their positions better.
- The manner in which both these Bills were introduced in Parliament was also in direct violation of the Rules of Procedure and Conduct of Business.
 - * In Rajya Sabha, specifically, Rule 69 talks about 'Motions after Introduction of Bills' and 'Scope of Debate'.
 - * According to the proviso of Rule 69, there is discretion given to the Chairman in exceptional situations.
 - * But, every discretionary power does require that the Chairman must exercise it judiciously and with proper application of mind.

- * There has been no cogent or detailed explanation given by those presiding our Houses of Parliament as to why the government has been allowed to flout parliamentary rules and convention on more than one occasion.

Issue Area

- Such actions of government in Britain and India have revealed a complete disregard for established parliamentary processes. This has placed democratic institutions in the peril of being weakened.

Lessons for India

- The principle of judicial duty stands reiterated: "... the courts have the responsibility of upholding the values and principles of our constitution and making them effective: And it is their particular responsibility to determine the legal limits of the powers conferred on each branch of government, and to decide whether any exercise of power has transgressed those limits."
- In habeas corpus writ petitions challenging the detentions of political leaders and others in Kashmir, the Supreme Court refused to examine the legality of the matter immediately.
 - * On the constitutional questions that have been raised by the abrogation of Jammu and Kashmir's special status, the court does not seem to think this is a matter urgent enough for a swift hearing. It has scheduled a hearing for October.
 - * Regardless of the merits of the petitions, the Court did not show much sense of urgency in dealing with them.
 - * A Court conscious of its constitutional duties would have given a decision either ways, at least in the habeas corpus petitions, by now. The approach of the Supreme Court in these matters has unfortunately been evasive
- Another remarkable feature of the UK Courts' hearing was its openness and transparency.
 - * The hearings were completely live streamed. The written submissions of the parties were uploaded in the website.
 - * Also, important updates about the case were announced through the official twitter handle of the UK Supreme Court.
 - * This is a significant gesture underlining the democratic nature of the Court. It sends out a warm signal that the Court is not an elitist or exclusivist institution which shuns public participation. Encourage public engagement with judicial process makes it more meaningful.
 - * In India, the Supreme Court had given green signal for live streaming of court proceedings in its September 2018 decision. Live-streaming of court proceedings will effectuate the "public right to know" and bring in more transparency in judicial proceedings, the court said. Even after a year, the decision has not seen implementation.

Conclusion

- As the highest constitutional court, the Supreme Court has the discretion to decide what matter needs its urgent attention.
- But this discretion must be exercised with public good as the driving force. In this, the UK court has set an example that the Indian judiciary would do well to emulate.

21. Trump's peace negotiation with Taliban

Context

- U.S. President Donald Trump said he cancelled peace talks with Afghanistan's Taliban leaders after the insurgent group said it was behind an attack in Kabul that killed an American soldier and 11 other people.
- Donald Trump also tweeted that he was cancelling meetings with Taliban and Afghan President Ashraf Ghani in Camp David.

Background

- Taliban fighters now control more territory than at any time since 2001, launched fresh assaults on the northern cities of Kunduz and Pul-e Khumri and carried out two major suicide bombings in the capital Kabul.
- One of the blasts, a suicide attack in Kabul took the life of U.S. Army Sergeant 1st Class Elis from Puerto Rico, bringing the number of American troops killed in Afghanistan in 2019 till September to 16.

Draft Peace Deal

Earlier U.S. and Taliban negotiators struck a Draft Peace Deal which could lead to a drawdown in U.S. troops from America's longest war.

- Under the draft accord, thousands of U.S. troops would be withdrawn over the coming months in exchange for guarantees Afghanistan would not be used as a base for militant attacks on the United States and its allies.

Taliban's resurgence

- The Taliban has rejected calls for a ceasefire and instead stepped up operations across the country.
- Taliban has been continually engaging in a series of wanton attacks against civilians throughout the course of the talks that the U.S. had with the group in Qatar. One estimate suggests that it has engaged in 173 terror attacks resulting in 1,339 fatalities in 2019 alone.
- For Afghans, the Taliban's recent escalation of attacks has underscored fears it may be impossible to reach a stable settlement following any complete U.S. withdrawal.
 - * Many have worried about a fracture along ethnic and regional lines, with Persian-speaking Tajiks and Hazaras from the north and west against southern and eastern Pashtuns, the group that have supplied most of Afghanistan's rulers and where the Taliban draw most support.

- The Taliban has perversely used the attacks as a bargaining chip of sorts, to undermine the Afghanistan government and to seek concessions on its own terms.
- But a wave of Taliban violence has cast a long shadow over the deal.

Current Call of US

- The peace process to move forward should have all parties committed to an eventual political settlement which, in turn, would result in reduced violence.
- But with increased violence perpetuated by the Taliban during the peace process talks, US has called off the talks at least temporarily

India's View

With the talks called off, India can heave a sigh of relief. India was always skeptical of the outcome of the US-Taliban talks without the participation of the elected Afghanistan government

- India has long opposed the idea of a US military withdrawal from Afghanistan in the belief this would bring the Taliban to power in Kabul.
- India believes any Taliban regime will be beholden to Pakistan's military and allow their country to once again become a jihadi back-office for Rawalpindi.
- At the very least, it would mean hundreds of Pakistani-backed militants currently fighting in Afghanistan would be available for fighting in India and Central Asia
- Many in the security establishment believe that the withdrawal of foreign troops from the country will push Afghanistan back to medieval times. The prospects of a civil war loom large.
- If Afghanistan did slip into a full-fledged civil war then it would be easier for Pakistan to push Afghan jihadis into Kashmir.

Suspension of U.S.-Taliban talks has opened the space for the holding of Afghan presidential elections and a window of opportunity for the international community

- First, the Afghan election authorities and security forces should be supported in every way to conduct free and fair elections as an exercise of Afghan sovereignty.
 - * Concerns about misuse of government apparatus should be addressed.
 - * The Taliban will try to disrupt it. But a reasonably good turnout even if elections are held only in secure areas would be a barometer of support elsewhere, victory for the constitutional order and 'Islamic Republic', and a repudiation of the 'Islamic Emirates' of the Taliban.
- Second, its outcome could provide a stronger foundation for talks with the Taliban that are Afghan-led, Afghan-owned and Afghan-controlled, and not as dictated from Washington, Islamabad, Doha or Moscow.

- Third, free from elections, the Afghan government should take the lead in forging a national consensus behind talks with the Taliban
- Fourth, the international community should support this process and focus its efforts on the Taliban to demonstrate their 'nationalism' by distancing themselves from Pakistan's Inter-Services Intelligence, halting attacks against fellow Afghans, agreeing to a ceasefire, and negotiating directly with a representative Afghan delegation.
- Fifth, resumed U.S. military pressure on the Taliban is not enough. Crucial to Afghanistan's future is its ability to stand on its own feet economically, through investment in Afghanistan's mineral sector to generate revenues, and militarily, through a progressive 'Afghanisation' of security forces at a lower budget. India should be able to help in this.
- Finally, India should be able to use Prime Minister Narendra Modi's rapport with Mr. Trump and Russian President Vladimir Putin to influence their policies and play a larger international diplomatic role in Afghanistan.

Conclusion

- A draft peace agreement still exists, and Mr Trump will probably make at least one more effort to get it signed before the US election campaign officially kicks off.
- But India must accept that the next US president, whoever it may be, will probably also seek withdrawal.
- Afghanistan claims less than 20 US lives a year, but the lack of US public support, and the need to handle the challenge of China, will drive any US leader down the same path.
- India's Afghan priority should be preparing for the day after, even though that day has been postponed once again.

22. Two-Plus-Two Dialogue

Context

- Defense Minister of India Rajnath Singh was on a bilateral visit to Japan at the invitation Defence Minister of Japan
- The two Ministers held the Annual Defence Ministerial Meeting
- India and Japan have decided to hold their first Foreign and Defence Ministerial Dialogue (2+2) ahead of the Japan-India annual summit for "advancing cooperation towards peace and prosperity of the Indo-Pacific region".

Details

- The '2+2' is a format where Foreign Ministers and Defence Ministers of the two countries have a joint meeting to discuss strategic issues.
- Prime Ministers of Japan and India in their Vision Statement in October 2018 reiterated their unwavering commitment to working together towards a free and open Indo-Pacific.

- * The two Prime Ministers had also expressed their satisfaction at the progress made in fostering defence cooperation for shared security, and reaffirmed their desire to further deepen the strategic and defence cooperation between Japan and India.
- The Ministers welcomed that negotiations on the Acquisition and Cross-Servicing Agreement (ACSA)
 - * The ACSA would permit the Indian Navy (IN) access to a Japanese base in Djibouti, while the Japan Maritime Self Defense Force (JMSDF) would be permitted to use India's military installations on the Andaman and Nicobar Islands located in the Indian Ocean, which lie near the Malacca Straits, next to other naval facilities.
- The Ministers welcomed the steady progress in bilateral cooperation in the area of Maritime Domain Awareness (MDA) based on the Implementing Arrangement for Deeper Cooperation between the Japan Maritime Self-Defense Force (JMSDF) and the Indian Navy

What does the new 2+2 Dialogue mean for the India-Japan relationship?

Traditionally, India has resisted taking sides in great power competition. But that option is becoming increasingly difficult. New Delhi has been compelled to astutely choose its strategic partners in order to strengthen its strategic maneuverability.

- Two-Plus-Two Dialogue reflects the growing special relationship between India and Japan, which is driven by a number of factors including the desire to create an Asian strategic framework that is free, fair, and inclusive.
- The call for such a framework has become louder against the backdrop of increasingly muscular behaviour by China.
- The more confrontational China becomes, the more willing countries like India are to play the balance of power games in Asia and beyond.
- One of the primary objectives for both New Delhi and Tokyo is to prevent the rise of a unipolar Asia dominated by one single hegemonic power.
 - * It is this political objective that has been driving the relationship and the new two-plus-two dialogue will strengthen it further, especially the security relationship between New Delhi and Tokyo.
- But Japan does have a technologically advanced arms industry and it is possible that India could tap into it in order to make up for its own weaknesses in critical areas.
 - * Another area where Japan could help is with submarines: India was reported to have been interested in buying Japanese submarines, though Tokyo did not appear keen.

- * The two-plus-two dialogue could possibly give a political push to future arms sales.

Exercises

- The Ministers welcomed that the Japan-India-U.S. trilateral maritime exercise "MALABAR 2019"
- The Ministers also welcomed that the second Japan-India-U.S. trilateral mine-countermeasures exercise (MINEX)
- The Ministers recognised the conduct of Japan-India Maritime Exercise (JIMEX)
- The Ministers welcomed that 'SHINYUU MAITRI 18', the first bilateral exercise between the air components Japan Air Self-Defense Force (JASDF) and the Indian Air Force
- The Ministers also welcomed the first participation of the JASDF in the India-U.S. bilateral exercise "Cope India" as observers

23. A life in the balance: On Kulbhushan Jadhav

Context

- More than three and a half years after Pakistan announced it had arrested Kulbhushan Jadhav on charges of espionage and terrorism, India finally received consular access
- India's Deputy High Commissioner in Islamabad Gaurav Ahluwalia met Kulbhushan after Pakistan granted consular access to him

Background

- India had demanded consular access to Jadhav under the rules of the Vienna Convention on Consular Relations of 1963. This is an international treaty that defines consular relations between independent states
- India invoked Article 36 of the Vienna Convention on Consular Relations which provides for consular access to foreign nationals.

What is consular access?

- Article 36 of the Vienna Convention states that foreign nationals who are arrested or detained be given notice without delay of their right to have their embassy or consulate notified of that arrest.
- If the detained foreign national so requests, the police must fax that notice to the embassy or consulate, which can then check up on the person.
- The notice to the consulate can be as simple as a fax, giving the person's name, the place of arrest, and, if possible, something about the reason for the arrest or detention

Current status

- This is the first time India has got access to Jadhav since his arrest by Pakistani security forces in March 2016.

- Even after India won the case for consular access, Pakistan took weeks to respond, offering to allow the meeting only in the presence of video cameras, and Pakistani officials.
- India rejected this at first, and it is unclear why the government finally accepted those same terms, and nominated its Charge d'affaires to meet Mr. Jadhav despite the conversation being recorded, and Pakistani officials being present.
- According to the officials who met him, Mr. Jadhav's responses during the meeting seemed to be tutored and coerced, much like his "confessional" statements that were released by Pakistan during his trial in a military court.
- The MEA concluded that he was under "extreme pressure to parrot a false narrative". As a result, Pakistan's consular access appears to be as much of a sham as the trial itself, which was held in complete secrecy.

Future Course

- Despite the disquiet over the process thus far, the consular access provided marks Pakistan's initial compliance with the ICJ ruling, and it is hoped that Islamabad will follow through with the next part of the court's verdict.
- This includes a review of the trial process and a reconsideration of the death sentence, pending which Mr. Jadhav's execution must be stayed.
- The two sides must use their diplomatic channels to negotiate a possible reprieve for Mr. Jadhav, or discuss conditions under which Pakistan may be prevailed upon to release him to India.
- New Delhi has been able to secure access to Mr. Jadhav by appealing to international processes, but the road ahead must be negotiated bilaterally, with the understanding and empathy that a man's life hangs in the balance.

24. Putting the skids under border trade

Background

- In February 2019, in the wake of the Pulwama attack, India decided to withdraw the Most Favoured Nation (MFN) status to Pakistan; subsequently, it imposed 200% customs duty on all Pakistani goods coming into India.
- After the Balakot airstrikes, again in February, India and Pakistan closed their airspace, with Pakistan keeping the ban in place for nearly five months.
- In April 2019, India suspended trade across the Line of Control in Jammu and Kashmir citing misuse of the trade route by Pakistan-based elements.
- And more recently, post the Jammu and Kashmir Reorganisation Bill, Pakistan cut off diplomatic and economic ties with India — expelling the Indian envoy, partially shutting airspace and suspending bilateral trade.

Economic Transactions

- In 2018-19, bilateral trade between India and Pakistan was valued at \$2.5 billion — India's exports to Pakistan accounted for \$2.06 billion and India's imports from Pakistan were at \$495 million.
- India's decision vis-à-vis withdrawal of MFN status and imposition of 200% duty has hurt Pakistan's exports to India, falling from an average of \$45 million per month in 2018 to \$2.5 million per month in the last four months from May to August.

Western Border Trade

- The quantum of loss that has been incurred by traders in both India and Pakistan has varied according to the nature of trade and the trade route.
- For example, through the Wagah-Attari land route, bilateral trade was heavily in favour of Pakistan; in the last two years from, India's imports from Pakistan accounted for 82% of the total trade through the land route.
- After February, most of this business has been badly affected with only a handful of items including rock salt, continuing to be imported.

Border Economies

- Unlike national economies, border economies owe their existence to cross-border economic opportunities. These economies generally experience a sudden boom-bust cycle on account of political changes, trade bans, price and exchange rate and tax fluctuations.
- As seen elsewhere in South Asia such as via the inception of India-Bangladesh border haats, the costs and benefits are mutual to the border economies on both sides; much more in cases such as Amritsar where major economic activity is largely dependent on border trade with Pakistan.

Amritsar as an example

- Amritsar is land-locked, is not a metropolis and traditionally has no significant industry. Hence, any decision on India-Pakistan trade has a direct impact on the local economy and the people of Amritsar.
- Since February, according to estimates on ground, 5,000 families have been directly affected in Amritsar because of breadwinner dependence on bilateral trade.
- Traders and their staff members, customs house agents (CHAs), freight forwarders, labour force, truck operators, dhaba owners, fuel stations, and other service providers are closing shop and going out of business.

Changing the Trade Balance and its effects on economy

Many a time, upsetting the trade apple cart can have more repercussions than intended.

- For example, gypsum, imported from Pakistan, was being used in India as well as in Nepal for the cement plants there.

- To avoid empty backhauling on the return journey, trucks carrying these consignments brought back specific products such as yarn from mills in Uttar Pradesh to Punjab.
- In the absence of gypsum trade, the freight rate of trucks from Uttar Pradesh to Punjab, as per the ground reports, has increased from ₹3 to ₹7 per kg, with a single trip absorbing the cost of the entire journey.
- Earlier, prices of tradeable goods which were kept under check owing to the balancing out mechanisms of international trade, are experiencing fluctuations now because of the trade disruptions.

Pakistan takes a hit too

- There is gloom on the Pakistani side too. With Pakistan deciding to completely suspend bilateral trade, exports of cotton from India to Pakistan are expected to be affected the most, eventually hurting Pakistan's textiles;
- The lawn industry which will now have to source pricier cotton from alternative markets in the United States, Australia, Egypt or Central Asia; or there is a high possibility that Indian cotton, along with other products, will be routed through third countries such as the United Arab Emirates and Singapore, thereby increasing the share of indirect trade which is estimated to be more than double the direct trade between India and Pakistan

Hence, while the overall economies of the two countries may very well manage to stay afloat despite the suspension of economic ties, it is the local economies that will suffer the most and are already perishing.

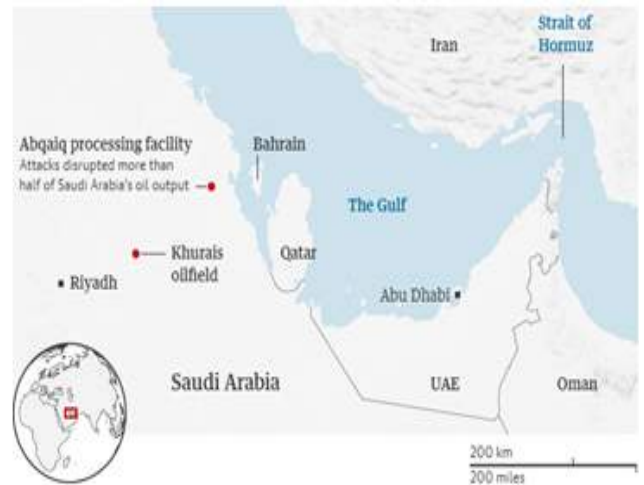
Conclusion

- In the spirit of nationalism, the trade fraternity on both sides, by and large, has stood by their respective governments.
- But locals in border economies on both sides have mouths to feed, which calls for a solution.
- What are the alternative sources of livelihood that can be generated to keep border economies afloat? It's time to think and come up with solutions.

25. Saudi oil plant fire

Context

- Yemen's Houthi rebels launched drone attacks on the world's largest oil processing facility in Saudi Arabia sparking huge fires and halting about half of the supplies from the world's largest exporter of oil.
- Loud explosions erupted at Khurais oilfield and Abqaiq processing facility, both owned by Saudi Aramco, the country's state-owned oil company, often described as the kingdom's crown jewel.



What has been the impact on oil?

- Abqaiq is the world's largest oil processing facility, where about two-thirds of the total Saudi supply is refined and cleaned of impurities such as sulphur and sand.
- Saudi oil ministry sources said the production was disrupted by about 5m barrels a day – nearly half the kingdom's estimated output of 9.7m barrels and 5% of global production.
- Economists believe the oil price could rise higher if Aramco cannot bring supplies back online quickly, or if there is military action in the Gulf.
- Higher oil prices can drag on global growth. It pushes up transport costs and the prices of petroleum-based products. This fuels inflation, leaving consumers with less disposable income.

The fact that it can be severely disrupted is a sign that the world's energy infrastructure is more vulnerable than previously believed, and considered a legitimate target.

Who was responsible?

- The Houthis, the Iran-aligned rebel army that has been fighting a Saudi-led military coalition in neighboring Yemen, claimed responsibility for the attack.
- The Houthis recently acquired much more powerful drone technology that has given them the power to strike targets up to 1,500km away, according to the UN.

* Abqaiq is within about 1,000km of Houthi-held territory.

How are the regional actors aligned?

- The Houthis are regarded as part of a network of militias in the Middle East who are sponsored or assisted in some way by Tehran, part of a broader fight to dominate the Middle East between Iran and Saudi Arabia that dates back to the Iranian revolution of 1979.



- The pair do not directly clash; the battle is playing out through proxy actors in Syria, Lebanon and Yemen, among other countries.

Concerns

- When Mr. Trump unilaterally pulled the U.S. out of the Iran nuclear deal and subsequently reimposed sanctions on the Islamic Republic, his expectation was that the renewed pressure tactics would force Tehran to return to talks so that he could bargain for a tougher deal.
 - * But Iran was so unpredictable in its response that tensions have rocketed in West Asia. The latest flare-up where two critical Saudi Arabian oil installations were attacked is an example.
- If the attacks had originated from Iran, as the U.S. has claimed, it is a serious act of aggression.
 - * And if it had originated from Yemen, Iran's continued support for the Houthis, which enables them to carry out a high-precision, cross-border attack such as this, would come under renewed focus.
- The U.S. in May 2019 had effectively cut off Iran's oil industry, critical for its economy, from the global economy. Faced with a precarious economic situation and mounting U.S. pressure, Iran adopted a two-pronged strategy —
 - * start violating the nuclear deal step by step
 - * Target oil supplies through the Strait of Hormuz, a choke-point between the Gulf and the Arabian Sea and through which a third of crude oil exports transported on tankers pass.

- * A number of oil tankers, owned by Norway, Saudi Arabia and Japan, have come under attack near the Strait of Hormuz
- With attack on the Saudi oil installations, Iran has upped the ante further, sending a message across the world that no oil facility or tanker is safe in the Gulf as long as Iran is not allowed to trade its oil.
- Also the U.S. pullout from the deal appears to have tilted the balance of power within the Iranian regime in favour of the hardliners.

Carrot-and-Stick Policy of Obama

- U.S. President Obama's approach was different. Unlike Mr. Trump, he had a strategic goal — to deny Iran a nuclear bomb.
- He did not act unilaterally on sanctions. He consolidated international opinion, got both allies and partners on his side, imposed UN-recognised sanctions and then offered talks.
- And Iran accepted the offer despite all the bad blood between the U.S. ("the great Satan") and the Islamic Republic, joined the talks and agreed to scuttle its nuclear programme in return for the removal of the international sanctions.
- Mr. Obama could have acted unilaterally. He could have made greater demands from Iran such as ending its support for regional proxies.
 - * Or he could have threatened Tehran with military action.
 - * He did not do any of these primarily because he was aware of the risks involved in a direct conflict with Iran, a country that has always lived in insecurity and cultivated proxies across the region as part of its forward defence doctrine

Mr. Trump should have followed the policy initiated by Obama, force Iran to restrain itself through engagement and promote a new equilibrium in the region.

Conclusion

- Mr. Trump may be reluctant to launch a new war but his strategy of Unilateralism is unsuccessful. He has failed to foresee how far Iran would go if it is pushed to a corner. His unilateral actions have destroyed even the fragile order that existed in the region

26. UK's new work visa offer

Context

- To attract more international students, the UK government has announced a new two-year post-study work visa route from 2020.

Details

- Under the new graduate visa route, students from anywhere including India would be able to work or even look for work at any skill level.
- After the two years, they will be able to switch onto the skilled work visa if they find a job which meets the skill requirement of the route.
- The proposed rules also do not place any restriction on the type of jobs that students could look for.
- There is also no cap on the number of students who could avail the work visa
- The route is non-extendable and does not count towards settlement.

How does it work now?

- Currently, most international students pursuing bachelors and master's degrees can stay and work for only four months and those at 27 universities on a pilot scheme get six months.

Background

- The UK had the post-study work visa scheme till 2012 when the then home secretary Theresa May scrapped it.
- In 2012, then Home Secretary Theresa May had introduced a highly restrictive visa regime, known in the UK as the "hostile environment" policy. Under that policy, May had reduced the duration for students to seek work in the UK from two years to four months.

27. John Bolton goes: On the sacking of U.S. National Security Advisor

Context

- President Donald Trump announced that he had fired John Bolton, his third national security adviser, amid fundamental disagreements over how to handle major foreign policy challenges like Iran, North Korea and most recently Afghanistan.

His term in office was marked by ultra-hawkish positions

- He pursued hostilities with Iran,
- sanctions with Russia,
- brinkmanship on trade with China,
- opposed talks on Afghanistan, and with North Korean leader Kim Jong-un, and
- Pushed for regime change in Venezuela.
- Mr. Bolton inflicted the greatest damage on multilateral institutions and agreements, as he advocated the U.S.'s exit from the Human Rights Council and UNESCO,

- He presided over the cancellation of the multi-party nuclear deal with Iran
- He informed Moscow that the U.S. was pulling out of the 1987 Intermediate-Range Nuclear Forces Treaty.

India will heave a sigh of relief

- His final act, one that is regarded with relief in India, was to ensure that the U.S. deal with the Pakistan-backed Taliban was scuttled.
- The relief, however, may be temporary, given that Mr. Trump has publicly criticised his outgoing NSA, and may reverse many of the positions the U.S. had taken with Mr. Bolton at the helm.

What should India do?

- New Delhi must continue to keep a keen eye on all the changes in the White House and Cabinet, it is clear that investing too much in any one adviser, or expecting consistency in American policy as a result, would be a folly.
- Mr. Trump has run a revolving door for recruitments and retrenchments, and is now on his fourth NSA, third Secretary of Defense and second Secretary of State.
- India would do well to not allow its bilateral relationship with the U.S. or other relationships to be determined by such a fluid dynamic.

Way forward

- A case in point is ties with Iran, where New Delhi may have been better off not acceding to the tough Bolton line, and instead, like China, Russia, Iraq and Turkey, keeping its own counsel on the issue of oil sanctions.
- On the bilateral front, India must build its strategic and economic relationship with the U.S. with a keener eye on the transactional thinking that now prevails in Washington.

28. India, Mongolia to explore space together

Context

- India and Mongolia signed MoUs on space cooperation and disaster management that will provide a new dimension to the India-Mongolia strategic partnership.

Details

- The space cooperation would allow “peaceful exploration” of outer space and include remote sensing and weather forecasting.
- India and Mongolia at present carry out regular military exercises named “Nomadic Elephant” and “Khaan Quest” which is expected to be broadened
 - * Nomadic Elephant
 - * Khaan Quest

- Recognising that extremism and terrorism posed a grave threat to entire humanity, both sides reiterated their strong condemnation of terrorism in all its forms and manifestations including cross-border terrorism.

* The two sides reaffirmed that terrorism cannot be justified on any grounds whatsoever and it should not be associated with any religion, creed, nationality and ethnicity.

* Both sides stressed the critical need for enhancing the anti-terrorism and anti-organized crime capacity of developing countries in collaboration with the international community with a view to effectively addressing terrorism and violent extremism challenges.

- The Mongolian side reiterated its support to India’s candidature for permanent membership of the UNSC.
- India has announced it will continue to help Mongolia with capacity building and training programmes for its citizens across diverse professions.

India-Mongolia Relations:

- Ties between India and Mongolia date back centuries with Buddhism seen as a major binding factor between the two countries.
- In recent times, the two countries have set up mechanisms like the India-Mongolia Joint Working Group for Defence and the India-Mongolia Joint Committee on Cooperation (IMJCC) chaired at ministerial level besides others, to cement cooperation.
- For Mongolians, India is one of counter-weights to their neighbours (Russia and China).
- India is considered a spiritual neighbour, a declared third neighbour and strategic partner and centre for pilgrimage.
- India’s attempts to boost cooperation with Mongolia come against the backdrop of China making inroads into South Asia-Sri Lanka and Nepal besides Myanmar, considered India’s periphery.
- In recent years, New Delhi has increased interaction with countries like South Korea, Japan and Vietnam, all countries seen as on the periphery of China.
- Analysts say India’s interaction with Mongolia gives India, a much needed diplomatic and strategic leverage vis a vis the big countries in Mongolia’s neighbourhood.

29. Trump Administration’s Policy War on Immigration

Context:

- The US administration had imposed several rules in August 2019 alone, which has explicitly and implicitly made immigration to America

Rule No.1:

- According to the new rule, an individual can be denied a green card or even admission to the U.S. if “at the time of application for admission or adjustment of status, (the person) is likely at any time to become a public charge”.
 - * The changes will make it easier to designate potential immigrants as being at risk of depending on state funds.
 - * It will consequently make it easier to deny them admission or green cards.

Public Charge:

- ‘Liable to become a Public Charge’ is the term used in the United States to classify prospective immigrants who are denied entry due to their disabilities or lack of economic resources.
- The administration has increased the list of benefits that could designate a potential immigrant as likely to become a public charge.
- Factors that would make a prospective immigrant ‘Liable to become a Public Charge’ include:
 - * Not having an annual income of at least 250% of the Federal Poverty Guidelines. Earlier, it was sufficient if the financial sponsor of a potential immigrant meets certain income criteria.
 - * Medical conditions
 - * Old age
 - * Poor English language skills.

Public Charge Rule:

- The law has its roots in racist policies from the 1840s and 1850s used to deport and exclude immigrants such as Irish Catholics, and Southern and Eastern Europeans.
- It was passed in 1882. The same year, the U.S. Congress also passed the Chinese Exclusion Act, limiting Chinese immigration into the country.

Consequences:

- The net effect of this rule is to pressure prospective immigrants to lose benefits they are legally entitled to.
- It will also foster a system that favours wealthier, better-educated, younger immigrants who have better English speaking skills.

Rule No.2:

- Another rule change will make it harder for children born to naturalized U.S. citizens serving in U.S. Embassies or stationed on U.S. military bases abroad to acquire citizenship at birth.

- This rule is unlikely to impact a large number of children.
- However, the policy tweak indicates the overall message of the administration with regard to immigration.

Rule No.3:

- The United States Citizenship and Immigration Services (USCIS) has sent out letters saying that it would no longer handle the “deferred action” programme for non-military cases.
- However, no public announcement was made of the policy tweak.
- The programme enables individuals to postpone deportation from the USA.
- Many of those individuals might have come to the U.S. legally, but stayed on after their visas expired.
- This has included those in the U.S. for the treatment of grave illnesses and life-threatening medical conditions.
 - * Maria Isabel Bueso, a 24 year old woman has been in the U.S. since she was seven to participate in a clinical trial for a genetic condition that doctors said would not let her live through adolescence.
 - * The woman was among those were told to leave the country within 33 days or face possible deportation proceedings.
 - * In Ms. Bueso’s case, fending off deportation could mean the difference between life and death.
 - * USCIS said it had received 1,000 deferred action applications related to medical conditions.
- The USCIS letters said that the Immigration and Customs Enforcement (ICE) would handle the programme.

Conclusion:

- At the base of the Statue of Liberty, it is etched that ‘Give me your tired, your poor’. The American administration is suspected to have forgotten those words.

30. Israel, Pakistan ties a bridge too far?

Context:

- Foreign policy experts have recently speculated over the possibility of the Israel and Pakistan establishing diplomatic ties.
- This is an indication of the changing geo-political dynamics in the region and Israel’s growing diplomatic reach and success.

Israel's struggle for diplomatic recognition:

- Ever since Israel declared Independence in 1948, it has repeatedly tried to overcome its regional isolation and enhance its diplomatic relations with as many countries as possible.
- The only states in the region that have recognised Israel are – Turkey (1949), Egypt (1979) and Jordan (1994).
- On the other hand, Israel has been routinely cornered by the Organisation of Islamic Cooperation (OIC) for its occupation of Palestinian lands in violation of the UN resolution.
- Despite the constant and scathing criticism by the Islamic world, Israel has successfully cultivated diplomatic ties and enhanced its influence in its immediate neighbourhood.
- In fact, Israel has established diplomatic relations with a majority of the 193 UN member states.

India-Israel links

- India officially established full diplomatic ties with Israel in 1992. But both had maintained a covert relationship since the 1960's owing to mutual security concerns.
- There are many factors that brought these two democracies together, but it is a fact that both have dealt with a long history of state centric threats.
- Israel has overcome the threat posed by the combined Arab opposition in 1948, 1967 and in 1973.
- Whereas, India has trumped an acutely hostile neighbour such as Pakistan in every conflict since Partition.
- Both Israel and India have been victims of asymmetric warfare such as terrorism that has been sponsored by state actors. So naturally both have collaborated in the field of counter-terrorism.
- Due to the dynamism infused in India's foreign policy by the Prime Minister Modi, India's interactions with the Gulf Cooperation Council (GCC) states have improved significantly in recent times, and today it encompasses economic and security ties.
 - * The hallmark of the Narendra Modi government has been the high-level political engagement with the West Asian region.
- There is no doubt that mutual concerns about Iran have brought Israel and the Sunni Arab states together.
- But Israel continues to look beyond its immediate neighbourhood for the sake of greater economic and diplomatic leverage and the Indo-Pacific region in particular has emerged as an area of interest for its endeavours.

- While Israel established diplomatic ties with China at the same time as with India, their relations are largely limited to the economic domain due to the embargo placed by the United States on selling sophisticated weapons systems to China.
- On the other hand, Israel is expanding its sale of weapons and defence equipment to India and other countries in Southeast Asia.
- Israel is also looking to increase its diplomatic influence in South Asia by forging closer ties with populous Asian Muslim countries such as Bangladesh and Indonesia. Because this would help Israel gain greater legitimacy in the Islamic world.

Investment in the Arab world

- However, Israel's proposed ties with Pakistan will carry a different set of geo-political dynamics.
- Pakistan's national interests would better be fulfilled by having relations with Israel, especially because Israel exercises diplomatic leverage in Washington and could perhaps mediate on recurring tensions between U.S and Pakistan.
- Their mutual concerns regarding Iran can also be a major point of convergence.
- However, any hopes of rapprochement between Israel and Pakistan appears to be far-fetched. The fact is that Pakistan is seen as the "sword-arm" of the Sunni world.
- Pakistan has contributed considerably to the security of the Gulf monarchies, including in Saudi Arabia and Jordan. Pakistani has even stationed its military units in these countries to promote internal stability.
- Pakistani leaders such as Nawaz Sharif have sought and received refuge in the Arab countries.
- Pakistan has exploited the platform provided by the OIC to whip up support for its position on the Kashmir conflict, just as the OIC has done for the Palestinian cause.
- If Pakistan were to establish diplomatic relations with Israel, it would erode its Islamic credentials and lead to a reduced support base within the OIC on the Kashmir issue.
- The deep state of Pakistan would also face tremendous pressure from its many domestic fundamentalist Islamist groups, if it seeks to establish ties with Israel.

The Iran Factor:

- Iran is considered as a potent threat by Israel and the Shia-Sunni divide within Pakistan is frequently a point of friction between Iran and Pakistan.
- However, Israel cannot expect Pakistan to be used against neighbouring Iran and risk the dangers of escalation in sectarian conflict, given that more than 20% of Pakistan's population is Shia.

- Pakistan is unlikely to take any adverse steps that could destabilise its relations with Iran.
- In April 2015, Pakistan's Parliament had rejected Riyadh's request to join a Saudi-led military intervention in Yemen's civil war to fight the Houthi rebels who are backed by Iran.

Conclusion

- India has successfully balanced its ties between Israel and Palestine, and Israel may hope to do the same between India and Pakistan.
- However, it is not in Israel's interest to seek diplomatic ties with a state that is considered as a sponsor of terrorism and a hotbed of extremism.
- While Israel has the sovereign right to decide on its foreign policy, but for the time being it is unlikely to pursue any ties with Pakistan.

31. Modi meets Rouhani, discusses Chabahar

Context:

- Prime Minister Narendra Modi and Iranian President Hassan Rouhani met along the sidelines of the UN General Assembly's 74th session in New York.
- The leaders especially mentioned operationalization of Chabahar Port and noted its importance as gateway to and for the landlocked Afghanistan and the Central Asian region.

Background:

- India, the world's third-biggest oil consumer, meets more than 80 per cent of its oil needs through imports. Iran was its third-largest supplier after Iraq and Saudi Arabia till recently.
- India has stopped orders for Iranian oil since May 2019 following U.S. sanctions that kicked after the U.S.A pulled out of the Joint Comprehensive Plan of Action (JCPOA), an international deal to limit Iran's nuclear program in November 2018.
- India was one of the countries that was given an exemption from these sanctions until May, 2019. Iran is also accused by the US and its allies of attacking two key oil facilities in Saudi Arabia, triggering a new round of tensions in the region.
- Recently Iran's envoy to India had expressed concerns that despite a sanction carve out for India's participation in the construction and development of Iran's Chabahar port work on the project was "very slow". It was also asserted that India should not have cooperated with U.S. sanctions.

Chabahar Port:

- Chabahar Port is located on the Indian Ocean in the Sistan and Baluchistan province of Iran.
- It is located on the Gulf of Oman and is the only oceanic port of the country. The port gives access to the energy-rich Persian Gulf nations' southern coast.



- India's construction of the Shahid Beheshti terminal at Chabahar port since 2016 is a key component of its trade and connectivity routes to Afghanistan and Central Asia, circumventing Pakistan.
- It is a strategic project that would connect India, Afghanistan and Iran to Central Asia.
- Chabahar port will boost India's access to Iran, the key gateway to the International North-South Transport Corridor that has sea, rail and road routes between India, Russia, Iran, Europe and Central Asia.
- It is easily accessible from India's western coast and is increasingly seen as a counter to Pakistan's Gwadar port located at distance of around 80 km from Chabahar.
- Establishment of a politically sustainable connectivity between India and Afghanistan will be ensured by this project.

- With Chabahar port becoming functional, there will be a significant boost in the import of iron ore, sugar, and rice to India.

Details:

- The Prime Minister reiterated India's support for giving priority to diplomacy, dialogue and confidence building in the interest of maintaining peace, security and stability in the Gulf region, which is of vital importance for India.
- Noting that India and Iran shared old and civilisational ties, the two leaders positively assessed the progress in bilateral relations since their first meeting at UFA in 2015.
- Both agreed to mark the 70th Anniversary of the establishment of diplomatic relations in 2020.

SOCIAL ISSUES

1. Galos

- The Galos are one of the 26 major communities of Arunachal Pradesh.
- This central Eastern Himalayan tribe dominate West Siang, Lepa Rada and Lower Siang districts. They have a big population in East Siang, Upper Subansiri and Namsai districts too.
- The Galos belong to the Tani group inhabiting Assam and Arunachal Pradesh, besides Tibet.
- They trace their common origin to a primeval ancestor, Abotani.
- The Galo have been listed as a Scheduled Tribe under the name Gallong since 1950.

What's in a Galo name? A pointer to ancestors

- The Galo community in Arunachal Pradesh follow a unique system of naming that helps them trace ancestors and origin.
- The Galos maintain genealogy (study of families, family history, and the tracing of their lineages) through given names.
- They follow a system of prefixing the second syllable of a father's name to that of a son, who passes on the suffix in his name to his son.
- The names of ancestors can be traced from the first syllable or prefix of their names.
- Example: Kenjum Bagra is the 21st descendant of Memo, the founder of the Memo clan. Mr. Bagra's father, at number 20 on the Memo line, is Gumken, his grandfather is Megum, and his great-grandfather is Gumme. The 'me' in his great-grandfather's name was prefixed to his grandfather's name, whose suffix decided his father's name.

2. Live-in Relationships

Meaning

- It involves continuous cohabitation between the partners without any responsibilities or obligations towards one another.
- The Supreme Court in *Indra Sarma vs. V.K.V. Sarma* defined live-in relationships as- A domestic cohabitation between an adult unmarried male and an adult unmarried female.

Supreme Court on Live in relationships

The Supreme Court has, in several rulings, held that live-in relationships are not illegal.

- In *Lata Singh v. State of UP* (2006) it was observed that a live-in relationship between two consenting adults of heterosexual sex does not amount to any offence even though it may be perceived as immoral.

- In the case of *S. Khushboo v. Kanniammal & Anr* (2010) it was held that living together is a right to life.
- In *Indra Sarma v. VKV Sarma* (2013) the court observed, "Live-in or marriage like relationship is neither a crime nor a sin though socially unacceptable. The decision to marry or not to marry or to have a heterosexual relationship is intensely personal."
- In *Shafin Jahan v. Asokan* (2018), it held that the right to choose one's life partner is an important facet of the right to life, and social approval of intimate personal decisions should not be the basis for recognising them.
- In *Navtej Johar v. Union of India* (2018), it read down Section 377 of the IPC which criminalised consensual homosexual relationships.
- At the same time Section 2(f) of the Domestic Violence (DV) Act, extends protection to women who are in "relationship in the nature of marriage" but all live-ins do not qualify as relationship in the nature of marriage.

Supreme Court had laid down some guidelines (not exhaustive but insightful) for testing under what circumstances, a live-in relationship will fall within the expression "relationship in the nature of marriage."

- The important factors for determination would be – a reasonable duration of period of relationship to be determined subjectively;
- partners should have been in a shared household as defined under Section 2(s) of the DV Act;
- there must be some pooling of resources and financial arrangements supporting each other,
- sharing bank accounts, joint investments etc; having some sort of domestic arrangements like entrusting the responsibility of household chores on the woman;
- having sexual relationship, not just for pleasure, but for emotional and intimate relationship, for procreation of children, so as to give emotional support, companionship and also material affection, caring etc; having children and sharing the responsibility for bringing up and supporting them;
- holding out to the public and socializing with friends, relations and others, as if they are husband and wife; and
- Sharing a common intention of parties as to what their relationship is to be and to involve, and as to their respective roles and responsibilities, primarily determines the nature of that relationship.

Protection for Women under such relationship

- Women in relationships in the nature of marriage are entitled to protection and maintenance under the Domestic Violence Act, 2005.
- But the relationships which fail to qualify the above-mentioned test will not be entitled to seek protection under the DV Act.

What constitutes illegality?

- A live-in could be bigamous, adulterous, or involving some underage partner.
- These relations are illegal entailing legal ramifications for the parties involved therein.

Why younger generation have altogether different expectations from relationships?

- The parties enjoy the liberty to walk out of the relationship without legal hassles.
- Live-ins offer an opportunity to check compatibility and know each other better before they take the plunge.
- There may also be those who cohabit informally because they cannot formalise their relationships, such as inter-caste/religion opposite-sex couples who are barred from marrying by social norms, or same-sex couples, who are barred from marrying by law.

Context

- Referring to women in live-in relationships, a Bench of the State Human Rights Commission of Rajasthan said that the "concubine" life of a woman cannot be termed a dignified life.

Concerns

- This is patriarchy which prompts universities going forward to have more conservative curfews for female students.
- In the name of protecting the women it indirectly says don't challenge the patriarchal structures and institutions meant to keep the women in their place.
- In stating that women in live-in relationships are 'kept' as concubines, it ignores the possibility that such relationships could be a viable alternative in cases where marriage is legally or socially prohibited.
 - * It also assumes that marriage is, or ought to be, the only relationship through which women sexually associate with men.
- At another level, by equating women who cohabit with concubines, it entrenches the patriarchal Madonna-whore dichotomy: Which means that women can either be good women who abide by the societal boundaries set for them, committed to relationship or bad women who dare transgress these boundaries.
- Article 19 of the Constitution, which protects the right to freedom of speech and expression, includes the freedom to express one's identity, sexual preferences, and love.

- The right to life and personal liberty under Article 21 includes the right to privacy. The right to choose how to organise one's personal intimacies is an important facet of the right to privacy and, therefore, outside the purview of the state. Demanding that the government seek to prohibit live-in relationships is therefore brazen contempt of the decisions of the apex court.
- The language in the order will likely create a chilling effect, preventing vulnerable citizens, in need of legal protection, from seeking redress. The SHRC also demanded that governments run awareness campaigns against live-in relationships.

Conclusion

- In light of Supreme Court Judgments, it is important to note that being in a live-in relationship is a valid choice which deserves the recognition and protection of law.
- Illegality is different from immorality. People may regard live-in-relationships as immoral, but that is their own perception which cannot be allowed to influence anyone else's personal decision.
- Moral policing cannot be permitted, especially when the arrangement has the endorsement from the touchstone of fundamental rights.
- The most important concomitants of any relationship are love, trust and mutual respect. The existence of these make any relationship blissful, irrespective of the societal sanction of marriage.

3. National Nutrition Month (Poshan Maah)

- Under POSHAN Abhiyaan, September was celebrated as the Rashtriya Poshan Maah across the country to address the malnutrition challenges and sensitize our countrymen regarding the importance of holistic nutrition.
- Poshan Maah aimed at making people aware of the importance of nutrition & giving individual access to government services to support supplement nutrition for their children & pregnant women / lactating mothers.
- The programme is an initiative of WCD Ministry and NITI Aayog is supported by 18 line Ministries/ Departments/Government Organizations.
 - * It seeks to synergise all efforts by leveraging technology and intends to take nutrition awareness to the level of Jan Andolan or People's Movement.
 - * The programme focuses on 8 themes – Antenatal Care, Optimal Breastfeeding (Early & Exclusive), Complementary Feeding, Anemia, Growth Monitoring, Girls-education, diet, right age of Marriage, Hygiene & Sanitation, Food Fortification.

POSHAN Abhiyaan (National Nutrition Mission)

- The programme through use of technology, a targeted approach and convergence strives to reduce the level of Stunting, Under-nutrition, Anemia and Low Birth Weight in Children, as also, focus on Adolescent Girls, Pregnant Women & Lactating Mothers, thus holistically addressing malnutrition.
- POSHAN Abhiyaan aims to ensure service delivery and interventions by use of technology, behavioural change through convergence and lays-down specific targets to be achieved across different monitoring parameters over the next few years

4. Rashtriya Bal Puraskar**Context**

- The Ministry of Women and Child Development (WCD) has extended the last date of receipt of applications for the Pradhan Mantri Rashtriya Bal Puraskar – 2020.

About the award

- Pradhan Mantri Rashtriya Bal Puraskar instituted by WCD Ministry to felicitate meritorious children, individuals and institutions of the country is given under two categories i.e., Bal Shakti Puraskar and Bal Kalyan Puraskar.
- The Bal Shakti Puraskar aims to give recognition to children who have made extraordinary achievements in various fields including innovation, scholastic, sports, art and culture, social service and bravery.
- The Bal Kalyan Puraskar is given as recognition to individuals and institutions, who have made an outstanding contribution towards service for children in the field of child development, child protection and child welfare.

5. 'San-Sadhan' Hackathon**Context:**

- Design for Divyangjan-accessible toilets showcased in 'San-Sadhan' Hackathon.

Details:

- Participants of the 'San-Sadhan' Hackathon came up with thought-provoking ideas for accessible toilets for the physically challenged (Divyangjans).

About the 'San-Sadhan' Hackathon:

- It was organized jointly by the Ministry of Jal Shakti and the Department of Empowerment of Persons with Disabilities, in collaboration with Atal Innovation Mission and NITI Aayog. The Bill and Melinda Gates Foundation and 91springboard were also part of this initiative.
- This was an initiative under the Swachh Bharat Mission.
- Applications were invited for designs that make toilets smarter, more accessible, and easier to use.

- The government said that it was looking for smart, scalable and innovative solutions for economical toilets for individual and community use in rural and urban contexts.
- Three innovators were selected winners from the shortlisted 21 applications.

6. Saharia children battle malnutrition**Saharia Tribes:**

- Saharias are a particularly vulnerable tribal group.
- The Saharia are an ethnic group in the state of Madhya Pradesh
- They are also found in Baran district of Rajasthan.
- The tribe members believe in Folk Hinduism's gods and goddess that they worship.
- The Saharia tribe health is very poor. There is a prevalence of malnutrition and pulmonary tuberculosis.

Context:

- Acute malnutrition among Saharia tribes is continuing to take away lives.

Details:

- Acute malnutrition among Saharia tribes is continuing to take away lives, due to crushing poverty, delayed breastfeeding, premature pregnancies and seasonal migrations.
- There is prevalence of superstitious beliefs among the tribe, such as a newborn has to be fed jaggery syrup or honey, as the first milk is impure because it is extracted from breasts after nine long months.
- According to the National Family Health Survey 2014-2015, just 43.2% of children under three were breastfed within the first hour of their birth in rural parts of Sheopur district.
- Seasonal migration also affects children, especially girls, as parents mostly take them along with them to fields where they are neglected, wander under the sun, don't get food, and contract diseases easily during the monsoon.
- An Indian Council of Medical Research (ICMR) study revealed that, among Saharias, TB prevalence is an alarming 1,995 per 1,00,000 persons.
- It is opined that higher incidence of tuberculosis among Saharias is linked to the high malnutrition level among them and vice versa.

7. Tabrez Ansari Case- Lynching, not murder**Context**

- Jharkhand Police has dropped murder charges against all 11 accused in the Tabrez Ansari lynching case and said that doctors have stated in the autopsy report that he died due to cardiac arrest.

- The decision of the Jharkhand police that the killing of Tabrez Ansari, did not amount to murder is quite debatable.
- They have chosen to charge the 11 men arrested for his lynching with culpable homicide that does not amount to murder.

There are two classes of culpable homicide:

- Culpable Homicide Amounting to Murder: It is known as simple murder.
- Culpable homicide not amounting to Murder: There is necessarily a criminal or knowledge in both. The difference does not lie in quality; it lies in the quantity or degree of criminality closed by the act. In murder, there is greater intention or knowledge than in culpable homicide not amounting to murder.

Background

- Tabrez Ansari was brutally thrashed by a mob on the allegations of bike theft
- He was tied to a pole and assaulted for hours at night
- It is known that it was only the arrival of the police that ended the assault on him.

The official explanation for concluding that it was not murder is unconvincing.

- The two-pronged argument is that the medical report gave the cause of death as 'cardiac arrest due to stress', and the fact that the victim did not die immediately, but succumbed some days later.
- The police also say a second opinion from forensic experts was that the death was caused due to a combination of heart attack and the injuries he suffered.
- It is quite obvious that merely attributing death to a heart attack is meaningless without referring to the trauma caused by the physical assault.

Inferences

- The line between culpable homicide and murder is thin.
- It is the courts that usually assess the circumstances in which a homicide took place and decide whether it amounted to murder or not.
- Murder is punishable under Section 302 with death or life imprisonment, while forms of culpable homicide attract either a life term or 10 years in prison under Section 304 of the IPC.
- By invoking only the offence of culpable homicide not amounting to murder may make it easier for the defence to claim that their offence lacked premeditation or intention.

* Instead, they could claim that they were deprived of their self-control by the "provocation" given by the victim.

Way forward

- The suspicion that the charge is being diluted underscores the need for a special anti-lynching law.
- Such a law could cover acts of group violence, whether spontaneous or planned, so that those who join lynch mobs do not gain from any ambiguity about their intentions.

8. One year after 'Navtej Johar', imagining an equality law

Context

- It's been a year since Section 377 of the Indian Penal Code-- a draconian, British-era law criminalizing same-sex relationship-- was read down.
- With this we have moved from a society where transgender, intersex, lesbian, gay, bisexual and gender non-confirming persons were treated as criminals to the constitutional recognition of the rights to sexual orientation, gender identity and gender expression.

Navtej Johar v. Union of India

- This judgment in the Supreme court not only laid the ground for stronger equality recognition such as the judgment in the Joseph Shine case decriminalising adultery (2018) and the judgment in the Sabarimala case recognising the rights of women to enter religious shrines (2018), but also led to the decriminalising of same-sex intercourse in other jurisdictions such as the High Court of Botswana and inspired a constitutional challenge to Section 377A in Singapore.
- The recognition of these rights impacts not only LGBTI persons, but everyone, for it protects all our rights of self-expression, equality and autonomy.

Steps for equality

The Navtej decision has to be followed by positive steps for equality. Transgender persons still face a number of legal barriers and LGBTI people continue to face discrimination, exclusion, abuse and harassment at work, school, health care settings and in public places.

- One reason for this is that we still do not have an equality and anti-discrimination statute that would protect persons from discrimination on different protected grounds.
- Legislation such as the Scheduled Caste and Scheduled Tribes (Prevention of Atrocities) Act, 1989 and the Protection of Civil Rights Act, 1955 make certain caste discriminatory acts criminal offences but do not provide civil remedies of injunctions or damages for acts of discrimination.
- We have the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, but this is limited to sexual harassment at work.

- The Transgender Persons (Protection of Rights) Bill, 2019 addresses only transgender and intersex persons' rights and there is severe criticism of this Bill. The rights of equality and non-discrimination on the ground of sexual orientation are not covered under this Bill.

An overarching legislation

- The need of the hour is a comprehensive legislation that guarantees equality to all persons on the basis of sexual orientation, gender identity and expression, sex, caste, religion, age, disability, marital status, pregnancy, nationality and other grounds.
- The law should impose obligations of equality and non-discrimination on all persons, public and private, and in the areas of education, employment, healthcare, land and housing and access to public places.
- It should provide for civil remedies including injunctions to stop discriminatory behaviour, costs and damages, and positive action to make reparations.

Most importantly we need an equality law to define what equality would encompass.

Conclusion

- Supreme Court comes to rescue on the question of what equality is, because it held in its privacy judgment in *K.S. Puttuswamy v. Union of India* (2017) that equality and liberty cannot be separated, and equality encompasses the inclusion of dignity and basic freedoms.
- Situations like what we see in J&K also show us that we need an equality law that not only addresses discrimination against individuals but also addresses structural forms of discrimination and exclusion.
- On the first anniversary of Navtej, the time is right for these reforms, so that we are able to see these battles being won in the next 25 years.

9. Beyond Gender Binaries

Context:

- A judgment made by the Madras High Court and an order issued by the government of Tamil Nadu aims to protect the freedom of intersex infants and children to choose their gender identity.

The Court Verdict:

- A trans-woman and her husband had approached the Madurai Bench of the Madras High Court with a plea to instruct authorities to register their marriage.
- In April, 2019, the Bench allowed the plea, but went on to ban sex reassignment surgeries on intersex infants and children.
- The court observed that the consent of the parent cannot be considered the consent of the child.
- The Bench had also directed the Tamil Nadu government to file a compliance report.

- Earlier, Srishti Madurai, a student movement in Tamil Nadu had approached the National Human Rights Commission on the subject.

The Government Order:

- After the court judgment, the Tamil Nadu government passed an order banning sex normalization surgeries in intersex children and infants.
- Tamil Nadu's order comes as the second such move made by any Government on gender and sexual identity.
- The Parliament of the island of Malta adopted the Gender Identity, Gender Expression and Sex Characteristics Act in April 2015.
- The government order specifies that such surgeries can only be performed in case there is a life-threatening situation.
- Such a situation will be certified by a team that includes pediatric surgeons/urologists, endocrinologists, a social worker/intersex activist and a government representative.

What Does Intersex Mean?

- Intersex is the term used to refer to people born with physical and biological characteristics that are more diverse than stereotypical definitions of male or female bodies.
- There are differences between gender, sexual identity and sexual orientation.
 - * Gender is assigned at birth based on the anatomy (male or female sexual organs).
 - * Sexual identity is what one sees oneself as.
 - * Sexual orientation is identified based on the sex a person is attracted to.
- Genetically, the male is invested with XY chromosomes and the female, XX.
- In intersex there are at least 40 different variations.

Gender Assignment:

- Sexual development is a complex process.
- With huge leaps in the field of medical genetics, it is now apparent to scientists that gender assignment is not merely the function of the X and Y chromosomes.
- Hundreds of genes have been identified, in which mutations or changes may lead to a 'different kind of development' impacting the gender of the fetus.
- There are several metabolic developments involved in these pathways. All of these differences can't be detected at the time of birth.
- Doctors and parents identify it only when the baby exhibits ambiguities in anatomical features. Ex.: the presence of both male and female genitalia, two different genders for internal and external reproductive organs, etc.

Why are Sex Selective Surgeries Performed on Infants?

- When these differences are identified at birth, parents are eager to resolve the question of the gender of the baby and pick a gender.
- Surgery to correct the genitalia is then performed on the child.
- They are ignorant of the fact that the child will have to pick a sexual identity in the process of growing up.
- The surgery could lead to physical trauma, emotional turmoil and problems arising out of confusion about identity.

Future Prospects:

- The State's commitment to its intersex babies would be evaluated by the effectiveness of implementing the order.
- Awareness is necessary even for the medical community to recognize the possibilities of gender ambiguity.
- Parents need to undergo counselling in order to accept their children as they are.
- Infants born with apparent intersex features should be given the freedom to choose their gender identity.

10. Two out of three child deaths due to malnutrition: report**Context:**

- Malnutrition continues to be the leading cause for death among Indian children under the age of five, according to a study led by the Indian Council of Medical Research (ICMR).

Details:

- According to the first comprehensive estimate of disease burden due to child and maternal malnutrition and the trends of its indicators in every State from 1990, two-thirds of the 1.04 million deaths in children under five years in India are still attributable to malnutrition.
- The malnutrition trends over about three decades reported in the paper has utilised all available data sources from India, enabling more robust estimates than the estimates based on single sources that may have more biases.
- The India State-Level Disease Burden Initiative:
 - * It is a joint initiative of the Indian Council of Medical Research (ICMR), Public Health Foundation of India, and Institute for Health Metrics and Evaluation.
 - * The initiative is in collaboration with the Ministry of Health and Family Welfare along with experts and stakeholders associated with over 100 Indian institutions, involving many leading health scientists and policy makers from India.

* It was launched in October 2015.

Findings of the report:

- The report states that the Disability-Adjusted Life Year (DALY) rate attributable to malnutrition in children varies 7-fold among the States.
- It is highest in Rajasthan, Uttar Pradesh, Bihar and Assam, followed by Madhya Pradesh, Chhattisgarh, Odisha, Nagaland and Tripura.
- The report says the overall under-five death rate and the death rate due to malnutrition has decreased substantially from 1990 to 2017.
- However, malnutrition is still the leading risk factor for death in children under five years.
- It states that malnutrition is also the leading risk factor for disease burden for all ages considered together in most States.
- Among malnutrition indicators, low birth weight is the biggest contributor to the disease burden, followed by child growth failure, including stunting, underweight and wasting.
- The prevalence of low birth weight in 2017 was 21%, and varied across states, ranging from 9% in Mizoram to 24% in Uttar Pradesh.
- The prevalence of child stunting was 39%, ranging from 21% in Goa to 49% in Uttar Pradesh.
 - * The trend was the highest in the Empowered Action Group States, which includes Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Odisha, and Rajasthan.
 - * The prevalence of child underweight was at 33% and child anaemia cases was at 60%, ranging from 21% in Mizoram to 74% in Haryana.
- The study also found that the prevalence of anaemia in women was at 54% in 2017.

Way forward:

- The National Institute of Nutrition, an ICMR institute, and other partners are setting in place mechanisms to ensure there is more data on malnutrition in the various states, which will help monitor progress.
- Efforts are needed in each state to control malnutrition.
- State governments must be encouraged to intensify efforts to reduce malnutrition and undertake robust monitoring to track progress.
- For substantial improvements across all malnutrition indicators, states will have to implement an integrated nutrition policy to effectively address broader determinants of under nutrition across the life cycle.
- Focus on improving the overall nutritional status of girls and women during the preconception and pregnancy period and providing quality antenatal care will positively influence low birth weight indicators and extend the benefits to next generation.

- Focus will be needed on major determinants like provision of clean drinking water, reducing rates of open defecation, improving women's educational status, and food and nutrition security for the most vulnerable families.

11. Forensic laboratory constitutes special team for POCSO cases

Context:

In a move aimed at fast-tracking cases of crime against children, the Forensic Science Laboratory (FSL) has constituted a team of six officials to concentrate on evidence pertaining to the Protection of Children from Sexual Offences Act and rape.

Details:

- Since Forensic evidence in crimes against women and children is a priority for FSL, the team would work on DNA samples, cyber evidence and other evidence required for POCSO and rape cases, which will expedite the proceedings.
- The team will have six officials under the technical supervision of the head of biology department.
- FSL has also got sanction from the government to hire 80 officials on different posts for the Crime Scene Management team, who will work round-the-clock to visit the spots and inspect the crime scene.
- Timely evidence collection is extremely important as evidence tends to get destroyed or ignored if there is a delay in collecting them from the scene of crime, thereby affecting the quality of investigation, hence, the need for a dedicated team.
- The move has been taken in a bid to bust the general perception among criminals that nothing will happen.

SCIENCE AND TECHNOLOGY

1. Biotechnology sector- Different peas in different pods

Introduction

- India is among the first countries to set up a specialized agency for the development of research and human resources in the biotechnology sector.
- After decades of development, it is imperative to ask: has the biotechnology sector lived up to its promise? More importantly, is the sector poised to stand shoulder-to-shoulder with, if not beat, the IT sector in creating jobs for the future?

The environment of IT and BT are different

- Biotechnology research often requires access to laboratories with high-end scientific infrastructure, the supply of expensive chemicals and reagents with minimum shipping time between the supplier and the user, and a disciplined work culture and documentation practice due to regulatory and intellectual property filing requirement.
- Additionally, unlike the products and solutions from the IT industry, biotechnology products and solutions often require ethical and regulatory clearance, making the process long, expensive and cumbersome.
- As the nature of the work in the biotechnology sector is specialised, most jobs are filled with experienced and skilled scientists leaving the demand for young and inexperienced ones low.
- In a global marketplace, having a large number of young professionals hungry to work at meagre wage coupled with the need of large corporations in the West to get work done cheaper created some of the large IT companies in India.
- Therefore, unlike the IT sector, the biotechnology sector requires years of experience in the domain, access to labs with sophisticated instruments, sustained and long-term funding to innovate.

The future of biotechnology is bright in India. However, the sector is not going to displace the IT sector anytime soon in employment generation

Impediments in the Biotechnology Sector

- Modern biotechnological research is expensive. It requires a highly trained and skilled workforce and access to expensive instruments.
 - * So far, most of the high-quality research output has come from a handful of institutions with better scientific infrastructure.
 - * The rest, which forms the bulk of the research publications, is of mediocre quality. This is primarily due to a "publish or perish" culture that incentivises numbers over quality.

- Over the years, the focus of research has slowly shifted from fundamental to applied research. Why has India not produced another Jagadish Chandra Bose or G.N. Ramachandran despite the biotechnology research budget growing several folds? The fruits of applied research will only come when we start investing in basic research without asking for quick returns.
- Compared to the developed economies (the United States), biotechnology research in India is mainly funded by the public exchequer.
 - * Unless the private sector starts supporting applied research and engages with academic institutions, the innovation in applied and translational biotechnology will be minimal.
 - * While continuing and increasing the share of funding in basic research, the government should encourage and incentivise the private sector to invest substantially in applied research.

Advantage China

- Unlike India, China has many more labs with the best of scientific infrastructure; each with more number of skilled human resources trained in regimental work culture and trained to practise rigorous documentation.
- Chinese students and scientists outnumber Indians nearly 5:1 in most American universities in the life sciences/biology-related disciplines.
- A booming economy and a higher science budget coupled with a flexible hiring system have made Chinese universities and research labs attract many overseas Chinese scientists.

Initiatives taken by the Indian Government

The government has been supporting biotech entrepreneurs.

- Initiatives through the Biotechnology Industry Research Assistance Council (BIRAC) of the Department of Biotechnology to support the innovation ecosystems have resulted in an impressive outcome.
- For example, the funding has helped startup companies make nearly 50 biotechnology-related products that are in the market today.

Moving beyond this, however, will require a different strategy and understanding of the mature biotech-led innovation and economy ecosystems.

What can the Govt do going forward?

- Our government needs to make the process of hiring in our universities and national labs simpler and flexible, not necessarily provide more salary, to attract the bright overseas Indian scientists.

- * The government has been encouraging and promoting entrepreneurship, but the culture of institutions and scientists to be entrepreneurial will take time. This will require a flexible policy in the institutes to allow scientists incubate startup companies in their labs while retaining their positions
- Second, the government should let scientists from research institutions and universities take unpaid leave to join the industry for a fixed period.
 - * Similarly, the government should relax rules to appoint researchers from industry in faculty positions with the freedom to teach, participate, and take students.
 - * This academia-industry linkage will do the much-required communication and understanding of the problems at both ends.
 - * Without a sustained effort in encouraging and promoting science-driven innovation in our academic institutions, and a robust academia-industry collaboration, biotechnology-led innovation will not aid the nation's economic growth.

Conclusion

- Discoveries in biotechnology may help us solve some of the pressing societal issues of our time: cleaning our rivers, producing life-saving drugs, feeding our growing population with nutritious food and helping us clean the air we breathe. Therefore, it will be a mistake to look at the biotechnology sector through the lens of employment generation only.
- The need for the use of artificial intelligence-based tools and applications of big data in biology will leverage India's strength in IT and move biotech innovations faster to the marketplace.
- Till then, India needs to do things patiently and work on the right side of the ethical and regulatory boundaries.

2. Blackest of All Materials

Context:

- Engineers at the Massachusetts Institute of Technology (MIT) have created a material that is 10 times blacker than anything that has previously been reported.

Details:

- The material is made from vertically aligned Carbon Nano Tubes (CNTs).
- The team grew CNTs on a surface of chlorine-etched aluminum foil.
- The foil captures more than 99.96% of any incoming light, making it the blackest material on record.

Applications:

- The material can be useful in optical blinders that reduce unwanted glare.
- It can also help space telescopes in spotting orbiting exo-planets. An exo-planet is a planet outside the Solar System.

3. Electronics Sector in India

Context:

The Union Minister for Electronics and Information Technology, Communications and Law & Justice met prominent leaders of the electronics industry

Key Highlights of the Electronics Sector in India:

- The domestic manufacture in this sector has grown from USD 29 billion in 2014 – 15 to USD 70 billion in 2018 – 19.
- India has emerged as the 2nd largest manufacturer of mobile handsets in the world.
- The number of manufacturing units for LCD/LED TVs and LED lights have gone up.
- This sector now generates employment for more than 20 lakh people in the country.
- Off late, the export of electronic goods has also increased.
- The electronics market is poised to reach USD 400 billion by 2025.

National Policy on Electronics 2019

- This Policy envisions positioning India as a global electronics hub by encouraging and driving capabilities in the country for developing core components (including chipsets), and creating an enabling environment for the industry to compete globally.
- The policy seeks to:
 - * Promote domestic manufacturing and export in the whole value chain of ESDM (Electronics System Design and Manufacturing) sector.
 - * Offer incentives and support for manufacturing core electronic products.
 - * Provide special package of incentives for mega projects which are extremely high-tech and entail huge investments, such as semiconductor facilities display fabrication, etc.
 - * Draft schemes to encourage new manufacturing units and expand existing units.
 - * Encourage R&D and innovation in all subsectors of electronics; and in emerging areas of technology such as 5G, AI, Machine Learning, IoT/Sensors, Drones, Virtual Reality, Robotics, Nano-based devices, Additive Manufacturing Photonics, etc.

- * Give incentives and support for enhancing availability of skilled manpower, including re-skilling.
- * Focus on Medical Electronic Devices Industry, Fabless Chip Design Industry, Power Electronics for Mobility, Automotive Electronics Industry and Strategic Electronics Industry.
- * Create Sovereign Patent Fund (SPF) to promote the development and acquisition of Intellectual Properties in the ESDM sector.
 - SPF is a State-led investment fund that will acquire Intellectual Property (IP) assets important to national economic objectives.
- * Thrust trusted electronics value chain initiatives to improve national cybersecurity profile.

4. Facial Payment Technology

- Under the facial payment technology, the customers simply make a purchase by posing in front of point-of-sale (POS) machines equipped with cameras, after linking an image of their face to a digital payment system or bank account.

Context

- China has embraced the facial payment technology.

Details

- China's mobile payment infrastructure is one of the most advanced in the world, but the new systems which require only face recognition is being rolled out nationwide.
- The software is already widely used, often to monitor citizens it has been credited with catching criminals.
- Alipay the financial arm of ecommerce giant Alibaba has been leading the charge in China with devices already in 100 cities.
- Supporters of the technology call it a better option, as, in the traditional way, it's very dangerous to enter the password if someone is standing next to you. Now the payment can be completed with facial recognition, which is believed to be a more secure mode of payment.

Concerns

- The Facial payment technology has raised major concerns over data security and privacy.
- Authorities have come under fire for using it to crack down and monitor dissent, particularly in China's surveillance-heavy region of Xinjiang.
- There have been concerns that the state could use this data for their own purposes, such as surveillance, monitoring, the tracking of political dissidents, social and information control, ethnic profiling, as in the case with Uighurs in Xinjiang.

- It is believed that it could even be used for predictive policing.

5. Global AMR R&D

Context

- India has joined the Global Antimicrobial Resistance (AMR) Research and Development (R&D) Hub as a new member.

About Global AMR R&D

- The Global AMR R&D Hub was launched in 2018 in the margins of the 71st session of the World Health Assembly, following a call from G20 Leaders in 2017.
- The Global AMR R&D Hub supports global priority setting and evidence-based decision-making on the allocation of resources for AMR R&D through the identification of gaps, overlaps and potential for cross-sectoral collaboration and leveraging in AMR R&D.
- The operation of the Global AMR R&D Hub is supported through a Secretariat, established in Berlin and currently financed through grants from the German Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Health (BMG).

Significance of joining Global AMR R&D

- By partnering with the Global AMR R&D Hub, India looks forward to working with all partners to leverage their existing capabilities, resources and collectively focus on new R&D intervention to address drug-resistant infections
- AMR is the ability of a microbe to resist the effects of medication that once could successfully treat the microbe.
- Today, the emergence and spread of antimicrobial resistance continue unabated around the world.
- Given the important and interdependent human, animal, and environmental dimensions of antimicrobial resistance, India considers it reasonable to explore issues of antimicrobial resistance.

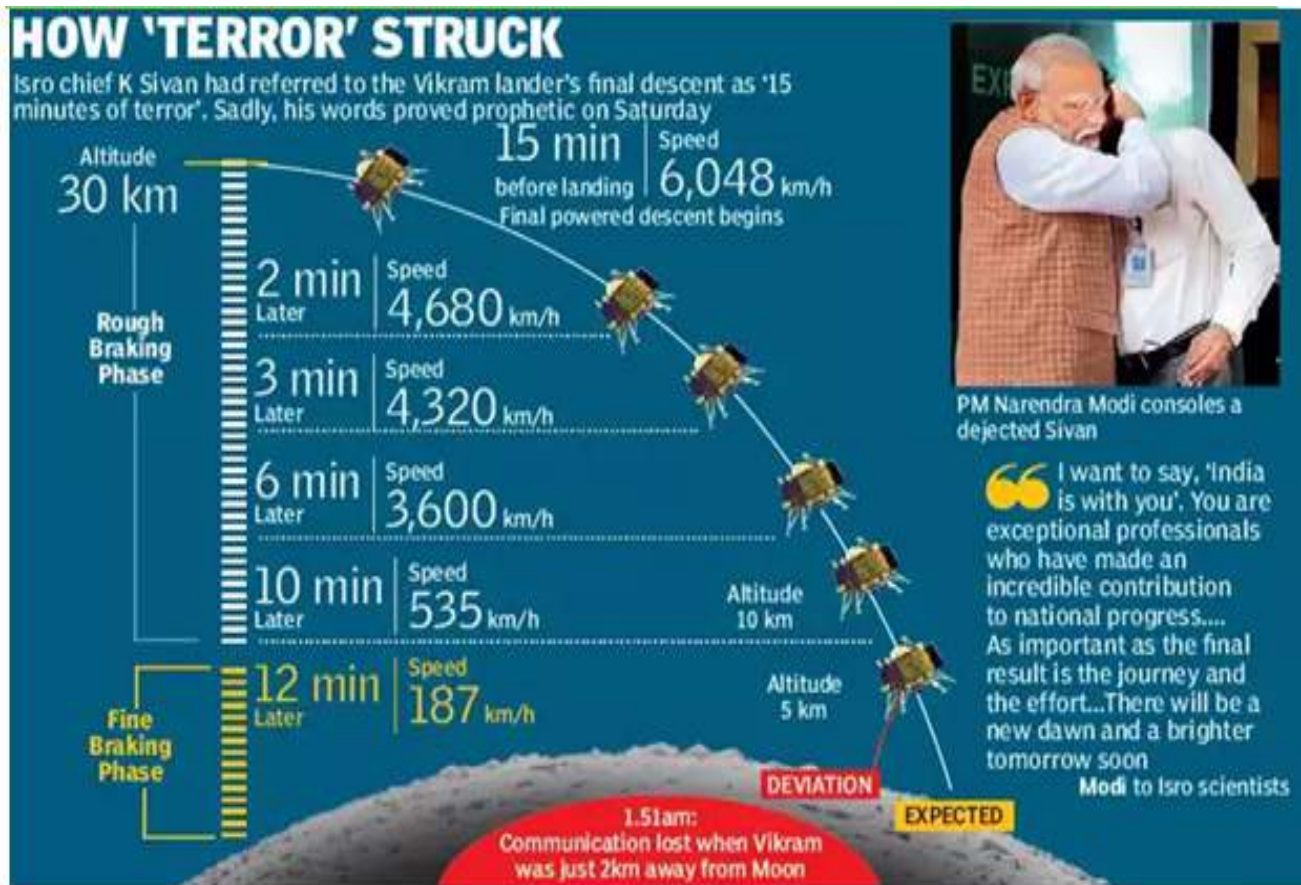
6. ISRO scientists work to decode Chandrayaan2 lander failure

It had two objectives

- One was to deal with Science or the Scientific exploration
 - * This would be performed by Orbiter.
 - * Which aimed to study the Moon's origin and its evolution by conducting topographical studies.
- The second was the technological demonstration
 - * Performed by the Lander Vikram
 - * If touchdown was successful, the Vikram lander would have served as a listening station for

seismic waves from the moon, which could reveal more details about the structure of the lunar core, mantle and crust.

Vikram-Lander



The critical manoeuvre lasting 15 minutes was what space scientists termed as 'Autonomous Powered Descent' to the lunar surface.

Vikram was then travelling at a speed of 6,000 kms per hour at a height of 30 kms. It had to meet three parameters

- Spacecraft's velocity to be brought down to near zero,
- Control of Trajectory- Its path
- The descent was to be done in a controlled manner to enable landing at a pre-determined spot near the South Pole of the Moon

Soft Landing

The soft landing sequence was divided into four distinct phases that would steadily decelerate the spacecraft and its altitude till it reaches near zero at touchdown. To do that, Vikram was equipped with a cluster of five engines that would perform specific pre-programmed functions.

- First phase, called the Rough Braking Phase.
 - * At an altitude of around 100 km, the lander will begin the 'rough braking' phase.
 - * In this phase, four of the five Liquid-Fuelled Thrusters on the four corners of the lander's base

will fire, will be switched on, to decelerate it.

- * For deceleration, the thrusters will be fired in the direction of the movement of the lander.
- * When fired in the opposite direction, engines provide acceleration, like during the lift-off of a rocket from the Earth—the rocket's movement is upwards while the exhaust plume from the engine is directed downwards.
- * In simple words, these engines will provide thrust opposing the downward motion of the lander, thereby causing it to decelerate gradually.
- Second, when the lander is at an altitude of around 30 km, it will begin what the Indian Space Research Organisation (ISRO) calls the 'Absolute Navigation' Phase.
 - * In this phase of its descent to the Moon's surface, the lander will put to use the
 - * By this time, the lander will have also started to turn in order to point its legs in the downward direction in order to position itself for landing on the lunar surface.
- Third, the lander will begin the 'Fine Braking' Phase, in which it will continue to use the LPDC to get the image of the lunar surface.
 - * The thrusters will also continue to fire to decelerate the lander further.

- Fourth, when the lander reaches close to the designated landing site, it will enter the 'Hovering' Phase.
 - * In this phase, as is clear from the name, the lander will hover over the designated landing site, and two of its thrusters will continue to fire.

What might have gone wrong?

- Some scientists believe the problem occurred in the functioning of one or many of the four engines that were involved in the de-boost stage.
- The other cause could be a catastrophic failure of communication either due to overheating or a system malfunction that then resulted in the loss of control of the spacecraft.

Pragyan rover

- After three hours of landing, Pragyan would come out of the lander and slope down to the moon's surface to collect data.
- Both the lander and rover are designed to be operational for 14 days, during the duration of a lunar day.

Orbiter

- The orbiter is circling the Moon at an altitude of 100 kilometres
- Orbiter will cast light on Earth-Moon relations and their origin
- The orbiter has eight instruments fitted into it and seven of them are India's. NASA has one payload onboard called the Laser Retroreflector Array (LRA)

Payloads

Payloads are the scientific instruments carried by that satellite which will help us in conducting experiments, understanding the science behind it and draw a conclusion for future exploration.

- It contains electronic components

Chandrayaan-2 Large Area Soft X-ray Spectrometer (CLASS).

- CLASS measures the Moon's X-ray Fluorescence (XRF) spectra.
 - * When X-rays from the Sun strike the lunar surface, they can cause some elements to emit additional X-rays, a process known as fluorescence
 - * The elements that emit the X-rays can be identified based on the energy of the X-rays that are emitted.
 - * the greater the intensity of the X-rays, the greater the abundance of the element
 - * The XRF technique will detect these elements by measuring the characteristic X-rays they emit when excited by the Sun's rays
- Basically it will examine the presence of major elements such as Magnesium, Aluminium, Silicon, Calcium, Titanium, Iron, and Sodium.

Solar X-ray Monitor (XSM).

- XSM observes the X-rays emitted by the Sun and its corona, measures the intensity of solar radiation in these rays, and supports CLASS.

Orbiter High-Resolution Camera (OHRC).

- OHRC provides high-resolution images of the landing site ensuring the Lander's safe touchdown by detecting any craters or boulders prior to separation.

Imaging IR Spectrometer (IIRS).

- One of its objectives is the global mineralogical and volatile mapping of the Moon.

Chandrayaan-2 Atmospheric Compositional Explorer 2 (CHACE 2).

- CHACE 2's primary objective is to carry out a study of the composition and distribution of the lunar neutral exosphere and its variability.

Two of the instruments are similar to those on Chandrayaan 1

Terrain Mapping Camera-2 (TMC-2)

- The TMC-2 will map the lunar surface and help to prepare 3D maps of it.
- It will give an idea about the craters, mountain ranges, and other various features
- The data collected by TMC 2 will give us clues about Moon's evolution

Dual Frequency Synthetic Aperture Radar (DFSAR).

- The Mini SAR instrument on Chandrayaan 1 was developed by NASA and it worked in only S-band frequencies with Hybrid Polarimetry.
- However, the dual-frequency SAR instrument developed by India can simultaneously map the surface in both L- & S-band frequencies with full polarimetric capabilities (the ability to study the optical activity exhibited by inorganic and organic compounds)
- It will study about the water-ice in the South Pole and thickness of the lunar dust on the surface.

- One of the critical differences between the atmospheres of Earth and the moon is how atmospheric molecules move.
 - * Here in the dense atmosphere at the surface of Earth, the molecules' motion is dominated by collisions between the molecules.
 - * However the moon's atmosphere is so thin, atoms and molecules almost never collide

Dual Frequency Radio Science (DFRS)

- It will study the density of the electrons in the moon's ionosphere i.e. the uppermost part of the atmosphere that is ionized by radiation.

7. What is 'Quantum Supremacy'?

Context

- U.K.-based Financial Times had an article which said Google had claimed to have achieved 'quantum supremacy' which means that researchers at Google had solved a really difficult problem in seconds with the help of quantum computers which a supercomputer could not

What are Quantum Computers?

The ideas governing quantum computers have been around since the 1990s but actual machines have been around since 2011, most notably built by Canadian company D-Wave Systems. Quantum computers work differently from the classical computers.

- Exploiting the principles of quantum mechanics, they can easily tackle computational problems that may be tough for the classical computer as the size of the numbers and number of inputs involved grows bigger.

Difference between classic and Quantum Computers

- Conventional computers process information in 'bits' or 1s and 0s, following Classical Physics under which our computers can process a '1' or a '0' at a time.
 - * They exploit the properties of Quantum Mechanics, the science that governs how matter behaves on the atomic scale.
 - * Quantum computers use Qubits i.e. 0, 1 and both of them simultaneously to run machines faster.
 - * The advantage of using a quantum computer is that the particle can be in multiple states simultaneously. This phenomenon is called superposition.
- Information processing is carried out by logic gates e.g. NOT, AND, OR etc.
 - * Information processing is carried out by Quantum logic gates.

How will it help us?

- The speed and capability of classical supercomputers are limited by energy requirements.

- * Looking for really useful information by processing huge amounts of data quickly is a real-world problem and one that can be tackled faster by quantum computers.
- * In theory, a quantum computer can solve this problem rapidly because it can attack complex problems that are beyond the scope of a classical computer.

- Along with these they also need more physical space.

Quantum Supremacy

- It refers to a Quantum Computer solving a problem that cannot be expected of a classical computer in a normal lifetime.
- This relates to the speed at which a quantum computer performs.
- The phrase "Quantum Supremacy" was coined in 2011 by John Preskill, Professor of Theoretical Physics at the California Institute of Technology in a talk he delivered on the benefits of using quantum hardware over traditional computers.
- Google's quantum computer, named Sycamore, claimed 'supremacy' because it reportedly did the task in 200 seconds that would have apparently taken a supercomputer 10,000 years to complete.

Is this an important achievement?

Yes it is but with a word of caution.

- The number-generating task was the equivalent of having a Ferrari and a truck compete in a race and, on the car's predictable victory, declare that the Ferrari could do everything that a truck did.
- While IBM and a few other private establishments also have quantum computer prototypes, a common ailment is that they have their own unique propensity to errors and are not as amenable to executing real world problems as super computers.
- It gives confidence to private entrepreneurs and even academics to invest time and money to improving them and customise them to real world problems.

How do they look?

- Quantum computers do not look like desktops or laptops that we associate the word 'computer' with.
- Instead (and there are only a handful of them) they resemble the air-conditioned server rooms of many offices or the stacks of central processing units from desktops of yore that are connected by ungainly tangled wires and heaped in freezing rooms.

Is India working on quantum computing?

There are no quantum computers in India yet.

- In 2018, the Department of Science & Technology unveiled a programme called Quantum-Enabled Science & Technology (QuEST) and committed to investing ₹80 crore over the next three years to accelerate research.

- The ostensible plan is to have a quantum computer built in India within the next decade.
- Phase-1 of the problem involves hiring research experts and establishing teams with the know-how to physically build such systems.
- With its help, the study says, astronomers can tell what molecules are found in a planet's atmosphere by observing the changes in starlight as it shines through the atmosphere.

8. SCISAT

- It is a Canadian satellite designed to make observations of the Earth's atmosphere. Its main instruments are an optical Fourier transform infrared
- The SCISAT satellite was developed by the Canadian Space Agency to help scientists understand the depletion of the Earth's ozone layer by looking at particles in the atmosphere as sunlight passes through them.

SECURITY AND DEFENCE

1. Apache Attack Helicopters

- Apache is the most advanced multi-role heavy attack helicopter in the world.
- Alongside the capability to shoot fire and forget anti-tank guided missiles, air-to-air missiles, rockets and other ammunitions, it also has modern Electronic Warfare (EW) capabilities to provide versatility to helicopters in a network-centric aerial warfare.
- The helicopter is capable of delivering a variety of weapons which include air-to-ground Hellfire missiles, 70 mm Hydra rockets and air-to-air Stinger missiles.
- Apache also carries one 30 mm chain gun with 1,200 rounds as part of area weapon sub-system and it carries fire control radar, which has a 360 degree coverage and nose mounted sensor suite for target acquisition and night vision systems.

These helicopters are day/night, all-weather capable and have high agility and survivability against battle damage. This procurement will enhance the capability of IAF in providing integrated combat aviation cover to the army strike corps.

Context

The Indian Air Force (IAF) has formally inducted eight AH-64E Apache attack helicopters into service at the Pathankot Air Force Station

Details:

- Apache attack helicopters are being purchased to replace the Mi-35 fleet.
- India is 16th nation to select the Apache and the AH-64E is the most advanced variant.
- India contracted 22 Apache helicopters from the U.S. government and Boeing in 2015 and the entire fleet will be in service with the IAF by 2020.
- The government has also cleared the acquisition of six additional Apaches for the Indian Army which has been formally approved by the U.S.

2. Chinese trawlers in southern Indian Ocean worry India

Context

- There has been a huge increase in Chinese deep-sea fishing trawlers in the Southern Indian Ocean far from the Chinese coast which has raised concerns in the government and the security establishment.

A look at stats

- In the last four years (2015-2019), on an average at least 500 Chinese trawlers were present in the region and around 32,250 incidents per year were recorded.

- The trawlers were, however, not in India's Exclusive Economic Zone (EEZ) but beyond.
- This includes trawlers from China, Hong Kong and Taiwan.
- There were 1,100 occurrences near Somalia and 1,500 occurrences near the Coast of Oman.

Automatic Identification System (AIS)

AIS is an automatic ship tracking system used onboard ships as well as onshore VTS (Vessel Traffic Service) systems to monitor vessel movements around the world. An AIS signal is sent from a transponder onboard a vessel to a receiver located onshore or on another vessel. AIS was originally created to supplement marine radar tracking for collision avoidance and safety efforts on the waterway.

- Occurrences are recordings of the AIS aboard trawlers and ships recorded when they are activated.
- The AIS information comprises name, MMSI number, position, course, speed, last port visited, destination and so on.
- This information can be picked up through various AIS sensors including coastal AIS chains and satellite based receivers.
- A trawler can be recorded multiple times based on its AIS signature.
- The maritime movements in the region are tracked at the Navy's Information Management and Analysis Centre (IMAC) at Gurugram, which is the single-point centre interlinking all the coastal radar chains and other inputs along the coastline.
- Chinese trawlers have institutional backing and have processing facilities with them which are sold in the vicinity.

Way forward:

- To address the issue, the National Maritime Domain Awareness initiative aims to integrate fishing, ports, customs so that the database is available to everyone.
- Currently, the States have their databases. As part of this evolving mechanism, the National Committee for Strengthening Maritime and Coastal Security is scheduled to meet to discuss the implementation.
- There has been a national effort to install AIS systems on ships under 20m for which a pilot study has been carried out.
- AIS works through satellite and the ISRO has already delivered 1000 transponders for trails in Gujarat and Tamil Nadu.

3. Citizenship Bill

Context

Non-Governmental Organisations across the North-Eastern States have lined up protest programmes against the government's bid to reintroduce the Citizenship (Amendment) Bill.

Citizenship Amendment Bill:

- The Citizenship Amendment Bill seeks to allow illegal migrants from certain minority communities in Afghanistan, Bangladesh and Pakistan eligible for Indian citizenship.
- The Bill seeks to amend the Citizenship Act of 1955 and grant citizenship to people from minority communities — Hindus, Sikhs, Buddhists, Jains, Parsis and Christians — from Afghanistan, Bangladesh and Pakistan after 6 years of stay in India even if they do not possess any proper document. The current requirement is 12 years of stay.
- They would not face deportation under the Passport (Entry into India) Act of 1920 and the Foreigners Act of 1946.
- The Bill provides that the registration of Overseas Citizen of India (OCI) cardholders may be cancelled if they violate any law.
- The proposed legislation was cleared by the Lok Sabha in January, 2019 but not tabled in the Rajya Sabha.

Concerns and criticisms:

- The Bill is perceived to be a demographic threat to indigenous communities.
- The Centre's move to grant citizenship to non-Muslim minorities from Bangladesh, Pakistan and Afghanistan is believed to pose a huge threat, which will affect the spirit of democracy.
- The Bill makes illegal migrants eligible for citizenship on the basis of religion. This may violate Article 14 of the Constitution which guarantees the right to equality.
- The Bill implies that illegal migrants from Afghanistan, Bangladesh and Pakistan who are Muslims, other minorities who do not belong to the groups stated in the bill (eg. Jews), or atheists who do not identify with a religious group will not be eligible for citizenship, which is also seen as a violation of Article 14.
- The Bill is believed an attempt to naturalise the citizenship of illegal immigrants in the region. Civil Society groups have strongly opposed the proposed bill in its present form that seeks to make drastic changes in the citizenship and immigration norms of the country by relaxing the criteria to become an Indian citizen.

- The Bill allows cancellation of OCI registration for violation of any law. This is a wide ground that may cover a range of violations, including minor offences (e.g. parking in a no-parking zone).

Is it at cross-purposes with the National Register of Citizens (NRC)?

- NRC was updated under the Citizenship Act to weed out illegal immigrants from Bangladesh and other countries.
- The legacy data—the collective list of the NRC data of 1951 and the electoral rolls till 24 March 1971—was analysed to update NRC.
- The amendment paves the way for non-Muslim minorities who came to Assam from Bangladesh between 1 January 1966 and 24 March 1974 to get citizenship.
- This negates the NRC exercise, say ethnic Assamese groups and regional parties.
 - * The Bill would hamper the Assam National Register of Citizens (NRC), which defines all illegal immigrants, irrespective of religion, on the basis of a cut-off date.
 - * The Citizenship Bill is also seen as a move to subvert the Assam Accord of 1985. The Accord deems any person who cannot prove his ancestry beyond March 24, 1971 as an alien. It does not differentiate on the ground of religion in this aspect.

4. Darknet

- Dark Net (or Darknet) is an umbrella term describing the portions of the Internet not open to public view or hidden networks whose architecture is superimposed on that of the Internet.
- Darknet provides anonymity to the users.
- Darknet is often associated with the encrypted part of the Internet called Tor network where illicit trading takes place such as the infamous online drug bazaar.
- A variety of darknet markets (black markets) allow for the anonymous, illegal buying and selling of drugs and other illegal or controlled substances, such as pharmaceuticals, and weapons.
- The services and websites running on the darknet is the dark web.

Are Dark Web and Deep Web one and the same?

- Deep Web is the area of the Internet which is not accessible through search engines. What can be accessed through search engines is called Surface Web.
- To get into the Deep Web one should know the right address.

- Dark Web is part of the Deep Web.
- While the Deep Web is accessible, the Dark Web is deliberately hidden.
- While incognito mode disables browsing history and web cache, the Dark Web is shielded by specialised software.
- Since the real world money trail carries the danger of exposure, Dark Web operators transact in virtual currencies, the most popular being Bitcoins.

Concerns:

The relative impermeability of Darknet has made it a major haven for drug dealers, arms traffickers, child pornography collectors and other criminals involved in financial and physical crimes so much so that one can buy anything from tigers to hand grenades to any kind of narcotic substances, provided the potential buyer finds the right website on the Darknet.

Context:

Expert from Israel is training Kerala Cyberdome analysts to monitor the Darknet.

Details:

- Kerala Cyberdome is a technological research and development Centre of Kerala Police Department conceived as a Cyber Centre of excellence in cybersecurity as well as technology augmentation for effective policing.
- The Kerala police have set up a state-of-the-art lab complete with enabling software to intervene and crack down on the rising criminal activities over the Darknet, known as the underworld of the Internet.
- A pool of four analysts have been trained and deployed in shifts for round-the-clock monitoring of Darknet.
- Since the expertise for imparting training in tracking the Darknet is limited in the country, the analysts were given 14-day training by roping in an expert from Israel.

5. Indian Coast Guard Ship 'Varaha'

- The 'Varaha' is a state-of-the-art offshore patrol vessel.
- It was built by Larson & Toubro.
- It has features like ultra-advanced navigation, communication sensors and machinery.
- It will operate from the port of New Mangalore on the West Coast covering the Exclusive Economic Zone up to Kanyakumari.
- ICGS 'Varaha' is capable of operating the indigenously-developed Advanced Light Helicopter by Hindustan Aeronautics Limited (HAL).

- The ship is well equipped with high speed boats, medical facilities and modern surveillance systems.
- It is also capable of carrying pollution response equipment.

Context

- The Defence Minister commissioned Indian Coast Guard Ship 'Varaha' in Chennai. The Minister said that the ship is a fine example of industry collaboration with the Make in India initiative.

6. INS Khanderi

Context

- Union Defence Minister Rajnath Singh commissioned the INS Khanderi in Mumbai, making it the second Scorpene-class submarine after INS Kalvari to join the submarine arm of the Indian Navy.

Details

- The name Khanderi is inspired by the dreaded 'Sword-tooth fish', a deadly fish known to hunt while swimming close to the bottom of the ocean.
 - * Khanderi is also name of an island fort built by great Maratha ruler Chhatrapati Shivaji Maharaj.
- It has been built in India to the French Scorpene design and is the second submarine of the Project-75
 - * The diesel-electric attack submarine is being built at Mazgaon Dock in Mumbai.
- It has the capability of firing six torpedoes
- The maximum speed of the INS Khanderi submarine is 20 nautical miles.
- Its state-of-the-art technology helps reduce noise under the sea.
- It saves oxygen availability and increases its capacity to stay underwater for long periods.

Operation Trident

- December 4, 1971, In the midst of Indo-Pakistani War of 1971, Indian Navy conducted an offensive operation
 - * Indian Navy's fleet sailed towards Pakistani waters to attack the Karachi port, the stronghold of the Pakistani Navy.
 - * In the attack, Indian Navy sank four Pakistani vessels and ravaged the Karachi harbour fuel fields, killing over 500 Pakistani Navy personnel.
- Three missile boats of the Indian Navy, INS Nipat, INS Nirghat and INS Veer, played a pivotal role in the attack.

- India suffered no losses, Pakistan lost a minesweeper, a destroyer, a cargo vessel carrying ammunition, and fuel storage tanks in Karachi.
- Navy day is observed on 4th of December every year to celebrate the achievements, and role of the naval force in protecting and guarding the country.

Operation Python

- It was a follow-up to Operation Trident
- It was the code name of a naval attack launched on Karachi by the Indian Navy

7. National Intelligence Grid (NATGRID)

- NATGRID is a counter terrorism programme, which will utilize technologies like Big Data and analytics to study and analyze the huge amounts of data from various intelligence and enforcement agencies to help track suspected terrorists and prevent terrorist attacks.
- NATGRID was among the ambitious slew of intelligence reforms undertaken in the wake of the Mumbai attacks of November 2008.
 - * NATGRID aims to mitigate a vital deficiency — lack of real time information, which was considered to be one of the major hurdles in detecting US terror suspect David Headley's movement across the country during his multiple visits between 2006 and 2009.

How does it function?

- NATGRID is an intelligence sharing network that collates data from the standalone databases of the various agencies and ministries of the Indian government
- It is a counter terrorism measure that collects and collates a host of information from government databases including tax and bank account details, credit card transactions, visa and immigration records and itineraries of rail and air travel.
- This combined data will be made available to 11 central agencies, which are: Research and Analysis Wing, the Intelligence Bureau, Central Bureau of Investigation, Financial intelligence unit, Central Board of Direct Taxes, Directorate of Revenue Intelligence, Enforcement Directorate, Narcotics Control Bureau, Central Board of Indirect Taxes and Customs and the Directorate General of GST Intelligence
- It is given access to information on money laundering and black money collected by the Financial Intelligence Unit.

Importance of NATGRID

- NATGRID will become a secure centralised database to stream sensitive information from 21 sets of data sources such as banks, credit cards, visa, immigration and train and air travel details, as well as from various intelligence agencies.
- The database would be accessible to authorised persons from 11 agencies on a case-to-case basis, and only for professional investigations into suspected cases of terrorism.
- It has the potential to provide real time tip-offs and predictive intelligence to deal with the terrorist threat.
- NATGRID will help to collate scattered information into a transparent, accessible, integrated grid and do away with the inefficiencies associated with information asymmetries that hitherto delayed counter-terror operations.

Challenges

- Sensitive information about individuals is available on a single source in NATGRID, the potential for its misuse might dramatically go up. The poor track record of the Indian security and intelligence agencies on individual privacy and liberty must be kept in mind
- If states are to actively contribute towards updating the NATGRID database in the spirit of cooperative federalism, they should be among the ones who benefit from it.
- At the level of execution, NATGRID also faces issues like consolidating data from a huge population, lack of compatibility with data sets in regional languages, risk of spies ratting out vital information to outside sources and security from external attacks.
- NATGRID suffers from many inadequacies, some due to bureaucratic red tape and others due to fundamental flaws in the system.

Context

- NATGRID project wants to link social media accounts to the huge database of records related to immigration entry and exit, banking and telephone details among others

Concerns

- The proposal has received resistance from the intelligence agencies, whose officials fear that linking the social media accounts to sensitive government data could expose the system to "trojan attacks."
- Linking the database to social media accounts could jeopardise the entire exercise as it could be exposed to unknown virus attacks from open source Internet

8. Project 17A

- The Nilgiri-class frigate or Project 17A is a follow-on of the Project 17 Shivalik-class frigate for the Indian Navy.
- The seven Project 17A class warships—four are being built at Mazagon and three at GRSE in Kolkata—are the first major surface ships that are being constructed in India using 'Modular' Methodology.

'Modular' Method

- It involves building a warship by first constructing smaller modules or blocks, weighing hundreds of tonnes, and bringing them together for final welding and assembly.
- Using the modular method saves time as the blocks can be assembled at different locations. In addition, the blocks can be built together for multiple ships of the same design.
- An added advantage of modular technology is the reduced cost and time of incorporating upgrades and modifications to the ship in the future as parts can be detached and replaced more easily.

Firepower

In addition to construction methodology, the Project 17A Nilgiri class will be a radical upgrade over the existing Shivalik class in air defence capabilities.

- The Shivalik Class Ships used the Russian Shtil surface-to-air missile as their primary air defence weapon.
 - * The Shtil is fired from a single mechanical missile launcher in the bow of the ship.
 - * The use of a mechanical launcher limited the number of missiles that can be fired at a time to just one.
- In comparison, the Project 17A class ships will use the Barak-8 surface-to-air missile, jointly developed by India and Israel.
 - * The Barak-8 is fired from a Vertical Launch System, which consists of multiple individual missiles in separate container-launcher silos installed in the hull of the ship.
 - * A Vertical Launch System enables multiple missiles to be fired simultaneously
 - * In addition to the advantage of a vertical launch system, the Barak-8 features longer range (over 70km) and a more advanced radar seeker than the Shtil, enabling it to deter attacks by multiple aircraft and anti-ship missiles, at longer distances.
- The Project 17A class ships will also use a larger main gun, which has a calibre of 127mm, unlike the Indian Navy's existing fleet of ships that use 76mm and 100mm guns.

Sensors

- The Project 17A ships also feature an upgrade in sensors. The ship is equipped with the MF-STAR radar from Israel.
- This radar has a range of around 450km and can detect multiple targets at once.

Context

- Raksha Mantri launched INS 'Nilgiri', the first of the Navy's seven new stealth frigates, at Mazagon Dock Shipbuilders Limited in Mumbai.
- INS Nilgiri is the first ship of Project 17A.

9. Jurisprudence of the judicial rubber stamp

Context

- In August 2019, amendments to the Unlawful Activities (Prevention) Act ("UAPA"), India's signature anti-terrorism legislation, allowing the Central government to designate individuals as "terrorists", caused a furore.
- Critics warned that vesting such sweeping powers in the hands of the political executive would prove to be a recipe for abuse, and for political and social persecution.
- In response, it was argued that the UAPA provided for a system of checks and balances which would ensure that governmental abuse could be swiftly reviewed and rectified.

How the UAPA Tribunal Works?

A look at how the UAPA functions presently suggests that the defenders of the law are too optimistic in their faith in "institutional correctives".

- Before the 2019 amendments, the UAPA could be used to ban associations and not individuals. To this end, the UAPA required, and still requires that the ban must clearly set out the grounds on which the government has arrived at its opinion; and it may then be contested by the banned association before a Tribunal, consisting of a sitting High Court judge.
- As a number of judgments have held, the task of a UAPA Tribunal is to carefully scrutinise the decision of the government, keeping in mind the fact that banning an organisation or a group infringes the crucial fundamental freedoms of speech and association.

Ban on Jamaat-e-Islami

- Kashmir-based Islamist political party was banned for five years by the Govt accusing it of supporting militancy by a recent UAPA Tribunal Order
- Created in 1942, Jel participated in Indian elections for more than two decades before becoming engaged with separatist politics following the onset of militancy in Kashmir in 1989.

Sealed covers and evidence

- The government's ban on the Jel, J&K was based on its opinion that the association was "supporting extremism and militancy", "indulging in anti-national and subversive activities", and activities to "disrupt the territorial integrity of the nation".
- In support of this opinion, the government said that there existed a large number of First Information Reports ("FIRs") against various members of the association.
- Among other things, the Jel, J&K responded that for almost all of the FIRs in question, the people accused had nothing to do with the association. This, it was argued, could be proven by looking at the association's membership register, which had been seized by the government.
- One would think that such a case can be resolved straightforwardly: had the government managed to prove that there existed sufficient evidence of wrongdoing against members of the Jel, J&K, that would justify banning the organisation altogether.
- It is here, however, that things began to get murky because the government then fell back on the increasingly convenient "sealed cover jurisprudence", submitting material that it claimed was too sensitive to be disclosed.
- Notably, the evidence was not disclosed even to the association and its lawyers, who were contesting the ban.

Concerns with tribunal

- These tribunals have given the Governments vast leeway to Prove the Govt's view and its case, with this the tribunals have departed from some of the most fundamental principles of fair procedure, and act as little more than judicial rubber stamps
- Now, it would appear to be a very basic principle of justice that if an association is to be banned for unlawful activities, then the material on the basis of which that ban is justified is put to the association so that it has a chance to defend itself.
- To take a decision on the legality of a ban by looking at secret material that is withheld even from the association itself is exactly akin to condemning a man unheard.
- It is kangaroo-court style justice, which has no place in a modern democracy. However, this is exactly what the Tribunal did.
- To this day, neither the association nor anyone reading the Tribunal's opinion has any way of knowing what the evidence was.

- * In essence, therefore: the fundamental freedoms of speech and association have been violated on the basis of secret evidence passed from the government to the Tribunal; an association numbering in at least the thousands has been shut down for five years, and all its members made putatively unlawful, potentially criminal without even being told why.
- The testimony of a senior and former office bearer of the Jel, J&K about the association's efforts to distance itself from "unlawful activities", "extremism", and "terrorism" went un rebutted
- More importantly, as the Jel, J&K argued, a look at its membership register would make it clear that its members had nothing to do with criminal activities.
 - * The problem, however, was that its membership register had been seized by the government.
 - * Consequently, the Jel, J&K made a rather common-sense argument: let the government produce the membership register, since it was in its possession.

Justice denied by the Tribunal

- The government, however, refused to do so, and instead submitted even this piece of evidence in a sealed cover.
- And the Justice of the Tribunal's response to this was that "the respondent Association has not led any evidence to substantiate their defence that their office-bearers or members are not involved in the kind of activities alleged against them".
- In short, therefore, the Tribunal wanted the association to prove that their members were not committing illegal activities, while the main source of evidence that the association would rely upon to prove exactly that, was in the hands of the government — and the association was not allowed to rely on it.

If, therefore, we take a step back and look at the Tribunal's opinion, two aspects stand out starkly.

- First, a five-year ban upon an association — going to the very heart of the freedom of speech and association, potentially making all persons associated with it criminal — was upheld by a judicial forum on the basis of secret evidence that the association had neither the chance to see, nor to rebut.
- And second, the most valuable piece of evidence that the association had to defend itself was seized from it by the very government that had banned it; and not only did the Tribunal wink at this, but then used the absence of that piece of evidence against the association that it had been seized from, and in favour of the government that had seized it.

Conclusion

- These “departures” have been made boundless, and boundlessly manipulable to the extent that they have swallowed up the most basic rules of procedural justice and fairness.
- What we effectively have now, is this situation: on the one hand, every leeway is provided to the government, loopholes have been created where non-existed, and every procedural and evidentiary standard diluted, while on the other, associations (comprising Indian citizens) are held to impossible standards in order to disprove the case against them.
- This is not a jurisprudence that respects constitutional democracy or fundamental freedoms such as speech and association.
- Rather, it is a jurisprudence of the judicial rubber stamp: courts acting to legitimise and enable governmental overreach, rather than protecting citizens and the rights of citizens against the government.
- It is a situation where in the words of a famous English judge the judiciary has gone from “lions under the throne” to “mice squeaking under a chair in the Home Office” – with “consequences that the nation will one day bitterly regret”.

10. Meet of DGPs discusses draft policy on drones

Context

At a meeting of the Director General of Police (DGPs) of southern States, issues relating to what types of drones could be permitted and the formulation of a policy on their usage were taken up for discussion.

Details:

- With individuals and private companies planning extensive usage of drones for purposes like video coverage of events to agriculture, the Centre wanted to evolve a drone policy.
 - * Drone is terminology for Unmanned Aircraft (UA).
 - * There are three sets of Unmanned Aircraft, namely, Remotely Piloted Aircraft, Autonomous Aircraft and Model Aircraft.
- The major concern is that the Centre is allowing drones weighing 400 gm or less. But the problem is most of the drones being used while covering marriages or meant for areas like precision agriculture weigh more than that.
- At the meeting, it was decided to constitute five regional coordination committees and discuss the finer details on issues relating to law and order.

- The committee would prepare a draft policy and present it to the Centre for its consideration.

National Drones Policy:

- India imposed a blanket ban on drones in 2014. In the following years, it came to be seen as impractical. So, the government crafted a regulatory policy.
- The National Drones Policy drafted by the Ministry of Civil Aviation came into effect from December 1, 2018.
- The “Drone Regulations 1.0” lays down rules as to where, when and how drones can operate within India.
- The Ministry of Civil Aviation has kick-started the online registration of drones in India through its Digital Sky portal.
- The Digital Sky Platform is the first-of-its-kind national unmanned traffic management (UTM) platform that implements “no permission, no takeoff” (NPNT).
- Under the new policy, Nano drones which weigh less than 250 grams or equal does not need a registration or license.
- However, drones that belong to remaining categories will need to be registered on the Digital Sky portal.
- Drone Regulations 1.0 intend to enable visual line-of-sight daytime-only and a maximum of 400 ft altitude operations.
- Air space has been partitioned into Red Zone (flying not permitted), Yellow Zone (controlled airspace), and Green Zone (automatic permission).
- The regulation also defines “No Drone Zones” around airports; near international border, Vijay Chowk in Delhi; State Secretariat Complex in State Capitals, strategic locations/vital and military installations; etc.

Way forward:

- Since Indian cities are growing vertically, having nano drones flying around without much regulation may lead to the invasion of privacy.
- They may also be misused for unethical activities such as corporate espionage, trespassing, surveillance, unauthorised photography and burglary.
- There is a need for clarity in the policy with a mechanism to check whether the operators are adhering to the norms.
- Strict monitoring is needed on how drones collect, use, store and share data.

Conclusion:

A comprehensive system for approving applications, renewing permits, alerting the agencies concerned to deal with emergencies, and recording the history of a vehicle can strengthen the policy's applications. This can help India use drones effectively for not just aerial mapping but also in disaster management, traffic control, policing, security, environmental studies and agriculture.

ENVIRONMENT AND ECOLOGY

1. Biocatalyst Cuts Effluent Discharge during Leather Processing

Context:

- A novel Amylase-Based Biocatalyst helps in processing leather in an environment-friendly way.

Pollution in the Leather Processing Industry:

- Pre-tanning process generates 60-70% of total pollution during the processing of leather.
- Chromium is used in the process for increasing the stability of the collagen through cross-linking. It leads to the discharge of chromium into the environment.

Details:

- A Biocatalyst uses biological systems or their parts to speed up (catalyse) chemical reactions.
- The biocatalyst was developed by researchers at the Central Leather Research Institute (CSIR-CLRI), Chennai.
- The team used genetic code engineering to introduce new chemistry in the amylase enzyme to improve its enzymatic properties.
- The biocatalyst has 120 times higher binding to the glycan sugar (glycosaminoglycan) present predominantly in the skin.
- Once the catalysts binds to the sugar, it selectively breaks down (hydrolysis) the sugar thus opening up the skin fibre.

Significance:

- The biocatalyst will make a threefold reduction in water usage during the processing of leather.
- It will also reduce the time taken to process the skin at the pre-tanning stage.
- It will increase the absorption of chromium and reduces its discharge into the environment.
- The chemical oxygen demand drops by about 35% while the total solid effluent load reduces by over 50%.

2. Boiga Thackerayi

- It is a new species of snake that has been discovered in the Western Ghats in Maharashtra.
- The species falls in the category commonly called cat snakes.
- It belongs to the genus Boiga and has Tiger like stripes on its body.
- This is the second species of Boiga after *B. dightoni* that is endemic to the Western Ghats and the first new species of Boiga described after 125 years from the Western Ghats.

- This is apparently the first known species of Boiga which feeds on frog eggs.

3. Environment Pollution (Prevention and Control) Authority (EPCA)

- The EPCA was constituted under the provisions of the Environment (Protection) Act, 1986.
- It is tasked with taking various measures to tackle air pollution in the National Capital Region.
 - * Its objective is to protect and improve the quality of environment
 - * The EPCA is mandated to enforce Graded Response Action Plan (GRAP) in the city as per the pollution levels.
- The EPCA assists the Supreme Court in various environment-related matters in the region.
 - * They help in preparing Reports and also in monitoring the implementation of the Courts Orders.
- The EPCA has been empowered to take suo motu action as well as on the basis of complaints made by any individual, representative body or organisation functioning in the environmental issues sector.
- The EPCA in the past had enforced several measures, including closure of the Badarpur thermal power plant, ban on brick kilns, hot mix plants and stone crushers, and construction activities.

Composition

The constitution of this body is largely regional.

- Besides the chairman, the EPCA has 14 members, some of whom are the environment secretary of the National Capital Territory of Delhi (NCT), chairperson of the New Delhi Municipal Council, transport commissioner of the NCT, the commissioners of various municipal corporations of Delhi and professors at IIT Delhi and Jawaharlal Nehru University.

4. Environmental Flows

- It refers to minimum water levels that must be maintained in the river at all times of the year for its health and sustainability
- It is defined in terms of the quantity, quality and timing of water running through rivers and wetlands.
- They sustain aquatic ecosystems and human livelihoods.

Importance of Environmental Flows

- Flows are needed for maintaining the river regime, making it possible for the river to purify itself, sustaining aquatic life and vegetation, recharging groundwater, supporting livelihoods, facilitating navigation, preserving estuarine conditions, preventing the incursion of salinity, and enabling the river to play its role in the cultural and spiritual lives of the people.

Threats to minimum flow

- River flows are threatened by a proliferation of dams and over-abstraction of water for agriculture, industry and urban use.

Context

- The Centre has cut down by two years the grace period accorded to hydropower projects on the upper stretches of the Ganga, for complying with environmental-flow requirements.

Background

- In October 2018, amidst protests by Ganga activists and monks, the government had passed a notification requiring hydropower projects to release minimum quantities of water.
- However, it gave hydropower projects “three years (2018-2021)” to make modifications to projects to comply with these norms.

Reduction in time Period for execution of Minimal water flow

- But in September 2019 via a gazette notification, the government advanced this deadline to December 15 2019.
- This decision was taken because the Central Water Commission has for a year monitored flows from these projects and found that all the projects had the capacity to comply with the e-flow regime

5. Gharial

- The gharial (*Gavialis gangeticus*) is also known as the gavial, and fish-eating crocodile is a crocodilian in the family Gavialidae.
- It is native to sandy freshwater river banks in the plains of the northern part of the Indian subcontinent.
- The male gharial has a distinctive boss at the end of the snout, which resembles an earthenware pot known in Hindias.
- Gharials once inhabited all the major river systems of the Indian Subcontinent, from the Irrawaddy River in the east to the Indus River in the west. Their distribution is now limited to only 2% of their former range.
- In India, Gharials can be found in Girwa River, Chambal River, Ken River, Son River, Mahanadi River, Ramganga River.

- ICUN Red list classifies it as Critically Endangered.

6. Global Climate Strikes**Greta Thunberg**

- She is a 16-year-old climate activist. She is one of the world's youngest climate change crusaders
- She has delivered speeches at the World Economic Forum in Davos, the EU Parliament, COP24, and to the UN Secretary General Antonio Guterres.

FridaysForFuture movement

- #FridaysForFuture is a movement that began in August 2018, when Greta Thunberg sat in front of the Swedish parliament every school day for three weeks, to protest against the lack of action on the climate crisis.
 - * Greta decided to continue striking every Friday until the Swedish policies provided a safe pathway well under 2-degree C, i.e. in line with the Paris agreement.
 - * It is a campaign, which has seen students walk out of their schools on Fridays to demand their political leaders take urgent action to address climate change.
- In a parallel movement, millions of adults will be joining them in the Global #ClimateStrike.

Why are students protesting this time?

- Even though climate change affects everyone, the present generation of youngsters are the ones who are going to be bearing the brunt of it in the coming decades.
- The sentiments behind these school student movements are the “broken promises” of older generations, members of which continue to extract and use fossil fuels, leading to increased CO2 emissions and subsequently, increasing average global temperatures.
- Distrust of political leaders among the younger generation is also a reason why they feel the need to take things into their own hands.”

7. Great Indian Bustard

- The great Indian bustard (*Ardeotis nigriceps*) or Indian bustard is a bustard found on the Indian subcontinent.
- It is a large bird with a horizontal body and long bare legs, giving it an ostrich like appearance.
- It is among the heaviest of the flying birds.
- These birds are often found associated in the same habitat as blackbuck.
- IUCN Red data list classifies Great Indian Bustard as Critically endangered.
- It is protected under Schedule 1 of Wildlife (Protection) Amendment Act 2002.

Context:

- The National Green Tribunal has directed the Centre to prepare a time-bound action plan within two months for protection of Great Indian Bustard.
- The direction comes in the wake of high mortality rate of the Great Indian Bustard.

Concerns:

- 75 per cent of the birds have died due to collision with power lines in the past 30 years.
- Power lines, especially high-voltage transmission lines with multiple overhead wires, are the major threat to the critically endangered species as they have poor frontal vision.
- Activities such as mining, stone quarrying, growth of industries, heavy pesticide use, grassland conversion and power projects along with the expansion of roads, electricity pylons, wind turbines, solar energy projects and other infrastructures have increased the severity of habitat degradation and disturbance.
- The Union Environment Ministry has acknowledged that adult mortality among Great Indian Bustard is still very high due to collisions with power-lines that crisscross their flying paths.
- WII has suggested a slew of measures, including mitigation of all power transmission lines passing through priority bustard habitats, disallowing new wind turbines, solar farms among others.

8. India Water Week**Context**

- The President Shri Ramnath Kovind inaugurated the 6th India Water Week-2019 at New Delhi

Details

- It was organised for the first time in 2012.
- The theme for the 2019 event is "Water Cooperation – Coping with 21st Century Challenges".
 - * This year, the focus is on the need and importance of water use across all sectors.
- The idea behind the Water Week is to have talks, discussions, seminars, and sessions to build public awareness, to get support to implement key strategies for conservation, preservation and optimum use of available water.
- It is organised by the Ministry of Water Resources in coordination with the nodal ministries of Environment, Forest and Climate Change; Agriculture; Urban Development; Rural Development; New and Renewable Energy; Power; Drinking Water Supply and Sanitation; the NITI Aayog and other PSUs, national and international bodies.

9. Jaldoot

- Jaldoot is a travelling exhibition arranged by Regional Outreach Bureau, Pune under the Ministry of Information and Broadcasting
- It is a unique initiative to spread the message of water conservation to masses.
- The exhibition highlights bold initiatives and decisive actions taken by the government.

10. Maradu Flat Demolition Controversy**Background**

- The CPM-ruled Maradu Panchayat granted permission for the construction for five waterfront apartments overlooking the scenic canals of Kochi backwaters.
- The 343 flats in the five buildings cover an area of 68,028.71 sq mts.
- But after granting permission, the panchayat issued a notice to the builders following a directive by the Kerala Coastal Zone Management Authority (KCZMA).

Why did KCZMA object the construction?

- The government body said the site fell under the CRZ-III vulnerable category where no construction is allowed within 200 metres from the coast.
- Any such act will be identified and acted upon as a violation of the Coastal Regulatory Zone (CRZ) rules.
- It was also revealed that a directive issued by the KCZMA makes it mandatory for self-government bodies to obtain its clearance before approving constructions in coastal areas.
- But Maradu panchayat didn't forward any application to gain a CRZ permit for the five complexes.

What is CRZ?

- The CRZ norms are framed under Section 3 of the Environment Protection Act, 1986 to promote sustainable development based on scientific principles.
- No construction is allowed within 200 metres from the coast in areas falling under CRZ-III zone

How did the Supreme Court come into the picture?

- The builders managed to get an interim stay order from the Kerala High Court in 2007 and finished the construction before starting selling the flats.
- The KCZMA approached the Supreme Court in 2016 and argued the panchayat issued construction permit without their concurrence.
- The apex court formed a technical committee to study the issue - whose findings were in favour of the CZMA.
- In May 2019, the Supreme Court declared the construction permission granted by the Panchayat "illegal" and ordered the demolition of the complexes.

- The court said CRZ violations should not be treated lightly in view of the natural calamities happening in different parts of the country.

What are the builders' arguments?

- The construction was granted in 2006 when Maradu was a panchayat. However, it was upgraded a municipality in 2010.
- The builder's claim that the building permit was granted before the Coastal Regulation Zone Act came into force. There was no CRZ mapping available when the project was sanctioned.

Why is the demolition of the apartments problematic?

- If the entire structure is demolished at one go without proper study and planning, it will result in larger ecological disaster, seriously affecting the environment and inhabitants of nearby places.
- The method of demolition, if carried out, should be carefully decided in consultation with experts, though implosion by explosives seems most appropriate.
 - * Even so, it would be practically impossible to remove the foundation, especially with the 35m-deep cast-in-situ bored reinforced concrete piles expected under the buildings in Maradu.
- This could also result in significant environmental impact, including air pollution caused by fine material over a radius of more than 1 km and noise pollution.
 - * The fine material and debris could even contaminate water bodies and set on the leaves of plants.
- The demolition could also cause serious vibrations that may affect nearby heritage structures and buildings.
- The falling debris on nearby water surfaces (in this case, the canals connected to the Vembanad Lake), could lead to increase in hardness, alkalinity, heavy metal concentration, COD, turbidity and slight variations in pH of the water.

Blind spots and concerns

- The case raises multiple concerns regarding environmental governance and adjudication. Even the key question of whether the apartments fall within CRZ-III, which would prohibit construction within 200 metres from the High Tide Line, or the less restrictive CRZ-II is unsettled.
- The three-member panel appointed by the Supreme Court stated that as per the CRZ notification of 1991 and the Kerala Coastal Zone Management Plan, 1996, the area in question came under CRZ-III.
- Maradu became a municipality in 2010 and consequently, the 2011 CRZ notification categorised it under CRZ-II, though the Union Environment Ministry approved this only in February 2019.

- The Court held that since at the time of construction, the area fell within CRZ-III, these were unauthorised constructions.
- The Supreme Court has adopted a narrow view by merely examining the bureaucratic categorisation and ignored that the construction was based on permission granted by the local government and orders of the High Court.
- The process of adjudication through a three-member committee also raises questions since it further delegated the task to another technical committee, which the residents allege, did not give them a fair hearing.
- Alarming, the court is silent on the fate of the owners and residents of the apartments. Unlike most judgments on evictions, the court does not pronounce on the question of rehabilitation or compensation for those who would lose their homes.

Conclusion

- While State authorities and courts were complicit in allowing the buildings to be constructed in the first place, liability is now being placed squarely on the apartment owners.
- For environmental justice, what we need is a strong environmental governance system that enables all stakeholders to prevent violations instead of the court becoming India's new demolition man.

11. Mussoorie Resolution (Green Bonus)

Context

- 'Himalayan Conclave' was held in Mussoorie to deliberate on issues like conservation of the Himalayan ecology, biodiversity and the cultural heritage.

Participants

- Chief Ministers and representatives of the Himalayan states -- Jammu and Kashmir (Before August 5th), Uttarakhand, Himachal Pradesh, Sikkim, Arunachal Pradesh, Meghalaya, Nagaland, Tripura, Mizoram and Manipur -- took part in the conclave.
- The only absence was of Assam, which was ravaged by the floods.

Payment for Ecosystems Services (PES)

- Ecosystems support plants, animal and human life by maintaining the overall balance in nature. When functioning well, ecosystems also bring multiple benefits to people.
- These benefits include food, fiber, fuel, herbs and medicinal plants, genetic resources, drinking water
- Today, through these activities, we often exploit natural resources, influence the capacity of ecosystems to provide us with their beneficial services.

- With our excessive activities we impact air quality, water purification processes, flood control, the Earth's climate.
- It is an innovative approach to nature conservation.
 - * PES encourage the maintenance of natural ecosystems through environmentally friendly practices that avoid damage for other users of the natural resources.

What they demand now as 'green bonus' is called the payment for ecosystem services.

Why Green Bonus?

- Most of the country's rivers originate in the Himalayas and these states can be termed as the water reservoir of the country.
 - * They can build dams, take advantages of Hydropower, bring changes in the aquatic ecosystem by exploiting the fishery sector and can also become hubs of tourism.
- The states have large swathes of land fell into eco sensitive zones where all sorts of development activities could not be carried out
- This is one of India's major carbon sink. Besides it averts soil erosion from the Himalayas.
- For these, they also face numerous restrictions in their usual development works such as taking up big projects that destroy forests.
- Himalayan states provide critical and huge ecosystem services to the country. They have forest in around 41.5 per cent of their geographical area.

What was the demand of these states?

- The states that participated in this conclave demanded 'green bonus' for the ecological services being provided by them
 - * It was the first time that the Himalayan states have come on a single platform to take a unanimous stand on the issue of green bonus
- The Himalayan states also demanded a separate ministry to deal with problems endemic to them

Incentives have been awarded to them

To some extent, in fact, these states have been getting incentives based on their forest cover under a Finance Commission formula since 2005.

- The 12th Finance Commission, for the first time, recognised the need to invest in resources and earmarked Rs 1,000 crores for five years to be given to states for preserving forests.
- The 13th Finance Commission allocated Rs 5,000 crore, based on the area under forest cover with an added parameter of Canopy density.
- The 14th commission brought the landmark change of including forest cover as a determining factor in a state's share.

- * In the distribution of funds to states, the commission attached a 7.5 per cent weight to forest cover.

What is the issue now?

- An assessment of individual state shares, as recommended by the commission, reveals that states cumulatively received over Rs 39,300 crore for forest conservation in 2015-16.
- While 19 states, which have substantial proportion of forest land have gained due to this
- Among the top five beneficiary states, only Arunachal Pradesh featured.

Conclusion

- The demand for a 'green bonus' by Himalayan states, thus, is not only a valid one but also an ecological necessity.
- They should demand more, because by giving them more India's plains can be saved from many disasters.

12. Nandankanan Zoological Park

- Nandankanan, is located near Bhubaneswar, Odisha.
- It is the first zoo in the World to breed White tiger and Melanistic tiger.
- Nandankanan is the only conservation breeding centre of Indian Pangolins in the world.
- It is the only zoological park in India to become an institutional member of World Association of Zoos and Aquarium (WAZA).
- It is the first zoo in India where endangered Ratel was born in captivity.
- It is the second largest heronry for Open Billed Storks in Odisha.

13. Nilgiri tahr's population up by 27% in three years

- Nilgiri Tahr is also known as the Nilgiri ibex.
- It is endemic to the Nilgiri Hills and the southern portion of the Western Ghats in the states of Tamil Nadu and Kerala.
- It is the State animal of Tamil Nadu.
- It is classified as "Endangered" as per the IUCN Red List.

Context:

Nilgiri tahr's sightings in the Mukurthi National Park have risen from 568 in 2018 to 612 this year(2019).

Details:

- Officials have said that this is the second consecutive year that an increase in the population of the animal had been recorded in the park.
 - * The population of the Nilgiri tahr, has risen by 132 since 2016.

- * There was a decrease in tahr numbers in 2017, when a population of only 438 was recorded, down from 480 in 2016.
- * According to officials, the almost 8% increase in its population follows a similarly significant increase in its population in 2018.
- * Preliminary findings pointed to a healthy sex ratio, slightly skewed in favour of does (female goats).
- Efforts were being made to ensure that the 78-sq.km reserve, closed to tourists, remained relatively free of some of the species of invasive plants that had begun their incursion into other habitats, such as Scotch broom and gorse in Avalanche.
 - * Almost no spread of invasive plants, means that the tahr have plenty of food and more room for the population to grow.
- The area is also free from poaching.
- Conservation efforts have helped in bringing the desired results in terms of maintaining a healthy population of the tahr.

Mukurthi National Park:

- Mukurthi National Park (MNP) is a protected area located in the western corner of the Nilgiris Plateau west of Ootacamund hill station in Tamil Nadu in the Western Ghats mountain range
- The park was created to protect its keystone species, the Nilgiri tahr.
- It is home to an array of endangered wildlife, including royal Bengal tiger and Asian elephant.
- The park was previously known as Nilgiri Tahr National Park.
- The park is a part of Nilgiri Biosphere Reserve, India's first International Biosphere Reserve.
- As part of the Western Ghats, it is a UNESCO World Heritage Site since 1 July 2012.

14. Odonates

- Odonata is an order of carnivorous insects encompassing the dragonflies and the damselflies.
- Odonates are amphibiotic (having aquatic larval form and terrestrial adult form) insects.
- Dragonflies are generally larger, and perch with their wings held out to the sides.
- Damselflies have slender bodies, and hold their wings over the body at rest.
- Odonates are great biological indicators and studies on them would provide crucial information on the health of aquatic habitats and variations occurring in the climate.
- Regular monitoring of odonates over a long period will help assess the changes in the natural landscape.

- Odonates are good pest controllers, too.
- Among the 488 species of odonates found in India, the Western Ghats is home to 193.

Context

A survey of dragonflies and damselflies population in Kerala has raised concerns over the ecological impact of the successive floods in the State.

Concerns:

- A survey of dragonflies and damselflies held in the Silent Valley National Park (SVNP) has reported an alarming decrease in the odonate population.
- The abnormal rain pattern and the successive floods in the State could have decimated the population of dragonflies and damselflies in the SVNP.
- Odonates spend much of their lifetime as eggs and larvae underwater. There are concerns that the floods could have washed them off.
- Many Indian odonates are endemic and most of them are restricted to the riverine ecosystem.
- Large scale habitat alterations such as damming, channel diversion, sand mining and pollution is seriously threatening the habitat of survival of these species.

15. Pyrolysis (NGT tells CPCB to regulate import of waste tyres)

- Pyrolysis is the thermal decomposition of tyres in the absence of oxygen. It is a process where the material is put through a thermochemical treatment under high temperature to produce industrial oil and other matters.

Context

- The National Green Tribunal (NGT) has directed the Central Pollution Control Board (CPCB) to regulate import of waste tyres for use in pyrolysis industry so that India does not become a dump yard for highly polluting hazardous waste material from other countries.

Health Impact

- In 2014, the National Green Tribunal banned the burning of used tyres in the open or using them as fuel in brick kilns, because they produce toxic smoke known to be hazardous to health.
- The toxic pollutants emitted affect public health adversely.
 - * The workers employed in such unscientific practices suffer from neurological disorders, skin diseases, cancer etc.
- The activity emits highly carcinogenic/cancer-causing pollutants such as polycyclic aromatic hydrocarbons (PAH), dioxin, furans and oxides of nitrogen which are extremely harmful to the respiratory system.

Failure to comply by rules

- The Ministry of Environment and Forests has a well-defined Standard Operating Procedure (SOP) for operation of such plants. However, only a very small percentage of these plants are partially compliant with the SOP.
- According to CPCB report in most cases, it was observed that the reason for non-compliance is not meeting the criteria of Standard Operating Procedure [SOP] of Ministry of Environment and Forests and the consent conditions issued by the State Pollution Control Boards

Steps to be taken

- NGT says there is a need for restrictions on import and regulation of unregulated units
- Accordingly, the CPCB may issue appropriate directions on the subject after due consideration on the issue.
 - * The directions should also deal with the restrictions on import so as to ensure that India does not become a dump yard for highly polluting hazardous waste material from other countries and also to ensure that health of the workers involved in the process

Alternatives

- Used tyres can be recycled through cleaner processes than pyrolysis.
- Through a technology called CRMB (Crum Rubber Modified Bitumen), rubber from used tyres is added to bitumen with crushed stones to lay roads. While this process was implemented by the Centre until 2010, it has been neglected since.
- Contractors are deliberately avoiding this technology. The motive, it said, was to make more money by using the tyres to produce fuel through pyrolysis and other processes.

Way forward

- Stricter norms for granting permission for import of waste tyres are required.
- Permission should be given only to a company having mechanical recycling equipment for processing of waste tyres in an environment friendly manner.
- Such companies must submit end use certificate and power consumption bill to show genuine in-house processing of waste tyres and who their end customers are. This should be certified by an independent auditor

16. Tylophora Balakrishnanii

- Tylophora balakrishnanii is a straggling vine, has been discovered from the Thollayiram shola.
- Thollayiram shola in Wayanad is a biodiversity hotspot in the Nilgiri biosphere reserve.

- It is a tuberous species.
- Flowers of the plant are reddish-pink and the species is similar to the coastal plant Tylophora flexuosa. However, it differs in its floral parts arrangement and morphology.

Tylophora Neglecta:

- Tylophora neglecta has been discovered from the shola forest on the Thooval Mala hill under the Achencoil forest division in Kollam.
- The flowers of the species are white with a violet tinge.
- Its leaves are thick and bristly in nature.

Context

- A team of researchers has reported the discovery of two new plant species from the shola forests of the Western Ghats.

Details:

- Both the plant species belong to the Asclepiadaceae or milkweed family.
- Latex in plant parts and pappus seeds are the general characteristics of the milkweed family.
- The discovery highlights the rich biodiversity and the need for a conservation strategy for the fragile ecosystem of the Western Ghats.

17. UN Convention to Combat Desertification

Context

- India hosted the UN Convention to Combat Desertification
- The UNCCD meeting takes place every two years and the ongoing one in Greater Noida is the 14th such meeting.

What is it?

- It is a major global agreement on issues related to land, the convention (UNCCD) seeks to address the phenomenon of desertification, the process through which fertile and productive land become degraded and unfit for useful activities like agriculture.

Why is desertification a concern?

- A variety of factors, both natural and human-induced, are known to be affecting the productivity of land, and making them desert-like.
- Increasing populations and the resultant rise in demand for food and water, feed for cattle, and a wide variety of ecosystem services these offer, have prompted human beings to clear forests, use chemicals, cultivate multiple crops, and over-exploit groundwater. This has affected both the health and productivity of land.
- Natural processes such as rising global temperatures increase the frequency and intensity of droughts, and changing weather patterns have put further pressure on the land.

- A recent report by the International Resources Panel, a scientific body hosted by the UN Environment Programme, said that about 25 per cent of world's land area has been degraded.
- Another report, by the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services, said that nearly 40 per cent of world's population was being impacted negatively because of land degradation.
- The Intergovernmental Panel on Climate Change (IPCC) too came out with a special report on land, in which it said that the rate of soil erosion in many areas of the world was up to 100 times faster than the rate of soil formation.

* It also said the annual area of drylands in drought had been increasing at more than 1 per cent every year in the last 50 years, and that nearly 500 million people lived in areas that have experienced desertification after the 1980s.

- Desertification has implications for food and water security, livelihoods, migration, conflicts and even international security.

Combating desertification refers to activities that prevent or reduce land degradation, and restore partially or fully degraded land.

What is the Convention to Combat Desertification?

The UNCCD is one of three Conventions that have come out of the historic 1992 Earth Summit in Rio de Janeiro. It is, however, possibly the least known of the three.

- The Rio summit gave rise to the UN Framework Convention on Climate Change (UNFCCC) under which countries have agreed to restrict the emissions of greenhouse gases, first through the Kyoto Protocol of 1997 and now through the Paris Agreement that was finalised in 2015 and becomes operational in 2020.
- It also gave rise to the Convention on Biological Diversity (CBD) which too has delivered an international arrangement to protect and use biodiversity.
- The UNCCD has not yet resulted in any international treaty or protocol to fight desertification.
- The UNFCCC holds its general meetings every year, while CBD and CCD meet every two years.

Why was the need felt for such a convention?

- At the time the UNCCD was born in Rio, degradation of land was mostly viewed as a localised problem, one that was mainly affecting countries in Africa. In fact, it was on the demand of the African countries that CCD came into being.
- The Convention repeatedly makes a mention of the special needs of Africa in fighting desertification.

- Over the years, it has become increasingly clear that land degradation was impacting the global network of food and commodity supply chains and was getting impacted in return.
- The crops being grown and the quantities in which they were being grown were dictated not by local needs but by global demands. Changes in food habits and international trade have altered cropping patterns in many areas.
- Large-scale migration to urban centres and industrial hubs has seen a heavy concentration of populations in small areas, putting unsustainable pressure on land and water resources.
- As an issue, therefore, land degradation of land is, therefore, much more complex than it appears.

To what extent does land degradation fit into the context of climate change?

Land has always been an important conversation in the climate change debate.

- Forests, trees and vegetation cover are important sinks of carbon dioxide.
- Land degradation, therefore, reduces the amount of carbon dioxide that is absorbed, and consequently leads to a rise in emissions.
- At the same time, agriculture and activities such as cattle rearing contribute to emissions and are a major source of methane which is a much stronger greenhouse gas than carbon dioxide.
- Restoration of degraded land can, therefore, have major co-benefits for climate change objectives.
- According to the report by the International Resources Panel referred to earlier, restoring 350 million hectares of degraded landscape by 2030 would take out between 13 to 26 billion tonnes of greenhouse gas emissions from the atmosphere. This would more than offset the emissions from activities like agriculture and cattle-rearing.
- The IPCC report had estimated that such activities contribute about 25 per cent of annual greenhouse gas emissions, or about 12 billion tonnes of carbon dioxide equivalent.

What change can be expected on the basis of a CCD meeting?

- The discussions at the CCD have so far remained academic and technical, mainly focusing on the kinds of activities that can be undertaken to restore degraded lands.
- Working on a recent mandate of the CCD, countries are making efforts towards achieving what is called Land Degradation Neutrality, or LDN, within their territories, and trying to ensure that the amount and quality of land necessary to support ecosystem services and strengthen food security remains stable or increases within time periods targeted by them.

Bamboonomics at COP 14 UNCCD

- Bamboonomics is a movement to combat desertification and climate change which will involve the tribal community of India since they have the expertise in this field.
- They have lived for generations without disturbing the natural harmony of a place, and without degrading the environment.
- The movement will also not compromise the income of the poor in these regions.
- The movement will ensure that tribals can earn a livelihood without causing environmental harm.

Context

- Union Minister for Tribal Affairs Mr. Arjun Munda launched Bamboonomics at the COP 14 of the United Nations Convention to Combat Desertification (UNCCD).

18. United Nations Climate Action Summit

Context

- United Nations Climate Action Summit was held in New York. It was convened to identify urgent and concrete solutions to climate Change

Mr Modi's speech

It covered four important aspects of India's climate action — the push for renewable energy, electric mobility, mixing of biofuel to reduce consumption of fossil fuels, and the Jal Jeevan Mission.

- Mr. Modi reiterated India's commitment to the creation of 175 GW renewable energy capacity by 2022 under the Paris Climate Agreement.
 - * He also said India's renewable energy target will be increased to 450 GW
- India would spend approximately \$50 billion "in the next few years" on the Jal Jeevan Mission to conserve water, harvest rainwater and develop water resources
- He said India had plans to make the transport sector green through the use of electrical vehicles.
- He also spoke of the need for behavioural change. "Need, not greed, is our guiding principle,"

New initiatives

Prime Minister Modi announced two international initiatives.

- First, a platform with Sweden and other countries, for governments and the private sector to work together to develop low carbon pathways for industry.
- Second, a Coalition for Disaster Resilient Infrastructure. This initiative was approved by the Union Cabinet and ₹480 crore has been allocated for technical assistance and projects.

- * The U.K., Australia and island nations such as Fiji and the Maldives will be part of this coalition.

Issue Area

- To meet its Paris Pact target, India will need to add more than 20 GW of RE installation a year, more than double the rate achieved in the past four years.
- According to the clean energy research outfit, Mercom, the country added 8.3 GW of solar capacity last year. This is a 13 per cent dip from 2017. The fall in pace of adding solar installations has continued this year.
- Land acquisitions are a major worry for large-scale solar projects, the Mercom report noted.
- But policymakers should ill-afford to ignore it given that solar installations constitute nearly 60 per cent of the country's RE energy mix under its Paris commitments.

What else should the Govt do?

While India is shouldering its share of the climate burden, despite problems in climate finance flow, the government also needs to strengthen its climate adaptation plans.

- The existing internal framework, the National Action Plan on Climate Change (NAPCC) is more than a decade old. It lacks the legal foundation to incorporate the key national commitment under the Paris Agreement: to reduce the emissions intensity of economic growth by a third, by 2030.
 - * Without an update to the NAPCC and its mission-mode programmes, and legislation approved by States for new green norms governing buildings, transport, agriculture, water use and so on, it will be impossible to make a case for major climate finance under the UNFCCC.
 - * It is equally urgent to arrive at a funding plan for all States to help communities adapt to more frequent climate-linked disasters such as cyclones, floods and droughts.
- In this 2019's Union Budget, Rs 100 crore was allocated to the National Adaptation Fund for Climate Change (NAFCC), only a fraction of the total budget of over Rs 2,900 crore allotted to the Union environment ministry. This is 16% lower than the budget allocated to the NAFCC in 2017-18.
- India is correct in arguing that developed countries must do more, but a combination of policy, budgetary support, and a people's movement is needed to battle the globe's greatest challenge.

Conclusion

- Climate chaos is playing out in real time from California to the Caribbean, and from Africa to the Arctic and beyond. Those who contributed least to the problem are suffering the most.

- Hence a broad coalition -- not just governments and youth, but businesses, cities, investors and civil society — came together to move in the direction our world so desperately needs to avert climate catastrophe.

Leadership Group for Industry Transition

Context:

- A 'Leadership Group for Industry Transition' was announced at the Global Climate Action Summit to help guide the world's heaviest greenhouse gas emitting industries towards a low-carbon economy.

Details:

- This group comprising of countries and private companies will drive transformation in hard-to-decarbonize and energy-intensive sectors.
- Countries that are part of the Group are:
 - * India
 - * Sweden
 - * Argentina
 - * Finland
 - * France
 - * Germany
 - * Ireland
 - * Luxembourg
 - * The Netherlands
 - * South Korea
 - * The United Kingdom
- This global initiative will be supported by the World Economic Forum, the Energy Transitions Commission, Mission Innovation, Stockholm Environment Institute, and the European Climate Foundation among many others.
- India and Sweden will lead the Group.
- Industry sector emissions, including those from hard-to-abate and energy-intensive sectors like steel, cement, aluminum, aviation and shipping are expected to be 15.7 Gigatonnes (Gt) by 2050.
- This initiative is hence, important for industry to find a workable pathway towards reducing emissions and deliver on the Paris Agreement.

The Nationalist Hindrance to climate actions

How is political disconnect affecting the global initiatives against climate change?

- Unfortunately, national politics in country after country is trending in the wrong direction.
- A turn toward nationalism in multiple countries has created a short-term, look-out-for-our-own mentality that is harmful to the global collective action needed to address climate change.

- * In the United States, President Donald Trump not only refuses to enhance actions, he has actively rolled back measures in the electricity sector and actions to limit methane emissions in the name of competitiveness.

- * In Brazil, President Jair Bolsonaro has made it clear he sees environmental protections as limiting Brazilian business.

- And nationalism in some countries makes it harder to pursue aggressive action even in countries where the politics is more conducive.

How can the UN Summit swing the tide of global movements towards enhanced action?

- In an exercise of diplomatic pressure, countries have been urged to enhance their pledges for action made as part of the Paris Agreement, committing to lower future emissions.
- The second track seeks to induce changes in real economies around a set of 'action portfolios'. Domestic objectives are central to these conversations. If the UN Summit is to result in enhanced action, this is believed to be the more fruitful track.
- These include, for example:
 - * Furthering and accelerating energy transition toward low-carbon energy
 - * Making cities more climate-friendly and more resilient to climate disruption
 - * Starting the process of turning energy-intensive sectors such as steel and cement more carbon friendly.
 - * Promoting solar energy for energy security reasons.
 - * Making cities more liveable and making industries more efficient and therefore competitive.
- These initiatives serve as a focal point for broader conversations including coalitions of business and researchers.

19. Vulture culture: How the bird was saved from extinction

Background:

- In the late 1990s, the population of the vultures in the country had begun to decline sharply.
- The number declined from 40 million in the 80s to a few thousand by 2009.

Why vulture Population decreased?

- The major reason behind the vulture population getting nearly wiped out was the drug Diclofenac.
- Diclofenac was found in the carcass of cattle the vultures fed on.
- The drug, whose veterinary use was banned in 2008, was commonly administered to cattle to treat inflammation.

- Apart from the establishment of VCBCs and getting Diclofenac banned, the scientists' imperative was to manage the carcass dumps and make sure that poisoned carcasses were not dumped for the vultures to feed on.
- There was also an emphasis on creating awareness and on creating safe zones for vultures in places where there is an existing vulture population.
- So far nine states have been undertaken programmes to create safe habitats for vultures.
- Estimation of the vulture population in the wild is said to have stabilised.
- Surveys in 2015 revealed that there are about 6,000 White-backed vultures, 12,000 Long-billed vultures and 1,000 Slender-billed vultures in the wild.

Vulture Care Centre (VCC)

- To study the cause of deaths of vultures, a Vulture Care Centre (VCC) was set up at Pinjore, Haryana.
- It was here that the rescued vulture from Keoladeo National Park in Rajasthan, Haryana, Maharashtra and Madhya Pradesh were brought in.
 - * By the time vulture conservation breeding centers were started in 2004, the vulture population had already crashed significantly, almost by 99 %.
 - * As vultures are slow-breeding birds, intervention was of immediate requirement otherwise the vultures would have become extinct.
 - * With a decline in the vulture population, a rise in the plague causing rodents and feral dogs was also seen.
- Starting with just a few vultures, the VCC, until then the sole facility for the conservation of vultures in the country, has come a long way in the past two decades.
- At present, there are nine Vulture Conservation and Breeding Centres (VCBC) in India, of which three are directly administered by Bombay Natural History Society (BNHS).
- The total number of vultures in these VCBCs is more than 700.
- The objective of the VCBCs was not only to look after the vultures and breed them in captivity, but also to release them into the wild.
- The first objective of the VCBC was to produce a few hundred pairs of each of the three species of the endangered vultures.

Vultures:

- Vultures are scavenging raptors.
- Vultures are rightfully called the sanitizers of the ecosystem as they feed on the flesh of dead animals and prevent the bacteria and diseases in animals by clearing the carcass to the bones that helps to decompose the dead three times faster than otherwise.

- In India, upon death, cows are dumped in a common place which is inhabited by the vultures.
- Vultures are long-lived and slow breeding birds that attain sexual maturity by five years of age.
- The slow breeding process makes it even more difficult to conserve or reintroduce them.
- Killing them is strictly prohibited, even for research purposes.
- A particular characteristic of many vultures is a bald head, devoid of normal feathers.
- Although it has been historically believed to help keep the head clean when feeding, the bare skin may play an important role in thermoregulation.
- Vultures have been observed to hunch their bodies and tuck in their heads in the cold, and open their wings and stretch their necks in the heat.

20. World Ozone Day

- Every year September 16 is marked as the International Day for the Preservation of the Ozone Layer or World Ozone Day.
- This day was designated by the UN in 2009.
- This date was chosen because it was the day in 1987 when nations signed the Montreal Protocol on Substances that Deplete the Ozone Layer.
- The theme for 2019: 32 Years and Healing

Context

- The Union Minister of State (MoS) for Environment, Forest and Climate Change was speaking at an event in New Delhi to mark World Ozone Day.

Cooling Action Plan:

- The minister highlighted the fact that India became one of the first countries in the world to launch a comprehensive Cooling Action plan in March, 2019, which has a long term vision to address the cooling requirement across sectors such as residential and commercial buildings, cold-chain, refrigeration, transport and industries.
- The India Cooling Action Plan (ICAP) lists out actions which can help reduce the cooling demand, which will also help in reducing both direct and indirect emissions.
- The India Cooling Action seeks to
 - * Reduce cooling demand across sectors by 20% to 25% by 2037-38
 - * Reduce refrigerant demand by 25% to 30% by 2037-38
 - * Reduce cooling energy requirements by 25% to 40% by 2037-38
 - * Recognize "cooling and related areas" as a thrust area of research under the national S&T Programme

- * Training and certification of 100,000 servicing sector technicians by 2022-23, synergizing with Skill India Mission.

21. Windfall for Odisha tribals if single-use plastic is banned

Context

- India's policy on single-use plastic has been much in the news

What is single-use plastic?

- Single-use plastics, often also referred to as disposable plastics, are commonly used for packaging and include items intended to be used only once before they are thrown away or recycled. These include, among other items, grocery bags, food packaging, bottles, straws, containers, cups and cutlery.
- Plastic packaging is mostly single-use, especially in business-to-consumer applications, and a majority of it is discarded the same year it is produced.
- Such plastics are problematic because they are not biodegradable.

What are the concerns?

- India currently follows the Plastic Waste Management Rules, 2018.
- One of its key obligations is to have industries that make products that ultimately employ plastic (and generate plastic waste) collect a fixed percentage every year.
- The State Pollution Control Boards as well municipalities have the responsibility to ensure that plastic waste is collected and sent to recycling units.
- Compared to other countries such as the U.S. and China, India has a very low per capita generation of plastic waste.
- However, in real terms, this is quite substantial and nearly 10,000 tonnes of plastic waste is left uncollected every day.
- Studies by organisations like The Energy Resources Institute (TERI) on landfills have found that 10.96% of waste was only plastic and of these, non-recyclable plastics accounted for 9.6%. The disparity is because certain kinds of plastic, such as PET bottles are remunerative for rag pickers as they are in demand at recycling facilities.

How is the ban on single-use plastics going to benefit Odisha?

- As the focus is likely to shift to alternative products from single-use plastic millions of people, especially tribals residing in Odisha's forest-rich regions, expect an upturn in their income.
- Close to five million people in Odisha are currently involved in plate-making using both hand and machine stitching methods.
- They depend on two major leaves of forest species – sal and siali – for their earnings.

- Odisha's leaf plate and cup market is worth ₹1,500 crore.
- While 2.5 million people mostly tribals are sal leaf pluckers, 1.5 million are siali leaf pluckers.
- Around one million are connected with other leaves.
- As soon as plastic products are banned, the focus will shift to degradable materials and leaf plates and cups are one of the obvious choices.
- In 22 of the 30 districts of Odisha, inhabitants of forest-fringe villages are traditionally involved in leaf-plate making.
- In some districts, tribal women have already formed federations to get a better deal in the trade.

22. Pipe dreams, ground reality

Context

- Finance Minister Nirmala Sitharaman had announced in July 2019 that the government will provide piped water to all rural households by 2024 under the Jal Jeevan Mission.
- The Prime Minister has also stated that around ₹5 trillion will be spent under the ambitious Jal Jeevan Mission aimed at providing potable water.
- Under the Jal Jeevan Mission, the government will focus on rainwater harvesting and water conservation in 256 districts in the first phase and carry out other initiatives, including renovation of traditional water bodies and tanks, reuse of water and recharge structures, watershed development and intensive afforestation.
- The NDA government has also formed a new ministry to address all water issues that looks at the management of water resources and drinking water supply in a holistic manner.
- The Jal Shakti Ministry, formed by integrating the Water Resources and Drinking Water and Sanitation Ministries, aims to work with state governments to ensure Har Ghar Jal to all rural households by 2024.

Is the proposed plan viable?

- This will be a costly and futile exercise since over 70% of India's surface water (rivers and lakes) and groundwater is polluted.
- The plan will require digging up the whole country and squandering lakhs of crores away for little gain.
- Since surface and groundwater is unfit for domestic use, Indians will soon need reverse osmosis (RO) for home, which will only burden the country's already expensive water programme.

Protecting the unpolluted sources:

- Hence, it is of utmost importance that we protect the few unpolluted sources of water that remain.
- Otherwise, India will be consigned as a nation to drink unhealthy and expensive RO water.

- The only unpolluted sources of water that remain are the waters underlying the floodplains of rivers (for bulk water) and the subterranean natural mineral water underlying forest tracts (for drinking). These precious unpolluted water resources must be protected and conserved at any cost.

Yamuna Palla floodplain scheme: A local and sustainable scheme

- There are very few non-invasive schemes which can perennially provide natural mineral water and unpolluted bulk water for our cities.
- Such local and sustainable schemes are strongly supported by Nobel Laureate A.J. Leggett and renowned scientist M.S. Swaminathan.
- One such scheme is the Yamuna Palla floodplain scheme for Delhi which was initiated in 2009.
- It has been actively pursued by the Delhi Jal Board and provides quality water to more than a million people in Delhi.
- Such local and sustainable river floodplain schemes can provide water supply for hundreds of river cities in India.
- It will be path-breaking not only for India but also the world to invest in such localised schemes that are self-sustaining.
- It is not only environmentally sustainable but it will also yield great economic returns.
- In the case of India, examples of self-sustaining floodplain water cities include Varanasi, Prayagraj, Agra, Mathura, most towns in Bihar and West Bengal, Cuttack, Bhubaneswar, Amravati, Vijayawada, Rajahmundry, and many cities in Tamil Nadu.
- In these above-mentioned cities which are blessed with a self-sustaining floodplain, such localised water supply schemes can be implemented successfully.

Conserving and Securing the Floodplains:

- Floodplains can be secured by planting organic food forests or fruit forests which don't demand or consume much water.
- Carving out lakes, as has been suggested under the Jal Jeevan Mission, would require digging out vast quantities of sand.
- This will not only affect the wetland ecology of the floodplains but it will also cause loss of water due to evaporation.

For unpolluted water

- Another source of unpolluted water is natural mineral water that underlies our forests.
- This water is pure and it is of the highest international quality. Unpolluted rain falls on the forest, percolates through the vegetation, humus or leaf cover on the forest floor while picking up nutrients, and then through the underlying rock while picking up minerals.

- It finally settles in underground aquifers and this is referred to as natural mineral water which is bottled and sold at exorbitant prices.
- Many parts of the country can still tap these pristine water sources. All major cities that fall under the Western and Eastern Ghats belt have such forest aquifers.
- The hills around Visakhapatnam can provide enough water for millions of people. Shimla has a forest mineral water sanctuary spread over nearby hill ranges.
- Bengaluru's Bannerghatta National Park and Mumbai's Sanjay Gandhi National Park have underground forest aquifers that can supply natural mineral water for the entire population of these cities.
- So can the Delhi Ridge, for Delhi. Even the Aravallis can provide the best quality natural mineral water to all the cities in Rajasthan.

Sustainable exploitation and conservation:

- However, over-exploiting these water resources can destroy the process of natural recharge. Hence, we need to adopt sustainable 'conserve and use' solutions for the future.
- Most importantly, the water levels of the floodplain aquifers need to be monitored scrupulously to be well above the river water level so as to avoid contamination by river water.
- We must maintain adequate water levels for the subterranean forest aquifers in order to ensure sustainability.
- These floodplains and forest aquifers need to be declared as 'water sanctuaries' similar to our national parks and tiger reserves, in order to improve conservation efforts.
- If not, we will lose this amazing gift of natural infrastructure, as has already happened in some cases.

23. No more waste mounds on Siachen glacier

Context

The Indian Army has removed 130 tonnes of garbage from the Siachen Glacier and is cutting potential trash in rations.

Issue:

- On average, 236 tonnes of waste is generated every year on Siachen glacier.
- The biggest challenge is the high altitude as most posts are located between 18,000 and 21,000 feet.
 - * Bana post is the highest on the glacier close to 22,000 feet.
 - * At 18,000-19,000 feet, Indian and Pakistani posts face each other.
 - * Beyond 20,000 feet, it is only India.
- Nothing degrades at sub-zero temperatures, so everything had to be brought down.

What is being done?

- The army is looking to cut waste in the rations and utilities delivered on the glacier and make Siachen garbage-free in 12-15 years.
- Earlier, waste disposal work was fragmented and intermittent.
- Based on a 2018 concept note on waste management on the glacier, the Army has made bringing down waste a part of the Standard Operating Procedure (SOP) for troops.
- The capacity of each person to carry is 10-15 kg due to the extreme weather.
- Since then, nearly 130 tonnes of waste has been brought down from the Siachen Glacier and disposed of.
- The three types of wastes are disposed of differently.
 - * Biodegradable waste is rolled using baling machines.
 - * Non-biodegradable, non-metallic waste: three incinerators have been set up. The waste is burnt in the incinerators but they do not produce Carbon Monoxide. The ash is used as manure.
 - * Metallic waste: there are three extrication centres. Industrial crushers will be procured to crush it and send it down.
- The Army has collaborated with the civil administration there and barrels have been painted and set up in villages around to segregate waste.

24. The future of food is animal-friendly**Context:**

- The article talks about the monumental challenges that are facing our global food system.
- It is expected that by 2050 around 10 billion people have to be fed and with our current agricultural practices it is almost impossible.

Current Food System:

- Currently, our food system puts undue pressure on our limited natural resources.
- One of the incidents that could highlight the extent of these pressure factors was the massive Amazonian forest fires, which was mainly a result of man-made fires by cattle ranchers and loggers, in order to clear forest areas for their agro-industrial activities.
- Ranchers deliberately set fire to the forests so that they can be cleared for cattle grazing. Cattle ranching is responsible for nearly 80% of the destruction of the rainforests of Amazon.
- In India as well, our forests are threatened by overgrazing of buffaloes and goats which are used for dairy and meat.
- Further, greenhouse gas emissions, such as methane, are very high from the meat industry.

Problems of the meat industry

- The very design of our food system is extremely inefficient because we feed grains to cattle and chickens and then eat the animals.
- So, essentially, for every 9 calories of food fed to a chicken, we get 1 calorie back due to the natural loss of energy which takes place in the food chain.
- The irony is, despite the wide availability of food in our current agricultural system, around 34.7% of Indian children suffer from malnutrition.
- This shows how inefficient the current model of production is. It is neither fulfilling our basic requirements nor is it environment-friendly.
- The meat industry is also responsible for tremendous amounts of water wastage. According to reports, about one-third of the world's water consumption is for producing animal products.
- On the other hand, NITI Aayog has predicted that 21 major cities including Delhi, Bengaluru, Chennai and Hyderabad are going to run out of their groundwater supplies by 2020.
- In the light of these alarming observations on the future availability of water, we need to be all the more judicious while consuming water.
- Upon this, the usage of antibiotics and hormones is widespread in the animal husbandry industry and are used in both livestock and poultry feed.
- The World Health Organization has said that antibiotic resistance is one of the biggest threats to global health, food security, and development today.
- Perhaps the greatest casualty of the meat industry are the animals which are crammed into farms, face extreme cruelty during their lives and are inhumanely slaughtered.
- As our incomes increase, our consumption of meat also increases and the pressure on our limited resources will amplify.
- But despite this significant increase in meat production in order to meet the rising demand, we will still continue to be a malnourished nation.

The future lies in plant-based meat:

- However, the innovation of healthy and nutritious plant-based meat provides a safer and sustainable alternative.
- We also have lab-grown meat which is referred to as "cultivated meat", or also called as clean meat. Clean meat is grown in a lab from a small sample of cells taken from an animal.
- Both plant-based meat and clean meat are free from the negative impacts of animal meat production, such as climate change.
- It is also healthier as it is free of antibiotics and hormones.

- Globally, the Netherlands, the U.S., Israel, Japan and Singapore are developing both plant-based and clean meat.
- India's huge population can benefit by making plant-based and clean meat available.
- India enjoys a unique advantage to position itself as a leader in this sector because crops such as millets, ragi, pulses and chickpeas, which grow abundantly here, are ideal raw ingredients for plant-based meats.
- Further, India has already envisioned the setting up of the world's first centre of excellence for clean meat. This can provide a jump start for India's non-animal meat sector.
- This promising sector can counter the climate impact of the meat industry, increase farmers' incomes, combat malnutrition and spare the lives of billions of animals. It is time we as a people support it and encourage it to flourish.

HEALTH ISSUES

1. Anaemia

- Anaemia is a condition in which a person has a lower-than-normal number of red blood cells or quantity of haemoglobin, which reduces the capacity of their blood to carry oxygen and can lead to a number of health problems, and even death.
- Anaemia can cause weakness, breathlessness, lack of concentration and if the haemoglobin level falls quickly over a few days, it can even lead to cardiac failure.
- It is considered a severe public health problem if more than 40% of the population is diagnosed with anaemia.

Criteria

- Men with haemoglobin levels of less than 13.0 grams (g) per decilitre (dL) are considered anaemic, as per World Health Organization norms.
- Women with levels lower than 12.0 g/dL are considered anaemic if they are not pregnant.
- Among pregnant women, levels lower than 11.0 g/dL signal anaemia.

Context:

According to an analysis of data collected from ongoing anaemia detection and awareness camps of the Delhi government, about 60% of female students in Delhi colleges are anaemic, well above the national average. The findings, are yet to be made public.

Concerns:

- Anaemia in women and children has been a major problem in India for half a century.
- According to National Family Health Survey-4, the national average of anaemia among women between 15 and 49 years is 53% and in Delhi it's 54.3%.
- While the national average came down from 55.3% to 53% between NFHS-3 and NFHS-4, it rose from 44.3% to 55.3% in Delhi.
- Low haemoglobin levels lower productivity and cause illness and death, and thus impose an economic cost.
- The loss of gross domestic product to anaemia was estimated at \$22.64 billion (Rs 1.50 lakh crore) in 2016, more than three times the health budget for 2017-18.

Details:

- Nutritional deficiency is by far the most common cause of anaemia worldwide.
- Nearly half the cases of nutritional deficiency-related anaemia in India are caused by consuming too little iron.

- Inadequate intake of the vitamins B9 (folate) and B12 is also a frequent cause.
- The state programme officer of Delhi said that the distribution of IFA tablets would be extended to colleges.

Steps taken by the government:

- A flagship programme to address anaemia in women and children was introduced as far back as 1970, the National Anaemia Prophylaxis Programme, concentrated on distributing iron and folic acid tablets among two vulnerable population segments—pregnant women, and children aged 1 to 5 years.
- In 1991, the flagship programme was renamed National Nutritional Anaemia Control Programme and made part of the National Child Survival and Safe Motherhood Programme, which attempts to cater to the overall needs of mothers and children pertaining to health and disease.
- Yet more than half the targeted population remained anaemic in 2015.
- Anaemia Mukh Bharat (AMB) was launched in the year 2018 as part of Intensified National Iron Plus Initiative (NIPI) Program for accelerating the annual rate of decline of anaemia from one to three percentage points.
 - * The target groups for AMB are Children 6-59 months, 5-9 years, Adolescent Girls & Boys of 10-19 years, Women of Reproductive Age (15-49 years), Pregnant Women and Lactating Mothers.
- Weekly Iron and Folic Acid Supplementation (WIFS) program includes supervised weekly ingestion of Iron Folic Acid (IFA) tablet.
 - * To control worm infestation biannual deworming with Albendazole is provided.
- Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) has been launched to focus on conducting special ANC check up on 9th of every month with the help of Medical officers/ OBGYN to detect and treat cases of anaemia.

Why Anaemia still persists?

- Low political commitment is one of the major reasons. Anaemia has not been taken as seriously as we should have.
- Interventions that look at possible means to enhance the dietary intake of iron such as food fortification in addition to iron and folic acid tablets have not been implemented.

- The supplements failed to reach all the intended beneficiaries in adequate amounts, and not all beneficiaries who received the supplements actually ingested them.
- Iron-folic acid supplements are meant to be distributed under the National Nutritional Anaemia Control Programme and the Weekly Iron and Folic Acid Supplementation (WIFAS) programme, an initiative introduced in 2013 to reduce adolescent anaemia, estimated to affect more than half of all adolescent girls and just under one in three adolescent boys.
- Fewer than one in three pregnant women have access to iron and folic acid supplements, according to NFHS-IV, even after the percentage of women consuming these supplements during pregnancy doubled between 2005-06 and 2015-16, from 15% to 30%.

Way forward:

- To better target anaemia prevention and treatment, a pan-India survey of 100,000 children and adolescents was conducted to check for vitamin B12 deficiency and worm infestation.
- A parasitic infestation can cause malabsorption of essential nutrients, which, in turn, can cause anaemia, which is why de-worming tablets are also distributed under the existing iron and folic acid supplementation programmes.
- To improve the coverage of the WIFAS programme for adolescents, there are plans to use the Mid-Day Meal programme software that requires schools to update the number of beneficiaries every week.
- Efforts to improve supply to women have been on since the launch of the National Iron Plus programme in 2013, under which the government provides supplements to all women of reproductive age irrespective of their haemoglobin levels and pregnancy status, unlike earlier initiatives. What needs more emphasis is improved consumption.
- Creating awareness is particularly vital because anaemia can go undetected until it becomes severe.
- Greater awareness can boost community-wide demand for supplements, compelling wider distribution.

2. Ayushman Bharat PMJAY Start-Up Grand Challenge

- It is a call to action for the Indian start-up community to generate cutting-edge solutions for supporting the National Health Authority towards more effective implementation of Ayushman Bharat PMJAY.
- Under this initiative, Startups engaged in sectors such as medical devices, digital health, health communications, hospital services and hospital management, medical workforce training and capacity building, etc. are invited to solve a set of problem statements reflecting critical implementation challenges of AB-PMJAY.

* It is in partnership with Startup India.

* It is showcased as a unique, first-of-its-kind opportunity for start-ups to be a critical participant and stakeholder in implementing AB-PMJAY.

- The top 7 startups will be selected to work with the Ayushman Bharat scheme. Other benefits that winners will receive include cash prizes, piloting and testing opportunities, industry mentorship, procurement and funding support.

National Health Authority (NHA)

- It is the apex body responsible for implementing India's flagship public health insurance/assurance scheme 'Ayushman Bharat Pradhan Mantri Jan Arogya Yojana'.
- The NHA is the successor of the National Health Agency. It was renamed as the National Health Authority in January 2019.
- NHA has been set up to implement the PM-JAY at the national level.
- An attached office of the Ministry of Health and Family Welfare with full functional autonomy, NHA is governed by a Governing Board chaired by the Union Minister for Health and Family Welfare.
- A Chief Executive Officer (CEO), an officer in the rank of Secretary to the Government of India manages its affairs.
- To implement the scheme in the states, State Health Agencies (SHAs) in the form of a society/trust have been set up by the states.

Context

- The Prime Minister launched the Ayushman Bharat Start-Up Grand Challenge in New Delhi at Arogya Manthan function organized by the National Health Authority. This function marks the one-year anniversary of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY).

3. Comprehensive National Nutrition Survey

- The Comprehensive National Nutrition Survey was conducted by the Ministry of Health and Family Welfare and UNICEF between February 2016 and October 2018.
- It is the first study undertaken to measure malnutrition, including micronutrient deficiencies through biochemical measures such as blood and urine samples, anthropometric data as well as details of non-communicable diseases such as diabetes, hypertension, cholesterol and kidney function in children and adolescents.

- The National Family Health Survey (NFHS), however, collects anthropometric data (weight for age, height for age, weight for height, mid-upper arm circumference) to measure prevalence of stunting, wasting and underweight and household dietary intake to measure deficiencies. However, these are collected for children in the age group of 1-5 years and adults, but not for school going children between the age of 5 and 19 years.

Context:

Data from the first-ever national nutrition survey conducted by the Centre, yet to be made public, shows that obesity and undernutrition coexist in India, among children. Health experts have raised concerns over the delay in release of the survey.

Findings of the survey:

- Out of the children in the age group of 5-9 years and adolescents in the age group of 10-19 years are
 - * 10% are pre-diabetic
 - * 5% are overweight
 - * 5% suffer from blood pressure.
- The study found prevalence of indicators of non-communicable diseases alongside indicators of undernutrition shown by various NFHS surveys such as stunting, wasting and underweight.
- The survey provides for the first time hard evidence of the coexistence of obesity and undernutrition, among school-going children.

Conclusion:

- The United Nations Children's Fund (UNICEF) considers nutrition as a pillar of human development and recommends concrete, large-scale programming not only to reduce the burden of undernutrition and deprivation in countries, but also to advance economic progress.
- In India's case, along with undernutrition and micronutrient deficiencies, there is an emergence of overweight and obesity, contributing to the disease burden just as undernutrition does.
- In this context, it is imperative that the government rethink and redesign its nutrition policy at every level of governance with integrated action on malnutrition in all its forms.

4. Dementia

- Dementia is a progressive generative brain disease affecting a person's memory, thinking and the ability of social interaction.
- Dementia is an overall term for diseases and conditions characterized by a decline in memory, language, problem-solving and other thinking skills that affect a person's ability to perform everyday activities.
- Disorders grouped under the general term dementia are caused by abnormal brain changes or by damage to brain cells.

- Alzheimer's is the most common cause of dementia.

Context:

A report was released by Alzheimer's disease International (ADI), a London-based non-profit organisation, on the eve of Alzheimer's Day. The survey was conducted by the London School of Economics (LSE) to gauge attitudes towards dementia among those suffering from dementia.

Findings of the study:

- The number of those with dementia worldwide is set to increase to 152 million by 2050.
- As much as 50% of all people living with dementia never receive a formal diagnosis and in China and India.
- The current annual cost of dementia is estimated at \$1 trillion (approximately), which could double by 2030.

Details:

- Nearly a quarter of Indians surveyed said that they considered those suffering from dementia to be "dangerous".
- About three-fourths opined that those with dementia are "impulsive and unpredictable".
- According to a 2018 report in the Indian Journal of Psychiatry, population projections in India suggest that there will be one elderly person for every 3 in the working-age population by 2100 and an accompanying rise in elderly suffering from dementia.

Way forward:

- Degenerative diseases of the brain cannot be reversed. However, with some of the measures like symptomatic treatment and effective intervention, it is somewhat possible to delay the progress of the disease.
- Citizens need to be educated about the prevalence of such disease in our society and they must shed their taboos and be more accommodative towards the needs and infirmities of an old person in the family.
- Ignoring the needs and rights of the old age population and leaving them unaddressed can pose a great threat to our social development agenda.
- Older persons need to be brought into mainstream of the nation by focusing on their issues and encouraging their active participation in the society.
- There is a need for National Dementia Policy with very clear and well-defined action plan for India since India has a sizeable population of Alzheimer's disease affected people.

5. Eat Right India Campaign

- It was launched in 2018 and is led by Food Safety and Standards Authority of India (FSSAI).
- It is a Pan-India cycle movement aimed to create consumer awareness about eating safe and nutritious food.

- It aims to engage, excite and enable citizens to improve their health and wellbeing.
- It is a collective effort to make both the demand and supply-side interventions through the engagement of key stakeholders.

Aligned with plans

- This movement is aligned with the government's flagship public health programmes such as POSHAN Abhiyaan, Anemia Mukht Bharat, Ayushman Bharat Yojana and Swachh Bharat Mission.
- The FSSAI has also put in place robust regulatory measures under three major pillars: Eat Safe, Eat Health and Eat Sustainably for the programme.

6. Genomic Grid for India-Specific Cancer Research

Context:

- The central government plans to set up a National Genomic Grid to study genomic data of cancer patients from India.

Details:

- The National Genomic Grid will be formed in line with the National Cancer Tissue Biobank (NCTB).
- The grid will have four parts corresponding to eastern, western, northern and southern parts of India.
- The grid will collect samples from cancer patients to study genomic factors influencing cancer.

Objectives:

- The genomic samples will help researchers on India-specific cancer studies.
- It will help identify the right cancer treatment modalities for the Indian population.
- It also aims to make cancer treatment viable for people of different economic classes.

National Cancer Tissue Biobank (NCTB):

- The NCTB was set up at the Indian Institute of Technology, Madras, in collaboration with the Indian Council for Medical Research (ICMR).
- It has the capacity to stock 50,000 genomic samples from cancer patients. It has already collected samples from 3,000 patients.
- The first set of 350 genomic data of stomach and breast cancer patients developed from the 3,000 samples at NCTB will be released by the end of October 2019.

7. Global Fund for AIDS, TB and Malaria

- Global Fund was created in 2002. It is an international financing and partnership organization that aims to "attract, leverage and invest additional resources to end the epidemics of HIV/AIDS, tuberculosis and malaria
- It mobilizes and invests more than US\$4 billion a year to support AIDS, tuberculosis and malaria programs run by local experts in more than 100 countries.

- * Funding comes primarily from the public sector, with about 93% of total funding coming from donor governments.
- * The remaining funding comes from the private sector, private foundations and innovative financing initiatives.

- The Global Fund is a financing mechanism rather than an implementing agency.
- It has its secretariat in Geneva, Switzerland
 - * Programs are implemented by in-country partners such as ministries of health, while the Global Fund secretariat, whose staff only have an office in Geneva, monitor the programs.

Context

- India has announced a contribution of 22 million US Dollars to the Global Fund for AIDS, TB and Malaria (GFTAM) for the 6th replenishment cycle, an increase of 10% over the amount contributed by us in the 5th cycle.

8. Gooseberry candy rescues Assam nutrition drive

Context

A drive for good nutrition among pregnant women and children in a southern Assam district has been given a gooseberry candy twist. This follows a report that the targeted groups find the prescribed iron-folic acid tablets repulsive.

Background:

- According to the 2015 National Family Health Survey, 47.2% of the women of reproductive age in Hailakandi were anaemic.
- The district, thus, has the most anaemic children below 5 years, adolescents and women of reproductive age in Assam.

Concerns:

- Data reveals that the mothers, pregnant women and children in the district, consume only 24.3% of the total iron-folic acid tablets that the district receives and distributes.
- The tablets given to these groups are often not consumed as they feel nauseated or have constipation issues.
- There are also myths that these tablets will kill them or make them incapable of conceiving.
- About 32.5% of the children aged below five in Hailakandi are underweight. The average figure for Assam is 30%.

Details:

- To get around the problem while launching Poshan Maah, or nutrition month, a few days ago, the district administration decided to produce roundish amla-gur candies with a dose of salt.

- Nutritionists involved in the campaign said amla, or gooseberry, is rich in Vitamin C and antioxidants, while jaggery, is rich in iron, vital vitamins and minerals that boost the immune system.
- The gooseberry candy is provided alongside iron-folic acid tablets as behavioural change in nutritious eating is a slow process.
- If women and children avoid the tablet, they can get the required vitamin and mineral inputs through the improvised delicacy of which ingredients are available locally.
- The candy is cost-effective too.
- Anganwadi workers, supervisors and mothers have been engaged to prepare and distribute the 'laddoos' with the ingredients given by the district authorities.

Conclusion:

This novel initiative could go a long way in checking anaemia that increases the risk during pregnancy and at childbirth, besides resulting in low birth weight and malnourished children.

9. India Iodine Survey 2018- 19

Context

- The survey was conducted by Nutrition International in collaboration with the All India Institute of Medical Sciences and the Indian Coalition for the Control of Iodine Deficiency Disorders (ICCIDD).
- The survey tested the iodine content in samples of cooking salt from households to estimate the coverage of iodised salt.
- It covered all 29 states and seven Union Territories of the country, and included a total of 21,406 households.

Details

- The study shows that 76.3% of Indian households consumed adequately iodised salt, which is salt with at least 15 parts per million of iodine
- The five worst performers were Tamil Nadu (61.9%), Andhra Pradesh (63.9%), Rajasthan (65.5%), Odisha (65.8%) and Jharkhand (68.8%).
 - * Tamil Nadu has the lowest consumption of iodised salt despite being the third biggest producer of salt in the country
 - * Rajasthan, which is the second largest producer of salt, also figured among the five worst covered States.

Salt producing states in India

- Gujarat produces 71% of salt in the country, followed by Rajasthan at 17% and Tamil Nadu at 11%.
- The rest of the country accounts for a mere 1% of salt produced.

- By and large most States get their salt from Gujarat and Rajasthan and because of the distance, it is sent by rail. This salt is strictly monitored by the Salt Commissioner's office and if it is inadequately iodised, they don't allot rakes.
 - * The salt-producing States have access to common (or non-iodised) salt and, therefore, they start consuming it since it is readily available

Key recommendation

- The key recommendation of the study is to sustain the momentum so that iodine coverage does not fall below current levels.
- It also recommends that the States and the Centre work together to address the current gaps and look into issues that vary from one State to another, leading to adequately iodised salt not being produced.

World Health Organization (WHO) guidelines

- According to WHO, a daily iodine intake of 150 microgram is required to prevent iodine deficiency disorders and this can be achieved by using adequately iodised salt, i.e. salt containing a minimum of 15 parts per million (ppm) of iodine.

Iodine and its importance

- Iodine is a vital micronutrient needed regularly in small quantities.
- Deficiency of iodine can result in a range of disabilities and disorders such as goitre, hypothyroidism, cretinism, abortion, still-birth, mental retardation and psychomotor defects.
- Children born in iodine-deficient areas may have up to 13.5 IQ points less than those born in iodine-sufficient areas.
- A majority of these consequences are invisible and irreversible but can be prevented.
- Fortifying cooking salt with iodine is the easiest and most cost-effective way to address this problem.

Salt regulation

- India made fortification of salt with iodine mandatory for direct human consumption in 1992.
- This was relaxed in 2000 and then reimposed in 2005.
- In 2011, the Supreme Court, too, mandated universal iodisation for the control of iodine deficiencies.

10. International Sign Language Day

Context:

The Indian Sign Language Research and Training Centre celebrated Sign Language Day on 23rd September.

About the International Sign Language Day:

- The UN declared 23rd September as International Sign Language Day.
- The day was first observed in 2017. This date was selected because this was the date when the World Federation of the Deaf was established in 1951.

- The theme for 2019 is Sign Language-Rights for all.
- The objective of celebrating this day is enhancing the awareness of sign language and making the reach of sign language greater.

About the Indian Sign Language Research and Training Centre (ISLRTC):

- It is an autonomous body under the Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment.
- The Centre was established in 2015.
- The Centre carries out many activities for promoting the use of Indian Sign Language as the educational mode for deaf students at primary, secondary and higher education levels.
- It conducts diploma courses in Indian Sign Language Interpretation.
- It is located in New Delhi.

11. Leukemia

- White Blood Cells (WBC), also called leukocytes, are an important part of the immune system.
 - * These cells help fight infections by attacking bacteria, viruses, and germs that invade the body.
 - * White blood cells originate in the bone marrow but circulate throughout the bloodstream
- Leukemia is a type of cancer found in your blood and bone marrow and is caused by the rapid production of abnormal white blood cells.
 - * These abnormal white blood cells are not able to fight infection and impair the ability of the bone marrow to produce red blood cells and platelets.

12. Measles- Vaccine Hesitancy

- Measles is a highly contagious infectious disease caused by the measles virus.
- Symptoms usually develop 10–12 days after exposure to an infected person and last 7–10 days. Initial symptoms typically include fever, cough, runny nose, and inflamed eyes.
- Small white spots known as Koplik's spots may form inside the mouth two or three days after the start of symptoms.
- A red, flat rash which usually starts on the face and then spreads to the rest of the body typically begins three to five days after the start of symptoms.
- Common complications include diarrhea, middle ear infection, and pneumonia.
- These occur in part due to measles-induced immunosuppression. Less commonly seizures, blindness, or inflammation of the brain may occur.
- Measles is an airborne disease which spreads easily through the coughs and sneezes of infected people. It may also be spread through direct contact with mouth or nasal secretions.

- Interestingly, most people do not get the disease more than once.
- The measles vaccine is effective at preventing the disease and is often delivered in combination with other vaccines.
- It is one of the leading 'vaccine-preventable disease' causes of death.

Context

- In January 2019, the World Health Organization included 'Vaccine Hesitancy' as one of the 10 threats to global health, due to a 30% increase in measles cases in 2018.
- Vaccine hesitancy is defined as the "reluctance or refusal to vaccinate despite the availability of vaccines".
- The threat from vaccine hesitancy to global healthcare only appears to have grown more dangerous over the years.

How has it spread globally? A look at statistics

- In the first six months of 2019, there have been around 3, 65,000 measles cases reported from 182 countries and this comes after a major surge in measles cases in 2018.
- The WHO African region has registered the biggest increase, which stands at 900% for the first six months of 2019 as compared to the same period in 2018.
- These cases have largely been reported in the Democratic Republic of the Congo, Madagascar and Nigeria.
- In the WHO European region as well, there has been a sharp increase with 90,000 cases being recorded in the first six months of 2019, which is higher than the numbers recorded for the whole of 2018.
- The spread of the infection in the European region has been unprecedented in recent years and it has accounted for 1, 74,000 cases from 49 of the 53 countries between January 2018 and June 2019.
- In fact in August 2019 the following countries have even lost their measles elimination status – U.K., Greece, the Czech Republic and Albania.

The Lack of Public Confidence in Vaccines:

- A 2018 report on vaccine confidence among the European Union member states shows as to why the coverage of the vaccine has not increased in the European region to reach over the desired target of 90% in order to offer protection even to those who are not vaccinated.
- It found that younger people in the age group of 18–34 years and those with less education are less likely to agree that the Measles, Mumps, and Rubella (MMR) vaccine is safe.
- According to a March 2019 report, only 52% of respondents from 28 EU member states agree that vaccines are definitely effective in preventing diseases, while 33% felt they were probably effective.

- The more alarming fact is that 48% of those who were surveyed believed that vaccines can have serious side effects and 38% think vaccines are actually responsible for causing the disease that they are supposed to protect against.

The case with India:

- A disconcerting similarity can be seen in India as well with regard to 'vaccine hesitancy'.
- A study conducted in 2018 brought out that low awareness is the main reason why 45% of the children missed their vaccinations in 121 Indian districts that are known to have higher rates of unimmunized children.
- While 24% did not get vaccinated due to concerns about adverse side effects, 11% were reluctant to get immunised for reasons other than the fear of side effects.

What needs to be done?

- These alarming statistics point out the impact of low awareness and misinformation on the effectiveness and reach of vaccination programmes.
- Social media, in particular, has played a crucial role in spreading misinformation about vaccines.
- In this regard, the recent commitment made by Facebook to act against the circulation of vaccine-related misinformation, will be crucial in winning the war against vaccine deniers.
- Measles vaccine not only provides lifelong protection against the virus but also reduces mortality from other childhood infections.
- This is because measles viruses kill immune cells, leaving the child vulnerable to infectious diseases for two to three years.

13. Prospective Urban Rural Epidemiology (PURE) study

Context

- According to the PURE study published in the Lancet, Cardio Vascular Disease (CVD) continues to be the leading cause of death across the world, but there are significant variations between rich and poor nations.

Categorization

- The High Income Countries (HIC) in the study were Canada, Saudi Arabia, Sweden and United Arab Emirates.
- The Middle-Income Countries (MIC) were Argentina, Brazil, Chile, China, Columbia, Iran, Malaysia, Palestine, Philippines, Poland, Turkey and South Africa.
- The Low Income Countries (LIC) were Bangladesh, India, Pakistan, Tanzania and Zimbabwe.

Details

- CVD is the leading cause for death overall, there have been some transitions, particularly in the high-income countries, which have managed to reduce the number of deaths from CVD.

- * While in HIC, death from cancer is twice that of CVD, in LIC, including India, death from cardiac disease was three times that of cancer.

- The study establishes that though risk factors are lower in low income countries, factors such as access to quality health care and lack of insurance have a play, leading to the mortality
 - * Access to affordable, quality health care is still a dream in many pockets in India.
 - * A great amount of out-of-pocket expenditure (according to Health Ministry data for 2014-15, nearly 62.6 % of India's total health expenditure) often frustrates continuation of treatment, or adherence to drug regimens.
- In another paper, also published in the Lancet, on 'Modifiable risk factors, cardiovascular disease, and mortality', researchers established indoor air pollution as an emerging source of risk for cardiovascular disease in LIC and MIC.

Steps that can be initiated

- Some States have shown limited successes with government-sponsored health insurance schemes, the Centre's Ayushman Bharat Yojana will have to take much of the burden of hospitalisation for complications of non-communicable diseases.
 - * Therefore National and State schemes running on mission mode, including the National Programme for Prevention and Control of Cancer, Diabetes, CVD and Stroke will have to step up efforts to target people at risk with life-saving interventions.
- With better insurance and improving hospital standards, it is possible for LIC to head towards similar outcomes
- The need of the hour is out-of-the-box solutions combined with inspiration from models of those who seem to have belled this particular cat.
- Any plans that target the risk factors and prevent the onset of non-communicable diseases will clearly have to be truly game-changing, and incorporate the environmental angle as well.

14. Ranitidine

- Ranitidine, popularly known through brand names like Aciloc, Zinetac, Rantac and Rantac-OD, R-Loc and Ranitin, is an over-the-counter, prescription antacid used in the treatment of acid reflux and peptic ulcer diseases.
- It is commonly used to relieve acid-related indigestion and heartburn by decreasing stomach acid production.
- While other medicines like pantoprazole and omeprazole too treat these symptoms and are more commonly prescribed today, ranitidine is still widely used in India.

What is the problem?

- The US FDA stated in a release that it had learned that some ranitidine medicines contained “low levels” of a substance called N-nitrosodimethylamine (NDMA).
- An environmental contaminant found in water and foods, NDMA has been classified by the International Agency for Research on Cancer as probably carcinogenic to humans, which means it has the potential to cause cancer.
- This is the same impurity that the US FDA had investigated in blood pressure drugs valsartan and losartan in 2018.

How has India's drug regulator responded?

- India's top drug regulator wrote to state regulators asking them to direct ranitidine active pharmaceutical ingredient (API) manufacturers to “verify their products and take appropriate measures to ensure patient safety”.

How have companies selling ranitidine in India responded?

- At least two of the company's marketing top ranitidine brands here have decided to take precautionary measures like halting sales while investigations into their safety are in progress.
 - * This includes GSK, which publicly announced a voluntary recall of its Zinetac brand
 - * Torrent Pharmaceuticals, too, has “stopped the sales of this product” till it concludes a “detailed assessment” of its Ranitin

15. Silicosis

- It is a form of occupational lung disease caused by inhalation of crystalline silica dust, and is marked by inflammation and scarring in the form of nodular lesions in the upper lobes of the lungs.
- It is a type of pneumoconiosis.
- It is also known as miner's phthisis, grinder's asthma, potter's rot, etc.
- Over time, it could build up in lungs, cause bloody coughing and breathlessness.
- Silicosis is characterized by shortness of breath, cough, fever, and cyanosis (bluish skin).
- Silicosis is a permanent disease with no cure.
- The best way to prevent silicosis is to identify workplace activities that produce respirable crystalline silica dust and then to eliminate or control the dust
- Water spray is often used where dust emanates. Dust can also be controlled through dry air filtering.
- Jaggery (a traditional sugar) has a preventive action against silicosis.

Context:

- Miners of Ganj Basoda district in Madhya Pradesh suffering from silicosis have decided to organise themselves to press for adequate compensation and appeal to the government for right treatment, instead of being treated for tuberculosis.

Issue:

- Around 10,000 miners from 40 villages in the district have been facing the threat of the respiratory disease.
- At Pathar village in Ganj Basoda, while the tribal sarpanch himself is a miner, there were 40 women among 600 people, belonging mainly to the Saharia tribe, who have lost their husbands to silicosis.
- Silicosis is a disease caused due to inhalation of silica, and it is often mixed up with tuberculosis due to lack of awareness.
- The disease is considered incurable, but if timely precautions are taken then the people can save themselves from it.
- It is observed that the government is not ready to admit the extent of the Silicosis, and treat them for TB instead.

Details:

- At the workers are drawing inspiration from Jodhpur's Raju Devi, who, after her husband's death due to silicosis, organised around 25,000 miners and secured their rights.
 - * The Pneumoconiosis Board issues certificates to the patients, making them eligible for the government's financial assistance.
- The main challenge of eliminating silicosis in India is in the informal, unregulated sectors of industry which do not fall under the control of statutory tools such as the Factory Act of India (1948).
- Silicosis-affected workers in the informal sector are not entitled to statutory protection, which would remove them from the hazardous environment, or to compensation, which would enable them to leave work.
- Continued exposure makes it difficult for physicians to manage the disease.
- Furthermore, most primary-care physicians in India are not trained to manage occupational health diseases.
- Chronic exposure to silica increases workers' risk of tuberculosis infection and aggravates pre-existing pulmonary tuberculosis. Differential diagnosis is a challenge.

Way forward:

- Free diagnostic and treatment facilities at primary, secondary and tertiary-level health facilities to workers exposed to silica, along with counselling of patients about how to avoid dust inhalation and prevent progression of the disease, is the need of the hour.

- Awareness must be raised through information materials printed in the local language.
- Silicosis health-care units need to be established in silicosis-risk districts, where free chest X-ray and pulmonary function tests are done.
- Regular inspections must be made of industries that use silica, with active involvement of nongovernmental organizations (NGOs) to ensure proper monitoring.
- Cost-effective engineering control measures to manage silica dust need to be developed and promoted.
- A silicosis control programme must be set up in India.
- Guidelines are needed under the revised Indian national tuberculosis control programme towards management of those at risk of developing silicotuberculosis.

Conclusion:

Despite many clinical and operational challenges in the management of silicosis and silicotuberculosis, there is an opportunity for the Government of India to formulate a comprehensive policy framework on prevention, treatment, rehabilitation, compensation and follow-up. Action needs to be taken on active case-finding for documenting the burden of silicosis and silicotuberculosis.

16. 'TB Harega Desh Jeetega' Campaign

- The chief objective of the campaign is to eliminate tuberculosis (TB) from India.
- The campaign has 3 pillars
 - * Clinical approach
 - * Public health component
 - * Active community participation
- Supporting aspects of the campaign include patient support, private sector engagement, political and administrative commitment at all levels.
- The government will make sure that TB patients receive free and high quality treatment and care at private and public hospitals.
- The government has set the target year for eradicating TB from the country as 2025. The global target set by the UN is 2030.
- It also aims to improve and expand the reach of TB care services across the country by 2022.
 - * This includes preventive and promotive approaches, and proposes interventions such as engagement with private sector health care providers, inter-ministerial partnerships, corporate sector engagement, latent TB infection management, and community engagement.

* The interventions will be accompanied by a comprehensive, mass media and communications campaign to generate awareness about the disease and the free treatment services available under the government programme.

- In the year 2018 the government had launched the Nikshay Poshan Yojana, a direct benefit transfer (DBT) scheme to provide nutritional support to TB patients. Since then, about 26 lakh patients have received the benefit directly into their bank accounts.

Context

- The Union Minister for Health and Family Welfare launched the 'TB Harega Desh Jeetega' Campaign along with the National TB Prevalence Survey. He also released the TB India Report (2019).

National TB Prevalence Survey

- This survey is crucial for achieving the goal of ending TB in India by 2025.
- The survey will take 6 months and cover the whole country.
- The data thus obtained will be used as a policy tool for further interventions.

TB India Report (2019)

- According to this Report, 21.5 lakh cases of TB were reported in 2018.
- In 2017, there were 18 lakh cases and 2018 saw a rise of 17% from the previous year.

17. Tobacco

E-Cigarettes

Context

- The Union Cabinet has approved a ban on e-cigarettes, citing the need to take early action to protect public health.

What are they?

- Electronic cigarettes, also known as e-cigarettes, e-vaporizers, or electronic nicotine delivery systems, are battery-operated devices that people use to inhale an aerosol, which typically contains nicotine (though not always), flavorings, and other chemicals.
- E- Cigarettes simulates smoking and provides some of the behavioral aspects of smoking, including the hand-to-mouth action of smoking, but without burning tobacco.
- E-cigarettes typically have a heating element that atomizes a liquid solution called e-liquid. E-liquids usually contain propylene glycol, glycerin, nicotine, flavorings, additives, and differing amounts of contaminants. E-liquids are also sold without propylene glycol, nicotine, or flavors. Using an e-cigarette is known as "vaping" and the user is referred to as a "vaper."

Stated benefits of E-cigarettes:

- E-Cigarettes are sold as aids to reduce or quit smoking, and some people find them helpful for smoking cessation. As it helps them overcome addiction.
- E-cigarettes claim to bypass many of the health risks of tobacco smoking, and to offer a more healthful alternative to cigarettes and other conventional forms of nicotine intake. Hence they result in harm reduction as compared to actual cigarettes.

Concerns:

- The benefits of e-cigarettes are uncertain. There is very little scientific evidence to show that they may help people quit smoking, although they have not been proven to be more effective than smoking cessation medicine. Their safety and efficacy for quitting smoking is unclear.
- A 2016 World Health Organization (WHO) report found that the scientific evidence for the effectiveness of vaping for quitting smoking is "scant and of low certainty".
- There is concern with the possibility that non-smokers and children may start nicotine use with e-cigarettes at a rate higher than anticipated than if they were never created for they are considered less harmful and fashionable. Following the possibility of nicotine addiction from e-cigarette use, there is concern children may start smoking cigarettes. E-cigarettes might actually lead to increasing smokers.
- Since their entrance to the market in 2003, global use has risen exponentially. Large tobacco companies have greatly increased their marketing efforts.
- Though e-cigarettes are generally regarded as safer than combusted tobacco products, their part in tobacco harm reduction is unclear. In 2019, an outbreak of severe lung illness across multiple states in the US was linked to vaping. Nicotine replacement products may be safer than e-cigarettes.
- E-cigarettes create vapour, have been found to contain small amounts of toxicants, carcinogens, and heavy metals, as well as metal nanoparticles. E-cigarette vapor potentially contains harmful chemicals not found in tobacco.
- The long-term effects of e-cigarette use are unknown. Less serious adverse effects include abdominal pain, headache, blurry vision, throat and mouth irritation, vomiting, nausea, and coughing. Nicotine itself is associated with some health harms. Universal vaping "will bring its own distinct but as yet unknown health risks in the same way tobacco smoking did, as a result of chronic exposure".
- The scientific community are primarily concerned with the possible effect on public health. There is concern among public health experts that e-cigarettes could renormalize smoking, weaken measures to control tobacco, and serve as a gateway for smoking among youth.

- Following hundreds of possible cases of severe lung illness and five confirmed deaths associated with vaping in the US, the Centers for Disease Control and Prevention stated on September 6, 2019 that people should consider not using vaping products while their investigation is ongoing.

Current Scenario:

- Globally, many countries are evaluating the health risks associated with using e-cigarettes, and India is one of a handful of countries to enforce a complete ban.
- In India central government banned production, import, sale and distribution of e-cigarettes and similar products.
 - * Arguments in favour of the ban: Health risks associated with E-cigarettes. Public interest to ensure vaping doesn't become an "epidemic" among young people.
 - * Arguments against the ban: The E-cigarette traders have appealed against this move in the courts. And there have been some strong arguments against this move. India is the world's second-largest consumer of tobacco products after China, and more than 900,000 people die in the country each year from tobacco-related illnesses. In banning e-cigarettes prematurely, the government is eliminating a line of substitutes for hundreds of millions of consumers that may reduce their reliance on potentially more harmful tobacco products.

Way forward:

- There is an urgent requirement to conduct independent studies to evaluate the effects of e-cigarettes and arrive at a "rational" decision.
- Present and future generations must be urgently protected from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke.
- Keeping with the spirit of the WHO Framework Convention on Tobacco Control (WHO FCTC) the government must work towards reducing the prevalence of tobacco use and exposure to tobacco smoke and work towards complete elimination of tobacco and even E-cigarettes in the longer run.
- Public health must have primacy while deciding the future course of action.

National Tobacco Cessation QuitLine

- The National Tobacco Cessation QuitLine is a dedicated toll-free number that helps tobacco users to receive free support and guidance to subdue their addiction.

- The Union government's tobacco Quitline is monitored by National Institute of Mental Health and Neurosciences (NIMHANS).
- The helpline started by the Union Health Ministry in April 2018 is displayed on all tobacco products.
- Subsequently, the south Indian regional languages cell, NIMHANS Tobacco Quitline was started in september 2018.
- Those who are unable to kick the habit only with the help of Quitline, are referred to the nearest Tobacco Cessation Clinic (TCC).
- Penetration in rural areas is the next plan.

mCessation programme:

- Ministry of Health & Family Welfare, in partnership with World Health Organisation and the International Telecommunications Union, had started an initiative for utilising mobile technology for tobacco cessation.
- WHO-ITU's 'Be Healthy Be Mobile' initiative, aims to reach out to tobacco users of all categories who want to quit tobacco use.
- The Centre's 'mCessation' Programme to quit tobacco is a text messaging programme for mobile phone users.
- A person looking to quit tobacco can give a missed call to the toll-free number after which, they will be sent a series of messages over several months.
- In a 2018 report published by the peer-reviewed online journal BMJ Innovations it was reported that the 'mCessation' programme in India had seen a 19% quit rate (estimated as not used any tobacco in the past 30 days).

WHO Framework Convention on Tobacco Control (FCTC)

- The Framework Convention on Tobacco Control (FCTC) is the world's first public health treaty enacted under the World Health Organization (WHO).
- It is the biggest global initiative in tobacco control.
- The WHO FCTC was developed by countries in response to the globalization of the tobacco epidemic. It aims to tackle some of the causes of that epidemic, including complex factors with cross-border effects, such as trade liberalization and direct foreign investment, tobacco advertising, promotion and sponsorship beyond national borders, and illicit trade in tobacco products.
- WHO-FCTC provides for various measures to reduce the demand as well as the supply of tobacco.
- India is a signatory to this treaty since 2004.
- India played a leading role in FCTC negotiations to finalize its provisions and was the regional coordinator for the South-East Asian countries.

18. UMMID and NIDAN Kendras

Context:

The Union Health Minister inaugurated the UMMID and NIDAN Kendras.

About the UMMID:

- UMMID stands for Unique Methods of Management and treatment of Inherited Disorders.
- It has been launched to tackle inherited genetic diseases of new-born babies and pregnant women.
- The initiative aims to:
 - * Produce skilled clinicians in human genetics.
 - * Establish five NIDAN Kendras.
- It is supported by the Department of Biotechnology (DBT) under the Ministry of Science and Technology.
- This was launched taking into account the fact that congenital and hereditary genetic diseases are becoming a great health burden in India.
- There is a need for adequate and effective genetic testing and counselling services.
- In India's urban areas, congenital malformations and genetic disorders are the third most common cause of mortality in new-borns.
- With a very large population and high birth rate, and consanguineous marriage (marriage among blood-relatives) favoured in many communities, the prevalence of genetic disorders is high in India.
- The NIDAN Kendras will provide counselling, prenatal testing and diagnosis, management, and multidisciplinary care in government hospitals (where there are more patients).
- The Kendras will produce trained clinicians and also undertake screening of pregnant women and new-borns for inherited genetic diseases.

19. World Heart Day

Context

- The World Heart Foundation organizes World Heart Day, an international campaign held on September 29 to inform people about cardiovascular diseases, which are the biggest cause of death.
- The day promotes preventative measures to reduce the risk of cardiovascular diseases.
 - * It aims to drive action to educate people that by controlling risk factors such as tobacco use, unhealthy diet and physical inactivity, at least 80% of premature deaths from heart disease and stroke could be avoided.
- World Heart Day is a global campaign during which individuals, families, communities, and governments around the world participate in activities to take charge of their heart health and that of others.

- * Through this campaign, the World Heart Federation unites people from all countries and backgrounds in the fight against the CVD burden and inspires and drives international action
- * They celebrate and promote World Heart Day with activities such as fun runs, public talks, concerts, and sporting events.

Cardiovascular Disease

- It is a general term used to describe a range of disorders that affect the heart.
- The term cardiovascular disease encompasses diseases of the blood vessels; heart rhythm problems, or arrhythmias; heart infections; and congenital heart defects.

Symptoms of heart disease in blood vessels

- Chest pain, chest tightness, chest pressure and chest discomfort (angina)
- Shortness of breath
- Pain, numbness, weakness or coldness in your legs or arms if the blood vessels in those parts of your body are narrowed
- Pain in the neck, jaw, throat, upper abdomen or back

In India

- The prevalence of heart disease and stroke has increased by over 50% from 1990 to 2016 in India, with an increase observed in every state.
- Heart disease and stroke together contributed to 28.1% of total deaths in India in 2016 —compared with 15.2% in 1990.
 - * Heart disease contributed 17.8% of total deaths
 - * Stroke contributed 7.1% of total deaths.

Simple ways to prevent heart attack and stay healthy

- Ensure that your diet comprises a balance of nutrients like protein, carbohydrates, fat, vitamins, and minerals.
 - * Reduce your salt, sweet and red meat intake, to maintain cholesterol and blood pressure levels.
- Exercise regularly — Lead an active lifestyle, which will not only keep your weight in check, but also help improve blood circulation, lower cholesterol and blood pressure levels.
- Avoid alcohol and smoking — Steer clear of alcohol, smoking, and any such harmful addictive substances.
- Be relaxed and get enough sleep: Stress is one of the biggest triggers for heart attack across all age groups

Global Hearts Initiative

To support governments in strengthening the prevention and control of cardiovascular diseases (CVDs), in 2016 WHO and the United States Centers for Disease Control and Prevention (US CDC) launched the Global Hearts Initiative.

- The Initiative comprises five technical packages which provide a set of high-impact, evidence-based interventions that, when used together, will have a major impact on improving global heart health.
- On the prevention side, the Global Hearts Initiative comprises the
 - * MPOWER package for tobacco control in line with the WHO Framework Convention on Tobacco Control, the
 - * ACTIVE package for increasing physical activity,
 - * SHAKE package for salt reduction, and the
 - * REPLACE package to eliminate industrially-produced trans-fat from the global food supply.
- * On the management side, the HEARTS technical package is aimed at strengthening the management of CVDs in primary health care.

ART AND CULTURE

1. Bathukamma

- Bathukamma is a colourful floral festival of Telangana and is celebrated by womenfolk with exotic flowers of the region.
- Bathukamma is a beautiful flower stack, arranged with different unique seasonal flowers most of them with medicinal values, in seven concentric layers in the shape of temple gopuram.
- 'Bathukamma' means 'Mother Goddess come Alive' and the patron goddess of womanhood Goddess Maha Gauri-'Life Giver' is worshipped in the form of Bathukamma.
- It is the festival for feminine felicitation.
- The festival has over the years become a symbol of Telangana culture and identity.
- Bathukamma comes during the latter half of monsoon, before the onset of winter.
- The festival represents the spirit of Telangana and is celebrated for nine days during Dasara.

2. Bronze Idol of Buddha seated in the Bhumisparsha Mudra

Context

- Finance Minister handed over an antique bronze idol of Buddha to the Minister of State for Culture & Tourism

Background

- The idol had been stolen from the Nalanda Museum of ASI (Archaeological Survey of India) in 1961 and had resurfaced at an auction in Maastricht in The Netherlands (organized by a London-based dealer) in 2018.
- On receiving this information, the Directorate of Revenue Intelligence (DRI) officer in London contacted the Art & Antique Unit of the Metropolitan Police (UK).
- The ASI also certified that the statue was stolen from the Archaeological Museum in Nalanda.
- The International Council of Museums also inspected the image and confirmed that it is the same as the one stolen from Nalanda in 1961.
- The India Pride Project, an online volunteer group of art enthusiasts, played an active role in the identification of the idol.
- British authorities handed over the idol to the Indian High Commissioner (UK) on India's IndeBuddha in Bhumisparsha Mudrapendence Day in 2018.

- The stolen Buddha statue is documented as "Seated Buddha in Bhumisparsha Mudra" (height 6.5 inches, circa 12th century CE)

Bhumisparsha Mudra

- This is a common pose found in idols of the Buddha in many countries.
- This means: 'Touching the Earth'.
- In this posture, the right hand points downwards towards the earth, hanging over the knee and palm facing inwards. The left hand rests on the lap with the palm upright.
- Significance of the pose: This pose represents the moment when the Buddha attained enlightenment. It stands for 'Calling the Earth to Witness the Truth'.



3. Dadasaheb Phalke

- The Dadasaheb Phalke Award is part of the National Film Awards, themselves a highly coveted collection of honours in the film industry.
- The Award is named after Dhundiraj Govind Phalke, the pioneering filmmaker who gave India its first film—'Raja Harishchandra', in 1913.
- Presented annually by the Ministry of Information and Broadcasting, the award is considered the highest honour in the Indian film fraternity.
- It is awarded for "outstanding contribution to the growth and development of Indian cinema".

Details

- The award was instituted by the government in 1969, and consists of a 'Swarna Kamal', a cash prize of INR 10 lakh, a certificate, a silk roll, and a shawl.
- The first recipient of the award was Devika Rani Roerich in 1969.

- The award is presented by the President of India in the presence of the Union Minister of Information and Broadcasting, the Chairpersons of the juries, the representatives of the Film Federation of India, and the Confederation of All India Cine Employees amid senior officials

Context

- Amitabh Bachchan awarded the prestigious Dadasaheb Phalke Award

4. Errum Manzil

- Errum Manzil or Iram Manzil is an expansive palace standing in Hyderabad, Telangana.
- It was built by Nawab Safdar Jung Musheer-ud-daula Fakhru'l Mulk, a nobleman of Hyderabad state.
- It was built around the year 1870.

Context

The Telangana High Court has set aside the decision of the State Cabinet to demolish heritage structure Errum Manzil and build a new Assembly building there.

Details:

- The decision of Telangana Cabinet taken in June 2019, was challenged by different parties in HC in the form of eight Public Interest Litigation (PIL) petitions.
- The HC in its verdict observed the decision was arbitrary and that the protection given to Errum Manzil is that of a "protected heritage building".
- The division bench said the State had ignored various essential provisions of the law while deciding to demolish Errum Manzil.
- The Cabinet had also overlooked important factors and ignored the procedures established by law, the verdict said.
- Preservation of heritage was incorporated to be part of "life" enshrined in Article 21 of the Constitution, the bench noted.
- The World Heritage Convention-1972 makes it imperative for the State to preserve heritage buildings which contribute to the sense of culture and identity of the State.

World Heritage Convention, 1972:

- It is a convention introduced by UNESCO, concerning the Protection of the World Cultural and Natural Heritage.
- The primary mission of the convention is to identify and protect the world's natural and cultural heritage considered to be of Outstanding Universal Value.
- It is governed by — World Heritage Committee supported by the UNESCO World Heritage Centre (Established in 1992)
- By signing the Convention, each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage.

- It explains how the World Heritage Fund is to be used and managed and under what conditions international financial assistance may be provided.
- IUCN is the Advisory Body on natural heritage.
- It recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.

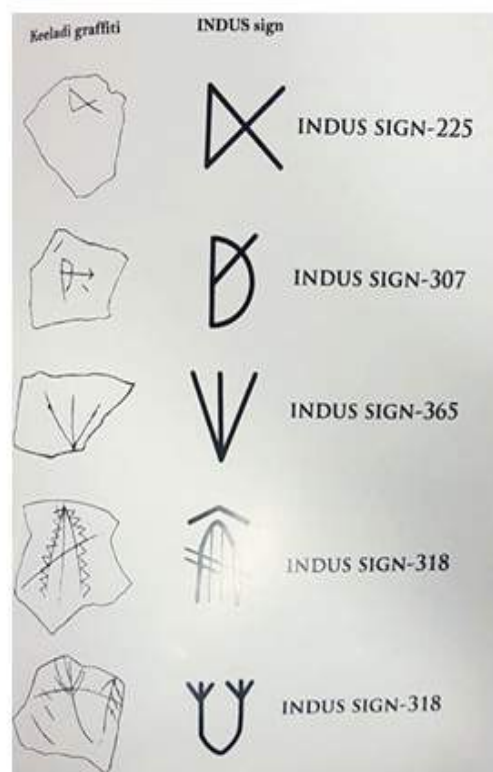
5. Keeladi findings traceable to 6th century BCE: report

Context

- This article discusses about report titled, 'Keeladi-An Urban Settlement of Sangam Age on the Banks of River Vaigai', published by the Tamil Nadu Archaeology Department (TNAD)
- According to the report the cultural deposits, artefacts that were unearthed, extracted during excavations at Keeladi in Sivaganga district could be safely dated to a period between 6th century BCE and 1st century CE.

Findings of the report

- The artefacts that were found in excavations carried out at Keeladi have determined a possible link between the scripts of the Indus Valley Civilisation and Tamil Brahmi, which is the precursor to modern Tamil.
 - * The Indus Valley Civilisation was situated in the north-western part of India between 5,000 BCE and 1,500 BCE.
 - * Around 1500 BCE, the civilization collapsed and some have speculated that its people may have moved south.
 - * The script that was used by the people of this civilization has been termed the Indus script



- There was an urban civilization in Tamil Nadu that was contemporary to the Gangetic plain civilisation.
 - * Sangam age is generally considered between 300 BC and 300AD.
 - * But the Sangam age materials unearthed from the Keeladi excavation site in Sivaganga district of Tamil Nadu could be dated between 600 BC and 100 AD
 - * This urban civilisation was thriving on the banks of the Vaigai River in Tamil Nadu in 6th Century BCE, around 2500 years ago
 - * What this suggests is that the Sangam era - considered Tamil Nadu's golden age - began much earlier than what was once thought.
- Another major discovery is that people in the Sangam period were literate as early as the 6th Century BCE.
 - * The finding was based on potsherds which had names of people - like Aadhan and Kudhiranaadhan - written in Tamil-Brahmi script
- The finding suggests that the society in Keeladi had used animals predominantly for agricultural purposes

6. **Mobile Science Exhibition (MSE) Programme**

- Mounted on a specially designed bus, a Mobile Science Exhibition carries a number of interactive exhibits related to everyday science.
- The MSE or Museo-bus travels from school to school in rural areas and organize exhibitions there throughout the year.
- Along with the exhibition, some other programmes like Sky Observation Programme through telescope, science films show, Science Demonstration Lectures etc. are also organised.
- The program has been fully funded by Ministry of Culture, Govt. of India.

Objectives of the programme

- Popularize science and technology among the students and general public.
- Creating a scientific awareness in the society.
- Inculcating a spirit of enquiry among the young people.
- Inspiring youngsters to pursue a career in science, technology, engineering and mathematics.
- Supplementing formal education imparted in schools and colleges with non-formal science education.
- Promoting a culture of science in society.

National Council of Science Museums (NCSM)

- It is an autonomous organization under the Ministry of Culture, Govt. of India.
- NCSM has its Headquarters in Kolkata

- It is primarily engaged in 'Communicating Science to Empower People' through its network of twenty-five Science Centres/Museums spread across India and a Central Research & Training Laboratory (CRTL), in Kolkata.
- NCSM is the world's largest network of science centres and museums that functions under a single administrative umbrella.

7. **Mangu Mutt**

The Punjab Chief Minister urged the government of Odisha to retract the decision to demolish the Mangu Mutt in Puri.

- The Mangu Mutt is believed to have been visited by Guru Nanak, the founder of Sikhism.
- The Mutt is among many structures within 75-metre radius of the Jagannath Temple that are being demolished to ensure the safety and security of the temple.

8. **Pulikali**

- Pulikali (Tiger Dance) is a folk art of Kerala.
- Artists wear a tiger mask, paint their bodies like tigers and dance to the rhythm of traditional percussion instruments such as thakil, udukku and chenda.
- It is performed on the fourth day of Onam festival.
- The main theme of this folk art is tiger hunting with participants playing the role of tiger and hunter.

9. **Rakhigarhi DNA does not contain 'Aryan' genetic trace**

Context

- A paper called 'An Ancient Harappan Genome Lacks Ancestry from Steppe pastoralists and Iranian Farmers', was published in the Cell journal
- This paper says that the inhabitants of the Indus Valley, spread in northwest Asia from 2600 BC to 1900 BC, lacked the Steppe-Pastoralist (Aryans) ancestry that brought Indo-European languages into South Asia.
 - * Which means that the hunter-gatherers of South Asia, have an independent origin.

Details

- The findings of the paper are based on the DNA sequencing of skeletal remains of a woman found at Rakhigarhi in Haryana
- The hunter-gatherer communities developed into agricultural communities and formed the Harappan civilisation.
- The researchers also suggest that there was a movement of people from east to west as the Harappan people's presence is evident at sites like Gonur in Turkmenistan and Sahr-i-Sokhta in Iran.
 - * There was a hint that settled life and domestication went from South Asia to West Asia.

- As the Harappans traded with Mesopotamia, Egypt, the Persian Gulf and almost all across South Asia, there was bound to be movement of people resulting in a mixed genetic history. India had a heterogeneous population right from the beginning of settled life



What is ancient DNA (aDNA)?

- DNA extracted from archaeologically recovered bones, teeth or fossil plant remains is called ancient DNA. It becomes degraded due to ageing, climate and soil conditions.
- Techniques developed over the past three decades have led to a revolution in the understanding of the evolution and genetic history of a range of animals and plants, including extinct species.
- Small fragments of aDNA are processed to sequence the genome of those ancient organisms.
- Palaeogeneticists have established how genetic variation might relate to the independent evolution of species on different continents or how populations that today appear distinct in different geographical areas were once related and likely existed together in one region.

Applications of aDNA from human samples:

- Modern human DNA databases are built on samples from people who are alive today.
- The comparison of aDNA samples with other aDNA and modern DNA databases can reveal unsuspected genetic histories.
- 99% of all human DNA is common.
- However, specific variant genes (alleles), mutations and other markers can be compared with that of modern groups.
- The applications of such comparison include:
 - * Understanding the genetic predisposition towards certain diseases and responses to medicines in different social groups in South Asia.

- * Tracing the deep ancestry of ancient individuals and assess how their genetic makeup is distinct.
- * However contamination from modern human DNA is a real challenge and requires special techniques at every stage of the recovery and extraction process.

What are the Implications?

- Population genetic history open new lines of evidence into pasts.
- The aDNA results reflect that a host of Chalcolithic (Copper-Bronze using) and Iron Age cultures prosper between 2000 and 1000 BC in almost all regions of the subcontinent.
- Most people today would readily accept information about their susceptibility to diabetes or cancer from their genetic data.
- But people would hesitate to accept that genetic cleavages that happened a 100 generations ago define their actions, choices and identity today.
- However, no single story of genetics, of language families, or of the movement of people can explain the geographic, technological and cultural complexities of this millennium.

10. Whistling Villages of Meghalaya

- The Kongthong village of Meghalaya has approached the government for initiating the procedure for its inclusion in the UNESCO list of Intangible Cultural Heritage.
- The villagers have a practice of giving each child a unique tune instead of a name. The tune is called 'jingrwai iawbei' (in the Khasi language).
- Mothers compose a tune for her child until they attain a certain age to be called by normal names.
- Some villages around Kongthong also follow a similar practice. Those villages are also claiming for a recognition by UNESCO.
- The area comes under the Sohra Hima (a traditional administrative unit) headed by a syiem or chieftain.
- Khat-ar means an area belonging to 12 clans of the Khasi community and Shnong means village.
- In 2017, UNESCO had put Turkey's whistled language on the List of Intangible Cultural Heritage in need of urgent safeguarding.

11. Vallam Kali

- It is a traditional boat race in Kerala
- It is a form of canoe racing and uses paddled war canoes.
- It is mainly conducted during the season of the harvest festival Onam in autumn.
- Vallam Kali includes races of many kinds of paddled longboats, and fame in Kerala the traditional boats of Kerala.

GEOGRAPHY

1. K2-18b

- It is an exoplanet orbiting the red dwarf star K2-18 which is about 110 light years from the Earth in the Leo constellation
- K2-18b was discovered in 2015 and is one of hundreds of super-Earths -- planets with a mass between Earth and Neptune -- found by NASA's Kepler spacecraft.
- "K2-18b is not 'Earth 2.0' as it is significantly heavier and has a different atmospheric composition.
 - * K2-18 b is about 2.3 times wider than Earth and eight times more massive
 - * It orbits a red dwarf, a star much smaller and dimmer than our own sun.

Context

- K2-18b, which is eight times the mass of Earth, is now the only exoplanet known to have both water and temperatures that could be potentially habitable, according to the study published in the journal Nature Astronomy

2. Minor Planet named after 'Pandit Jasraj'

Context

- A minor planet between the orbits of Mars and Jupiter has been named after the legendary vocalist Pandit Jasraj.

What is a 'Minor Planet'?

- Minor planets are celestial objects orbiting the Sun that are not large enough for their gravity to pull them into a spherical shape.
- This distinguishes a minor planet — or a "small Solar System body", which is now the preferred term — from planets or "dwarf planets", which are almost spherical.
- Small Solar System bodies include asteroids, comets, and several other celestial objects that go around the Sun.

How are they named?

- Names of celestial bodies are finally approved by a committee at the International Astronomical Union (IAU), a global organisation of professional astronomers, which also decides on definitions of fundamental astronomical and physical constants.
- In the case of small Solar System bodies, the discoverer has the privilege to suggest the name.
- The discoverer holds this privilege for 10 years since the discovery. But there is a process to be followed, and not all names are acceptable.

- Once it is determined that a celestial body is indeed new, a provisional name is given. This name has the year of discovery, two letters of the alphabet and, perhaps, two numbers. The minor planet that has been named after Pandit Jasraj was initially called '2006VP32'.
- Once more information is available about the body, particularly its orbit, and after it has been sighted on at least four occasions, it is entitled to have a permanent number. In this case, the number allotted was 300128. Only after this is the discoverer invited to suggest a name.

What are the requirements of the name?

- There are rules for nomenclature, and restrictions on the names that can be suggested. The proposed name must have 16 characters or less, it must be "non-offensive", and not too similar to an existing name.
- Names of political or military leaders can be suggested only 100 years after their death. The same applies for a political or military event. Names of pets, and names of a commercial nature are "discouraged". There can be restrictions depending on where the body is located — for example, new objects discovered beyond Neptune are supposed to be given names of creation deities.

3. National Institute of Ocean Technology (NIOT)

- NIOT is an autonomous society under the Ministry of Earth Sciences, established in 1993.
- It has its main office at Chennai, Tamil Nadu.
- The chief objective of the institute is to develop reliable indigenous technologies to solve the various engineering problems associated with the harvesting of non-living and living resources in the Indian Exclusive Economic Zone (EEZ), which is about two-thirds of the land area of India.
- The institute engages in developing technologies for sustainable utilization of ocean resources.
- It also engages in providing solutions to organisations working in the field.

Context

- Officials from the Ministry of Earth Sciences apprised the Vice-president of the status of the National Institute of Ocean Technology's research facility at Thupilipallam village in Nellore District of Andhra Pradesh

EDUCATION

1. Curriculum for Life Skills (Jeevan Kaushal)

Context

- Union Minister of State for Human Resource Development launched the Curriculum for Life Skills (Jeevan Kaushal) designed by University Grants Commission (UGC)

Details

- Life skills (Jeevan Kaushal) curriculum cover the set of human talents acquired by an individual via classroom learning or life experience that can help them to deal with problems encountered in day to day life.
 - * This includes the core skills each individual must possess internally as well as externally for the betterment of self and the society as a whole
- The curriculum is designed to impart and strengthen the knowledge, skills and dispositions believed to be the best requisites of the current Industry and thereby empower the talent inherent in each learner.
 - * Life Skills like communication skill, interpersonal skill, time management, problem solving ability, decision making capacity, leadership ability and integrity play a crucial role in boosting the employability of the students.

2. Institutions of Eminence status

Context

- The Ministry of Human Resource Development (MHRD) has awarded Institutions of Eminence (IoE) status to five public universities: IIT-Madras, Banaras Hindu University, IIT-Kharagpur, University of Delhi and University of Hyderabad.
- The decision was taken by the MHRD on the advice of University Grants Commission and the Empowered Expert Committee

About the Scheme

- Institutions of Eminence scheme has been launched in order to implement the commitment of the Government to empower the Higher Educational Institutions and to help them become world-class teaching and research institutions.

Objectives of the scheme

- to provide for higher education leading to excellence and innovations in such branches of knowledge as may be deemed fit at post-graduate, graduate and research degree levels and award degrees, diplomas and other academic distinction

- To engage in areas of specialization to make distinctive contributions to the objectives of the university education system wherein the academic engagement is clearly distinguishable from programmes of an ordinary nature.
- To develop the capacity of the students and the researchers to compete in the global tertiary education marketplace through the acquisition and creation of advanced knowledge in those areas
- to provide for high-quality teaching and research and for the advancement of knowledge and its dissemination through various research programmes undertaken in-house by substantial number of full-time faculty and research scholars in diverse disciplines
- To pay special attention to teaching and research in unique and emerging areas of knowledge, including interdisciplinary areas, which are regarded as important for strategic needs of the country but are not being pursued by conventional or existing institutions so far, and award degrees, diplomas and other academic distinctions.
- To aim to be rated internationally for its teaching and research as a top hundred Institution in the world over time.

3. National Council of Teacher Education (NCTE)

- The National Council for Teacher Education as a statutory body came into existence in pursuance of the National Council for Teacher Education Act, 1993
- The main objective of the NCTE is to achieve planned and coordinated development of the teacher education system throughout the country, the regulation and proper maintenance of Norms and Standards in the teacher education system and for matters connected therewith.

Objectives

- To regulate and properly maintain the Norms and Standards in the teacher education system and for matters connected therewith.
- It aims at training individuals for equipping them to teach pre-primary, primary, secondary and senior secondary stages in schools, non-formal and part-time education, adult education (correspondence) and distance education courses

4. National Educational Alliance for Technology (NEAT)

Scheme

Context:

- The Ministry of Human Resource Development (MHRD) has announced a new PPP (Public-Private Partnership) scheme, National Educational Alliance for Technology (NEAT) for using technology for better learning outcomes in higher education.

Details:

- The objective of the scheme is to use Artificial Intelligence to make learning more personalised and customised as per the requirements of the learner.
- This requires the development of technologies in Adaptive Learning to address the diversity of learners.
- There are a number of start-up companies developing this and MHRD seeks to recognise such efforts and bring them under a common platform so that learners can access it easily.
- The Ministry wishes to make such technologies accessible to a large number of students from economically weaker sections.
- The Ministry would create and maintain a National NEAT platform that would provide one-stop access to these technological solutions.
- Ed-Tech companies would be responsible for developing solutions and managing the registration of learners through the NEAT portal.
 - * They would be free to charge fees as per their policy.
 - * As their contribution towards the national cause, they would have to offer free coupons to the extent of 25% of the total registrations for their solution through the NEAT portal.
 - * The Ministry would then distribute these free coupons to economically disadvantaged students.
- The All India Council for Technical Education (AICTE) would be the implementing agency for the NEAT programme.
- Expert committees would select the Ed-tech companies.
- The Ministry proposes to launch and start operations by November 2019.

DISASTER MANAGEMENT

1. **Boat tragedy exposes serious safety lapses**

Context

- In a major tragedy in Andhra Pradesh, a private boat carrying tourists to Papikondalu capsized in the Godavari near East Godavari district leaving at least eight dead

Examples from the past

- Twenty-one persons drowned in the Krishna in 2017, when a boat carrying tourists to Pavitra Sangamam, on the outskirts of Vijayawada, capsized.
- Nineteen persons drowned when a boat overturned in East Godavari district in 2018.

A look at stats

- Sources say that more than 40 boats operate in the Krishna and about 75 in the Godavari.
- According to the National Crime Records Bureau (NCRB), on an average, 30 people die in boat mishaps every year in the state.

Concerns:

- The boat had no permission from the government to operate.
- Despite frequent boat accidents in the Godavari and Krishna rivers claiming several lives, no precautionary measures are being taken to prevent them.
- According to officials, many private boat operators don't follow the rules prescribed by the Indian Registration of Shipping and the Inland Vessels Act, 1917.
- Only a few possess fitness certificates as per the Public Canals and Ferry Act, 1890.
 - * The AP Tourism Department Corporation (APTDC) operates 52 boats.
 - * However, unconfirmed reports say that over 200 boats operate in rivers and canals to tourist places without licence and ignoring safety norms.

Way forward:

- Permission should be given only after verifying the hull shape, motor capacity, tonnage, length and breadth, bottom and other specifications.
- AP State Disaster Response and Fire Services personnel said owners should follow all fire safety norms and ensure that the boats contain fire extinguishers, caution boards, sand buckets and other fire-fighting equipment.

- Private boat owners flouting the norms must be heavily penalised.
- To prevent tragedies, officials should conduct raids regularly at tourist spots.

GOVERNANCE

1. Fake News

Definition:

- Fake news is a type of yellow journalism or propaganda that consists of deliberate disinformation or hoaxes spread via traditional news media (print and broadcast) or online social media. Fake news is a neologism often used to refer to fabricated news.
- Fake news is written and published usually with the intent to mislead in order to damage an agency, entity, or person, and/or gain financially or politically, often using sensationalist, dishonest, or outright fabricated headlines to increase readership.

Background:

- As opposed to the popular perception that fake news is a new phenomenon linked to the rise of social media, Fake news has been around since ancient times. Governments, political actors, individuals have always invested in disinformation campaigns to build narratives to their advantage.
- In the 21st century, with the advent of internet and social media platforms, the impact of fake news has become more widespread. Over time, the Internet has grown to unimaginable heights with tons of information updated, allowing the Internet to be a host for plenty of unwanted, untruthful and misleading information that can be made by anyone.
- The advent of social media has merely decentralised the creation and propagation of fake news. It is this that has led to the ubiquity of and difficulty in controlling/eliminating fake news.
- On social networks, the reach and effects of information spread occur at such a fast pace, that distorted, inaccurate or false information acquires a tremendous potential to cause real world impacts, within minutes, for millions of users.

Roots of fake news:

- Loss of confidence in the traditional media and expert knowledge have led to the growth of the social media as a medium of information.
- The modern information technology age has led to the availability of large amount of information at very high speeds. The lack of critical thinking leads to obscure sources of information to appear as authoritative and credible.

- The evolving nature of online business models encourages the production of information that is “click-worthy” and independent of its accuracy. For media outlets, the ability to attract viewers to their websites is necessary to generate online advertising revenue. Publishing a story with false content that attracts users benefits advertisers and improves ratings. 21st century fake news is often intended to increase the financial profits of the news outlet.
- Hostile government actors have also been implicated in generating and propagating fake news, particularly during elections for political polarization, mobilizing public opinion and vote bank politics. The relevance of fake news has increased in the era of post-truth politics. Governments and political actors have always invested in disinformation campaigns to build narratives of their choice.
- Confirmation bias among the people further advance the spread of fake news. Studies have confirmed that people don't care about finding the ‘truth’ behind a news item and instead look for evidence to support their preferred narrative. In the era of sharply divided political opinions conformational bias is a challenge.
- The state and non-state actors are trying to malign the image of enemy countries via fake news. Example: Intelligence agencies in India have pointed to the role of Pakistani ISI in spreading fake news in India.
- The role of internet trolls in spreading fake news cannot be overlooked. Internet trolls feed on attention and when interacting with each other, trolls often share misleading information that contributes to the fake news circulated on sites like Twitter and Facebook
- Fake news also refers to satirical news, whose purpose is not to mislead but rather to inform viewers and share humorous commentary about real news and the mainstream media.

Impact of Fake news:

- Fake news in India has led to episodes of violence between castes and religions. It often spreads through the smartphone instant messenger WhatsApp
 - * 2013 Muzaffarnagar riots, which claimed over 60 lives and displaced thousands, was fueled by videos circulated on WhatsApp.
 - * 2017 seven people were lynched as rumour of child abductions spread through WhatsApp in a village.

- Fake news was prevalent during the 2019 Indian general election. The elections were called by some as "India's first WhatsApp elections", with WhatsApp being used by many as a tool of propaganda. Parties had weaponized the platforms and misinformation was widely used for mobilizing public opinion.
- Rumours on the social media in April 2019 related to supposed dangers of vaccinations, resulted in some schools in Mumbai stopping health officials from administering vaccinations to children.
- Fake news is being used to target the rival company's sales. Tata Chemicals had to deal with a misinformation campaign in 2019 saying that Tata Salt contained high levels of potassium Ferro cyanide.
- The impact of fake news has become a worldwide phenomenon. The impact of fake news on the Presidential elections in the USA and the Brexit referendum is often quoted as global impacts of fake news.
- Fake news is also fuelling racist ideas in the western nations and is leading to Bullying and violence against innocent people.

Response:

- Combating fake news is a growing preoccupation of the technology platforms, the political class, the news media, and an increasing tribe of citizens concerned about democracy being hijacked.
- The current response to fake news primarily revolves around three prongs — rebuttal, removal of the fake news item and educating the public.

1. Rebuttal and Removal

- Rebuttal is a form of fact checking wherein the fake news is debunked by pointing out errors like mismatch, malicious editing and misattribution.
- Since fake news items do appear on institutional handles, attempts are made to have it removed after rebuttal. There is much pressure on companies like Facebook and YouTube to proactively remove fake news from their platforms and rework their algorithms to ensure that such content does not gain prominence.
- The government is drafting guidelines under Section 79 of the Information Technology Act that will bind companies such as Twitter, WhatsApp, YouTube and Facebook to respond to complaints over content in a "few hours" as against the current norm of 36 hours
 - * This is necessary in order to fight the menace of fake news over social media. Companies will also be required to have grievance officers stationed in India.
 - * The new intermediary guidelines under Section 79 of the Information Technology Act will also require companies to respond to complaints from not just courts and government entities, but also the general public.

- Following over 30 killings linked to rumours spread over WhatsApp, WhatsApp introduced various measures to curb the spread of misinformation which included limiting the number of people a message could be forwarded to as well as introducing a tip-line among other measures such as suspending accounts and sending cease-and-desist letters.
- In India, Facebook has partnered with fact-checking websites such as BoomLive.
- Twitter has also taken action to curb the spread of fake news such as deleting accounts. Accountability to address fake news is partly offloaded on to the technology platforms.
- Media houses also have their own fact-checking departments now such as the India Today Group, Times Internet has TOI Factcheck and The Quint has WebQoof

2. Educating the public

- The third leg of the response revolves around educating the end users to be more discerning consumers of news by informing them of verification tools so that they can ascertain the accuracy of a news item before sharing it.
- In 2018, Google News launched a program to train 8000 journalists in seven official Indian languages including English. The program, Google's largest training initiative in the world, would spread awareness of fake news and anti-misinformation practices such as fact-checking.

3. Other methods:

- Internet shutdowns have been used by the government as a way to control social media rumours from spreading in the case of emergencies.
- Ideas such as linking Aadhaar to social media accounts has been suggested to the Supreme Court of India by the Attorney General. This will help track the 'source' of fake news, ostensibly to address the issue at its root. This proposal to de-anonymise all social media accounts, is argued against as it is fraught with serious issues concerning invasion of privacy and free speech.

Concerns with the present approach:

- It is impossible to completely 'remove' fake news even after rebuttal, given the decentralised nature of dissemination. Propagation and virality of a news item are contingent not on its accuracy but on how well it conforms to the dominant narrative and also on the strength of the associated distribution networks that spread the narrative. It becomes quite impossible to rebut and remove all the fake news.
- The increasing complexity of issues, in combination with the deluge of information has made it impossible for any individual to develop a well-researched stand on all the topics and hence go with whatever interpretation is followed by the majority.

- Studies have confirmed that people don't care about finding the 'truth' behind a news item and instead look for evidence to support their preferred narrative (confirmation bias). Therefore, debunking discrete items of fake news without addressing this battle of narratives will have only a marginal value.

Way forward:

- Look for technological tools like AI to address the challenge posed by fake news, given its scale and speed.
- Need for collaboration between technology platforms, the political class, the news media, and citizens for a long lasting solution to the problem of fake news.
- A well-defined law for tackling fake news must be considered. The Singapore government's efforts in this direction might act like a guiding light.
- We must address the underlying narratives leading to the spread of fake news instead of merely trying to rebut individual items. We should thus not lose sight of the desired goal by focussing disproportionately on individual fake news items instead of the larger narrative.
- Educating the public with regard to the menace of fake news and providing facts should be the way forward.

2. Illegal Hoardings

Context

- Subhasri Ravi, a software engineer, was crushed to death by a water tanker in Chennai.
- She was on her way back home from work, was thrown off her scooter after an illegal hoarding erected on the road's divider fell on her following which she lost her balance and was hit by a water tanker.
- The illegal hoarding was reportedly erected as part of wedding celebrations of the AIADMK functionary's son on the Pallavaram-Thoraipakam radial road.

Similar examples from the past

- Raghu, a young engineer, died under similar circumstances in Coimbatore
- Babu, was electrocuted in Udhagamandalam when he touched a party flag that was in contact with a wire; both instances involved ramshackle structures placed along roads.

Madras High Court ruling on illegal hoardings

- Madras High Court has enforced a ban on illegal hoardings since 2006 and the Supreme Court has upheld the same in 2008.

- The Madras High Court had said "The erection of arches, placards and display boards, banners with poles, etc., abutting into public streets and pavements, which obstruct free and safe movement of traffic or free and safe movement of pedestrians or obstructs visibility of drivers is patently illegal".

Negligence of Civic Authorities and Insensitive Political Parties

- Subasri joins the list of hapless citizens whose lives were ended by civic neglect, police indifference, and, in Tamil Nadu especially, a political culture that dominates public spaces through exaggerated displays of cutouts, crude arches and flags at the cost of safety.
- Political parties from across the spectrum see no need for restraint, even after many directions from the Madras High Court to stop endangering public safety goes to show that there are no serious consequences.
- The Revenue Department and the local body must explain their failure to prohibit the dangerous structures, when there are clear orders in force.

Steps to be taken

- The government must fix accountability and make individual members of the executive liable for lack of public safety.
- Acts of omission, neglect and irresponsibility of civic officials should attract strong action
- It is clear, therefore, that even where limited permissions could be given, the structures cannot affect public safety.
 - * So a thorough investigation as to who, why was permission given needs to be taken up and enforcing penalty for the carelessness, laxity of officials should set a precedent preventing future such issues
- Strong action is needed against recalcitrant politicians and lumpen groups who use banners as displays of power or fealty
- Considering the long history of illegal political banners and religious displays, often involving theft of electricity, the court can bring about compliance with the law through a special panel, similar to the Supreme Court's committee on road safety headed by a retired judge.

3. India Urban Data Exchange (IUDX)

- It is a project initiated by Ministry of Housing and Urban Affairs (MoHUA)
- Under this platform data would be extracted from the Smart City Mission and could be monetised in the future, similar to the Unified Payments Interface (UPI) for bank accounts and digital payments
- The project proposes the example of fire, traffic and hospitals sharing data for emergency responses.

- * In another example, it states that streetlight timers can be connected with traffic density patterns to optimise power consumption.
- The IISc has been asked to lead this effort to create the specifications for such a data exchange platform through a broad collaboration

Context

- Union Ministry of Housing and Urban Affairs (MoHUA) officials have said that the open data platform for the 100 cities (part of the Smart Cities Mission) would be expanded to cover 500 cities by 2022 and all urban centres in the country by 2024.

4. Jan Soochna Portal (JSP)

- It is a portal launched by Rajasthan Government developed by the Information and Technology (IT) department, to enhance Transparency and accountability in the Right to information Act 2005, that deals with proactive disclosure of information.
 - * Under Section 4 (2) of the Right to Information Act 2005, provisions were made that different authorities and government departments will voluntarily disclose information through various means including the internet, so that general public can file least number of publications to seek to various information coming under the ambit of the government
- However, in the past 14 years, the centre and various state governments had not implemented this provision of the section.
- Through this portal, common people will get information pertaining to 13 departments online in a lucid language

Context

- Rajasthan launched JSP for quick access to information on government departments

Details

- Under this portal, activities of the government such as availability of food grains and ration shops and their distribution, implementation of various schemes and their beneficiaries and a variety of other information are available on a real-time basis virtually making it a Janta Information System.
- Various departments of the government of Rajasthan, called Line Departments, have been given a set of obligations that they are expected to fulfil.
 - * For example, they are expected to ensure digitization of records.
 - * In addition, the Department of Information Technology will serve as the nodal department for the development, operationalization and maintenance of the JSP.
- This department has been informed of its obligations, which includes adherence to the norms and standards laid down by a digital dialogue advisory group.

- * To ensure that the responsibilities are carried out, the Advisory Group will be the monitoring agency.
- * Grievance Redressal Officers will be appointed so that citizens can make the State government truly accountable.

- The government of Rajasthan has also taken steps to train citizens so that they are aware of the facilities available.
- The portal has been arrived at through a regular and rigorous consultative process between government officials, IT professionals and civil society.

Significance

- Files which were once accessible only on filing RTI Applications, would now be provided on suo motu basis by the Government to the public at regular intervals
 - * Since the information is available on the Internet, every citizen, right down to the municipal ward and panchayat, has access to the information.
- This information is made freely available on the JSP. All information can be accessed immediately, free of cost.
- This Portal provides Information about
 - * farm loan waiving scheme beneficiaries
 - * provides details about pollution and environment clearances
 - * mining licenses
 - List of mines in every district, provides geographical coordinates, and the area where mining has been permitted, including the land deed identifiers.
 - * It provides details of production and royalties and taxes paid.
- This kind of information can facilitate a progressive partnership between government and citizens for a cleaner society.

Challenges

- The mere launch of the JSP is not enough. There are huge challenges with regard to maintenance issues which needs to be addressed periodically
- Digital divide is a serious problem in India. To bridge this, care should be taken to ensure that access points are open and free.

Conclusion

- It would be wonderful if all other State governments follow the Rajasthan government's initiative, which aims to make people, including the marginalized sections, a part of the governance process.

MISCELLANEOUS

1. ERSS- Dial 112, 'E-Beat Book' System and 'E-Saathi'

App

Context

- The Union Home Minister launched three citizen-centric services of the Chandigarh Police which are ERSS- Dial 112, 'E-Beat Book' System and 'E-Saathi' App, in Chandigarh.

ERSS:

- ERSS stands for Emergency Response Support System.
- ERSS is one of the key projects of the Union Ministry of Home Affairs under the Nirbhaya Fund.
- ERSS provides a single emergency number (112), and a computer-aided dispatch of field resources to the location of distress.
- Citizens can send their emergency information through call, SMS, email and through the 112 India mobile app.

Dial 112:

- Till now, there were more than 20 emergency helpline numbers, for various kinds of emergencies needing the help of rescue forces in the domains of fire, health, police, etc.
- This was ineffective since the public would often get confused with the numbers and end up wasting time calling the wrong emergency service.
- To avoid this, the Dial 112 is created, which is a single number for immediate assistance services from police (100), health (108), fire (101), and women (1090).
- Initially, 16 states and Union Territories are planning to roll-out the service.
- In the future, more emergency services would be covered in this initiative.

E-Beat Book:

- It is a web and mobile-based application which will ease the collection, updation and analysis of information related to crime and criminals in real-time.
- The E-Beat Book would be linked with the Crime and Criminal Tracking Network & Systems (CCTNS), which would help in real-time updation of crime/criminal data.
- Every Beat Officer would be having an android phone to use the App.

'E-Saathi' App:

- This App is intended to help the general public, including senior citizens, to remain in touch with the police and also give suggestions to facilitate participative community policing.
- The beat officer would be able to provide services like passport verification, tenant verification, servant verification, character certification, etc. at a click of a button through the App, without people needing to visit the police station.

2. Global Goalkeepers Award

Context

- Prime Minister Narendra Modi was honoured with the Global Goalkeeper award by the Bill and Melinda Gates Foundation

Details

- The Goalkeeper awards felicitate changemakers around the world for their contributions toward meeting the UN's Sustainable Development Goals (SDGs), which the UN General Assembly set in 2015 for the year 2030.
- The awards are presented at the annual Goalkeepers function; the first such event took place in 2017.
- There are five categories of awards at the Goalkeepers event: Progress Award (age 16-30), Changemaker Award (age 16-30), Campaign Award (age 16-30), Goalkeepers Voice Award (any age), and the Global Goalkeeper Award (any age).
- Prime Minister Modi is being conferred upon this award for his work in sanitation through the Swachh Bharat Mission.
 - * The Global Goalkeeper Award, awarded to PM Modi, "celebrates a political leader who has demonstrated their commitment to the Global Goals through impactful work in their country and/or globally".

3. Médecins Sans Frontières/Doctors Without Borders (MSF)

- It is an international, independent, medical humanitarian organisation that delivers emergency aid to people affected by armed conflict, epidemics, natural disasters and exclusion from healthcare.
- MSF offers assistance to people based on need, irrespective of race, religion, gender or political affiliation.
- Médecins Sans Frontières was founded in 1971, in the aftermath of the Biafra secession

- * The Nigerian Civil War is also known as the Biafran War and the Nigerian-Biafran War, was during the period of 1967 to 1970.

4. **Naga Chilli**

- Naga Chilli (*Capsicum chinense*) also known as King Chilli, is more popular as Bhot Jolokia.
- It derives its name from the popular belief that it originated in the hills of Bhutan.
- The Guinness Book of World Records had in 2007 named it as the hottest chilli but lost its position first to a U.K. variety called Infinity and then the U.S.-developed Carolina Reaper.
- The chilli has now been used by a Naga panchakarma specialist in India for an acupuncture theory.
 - * Panchakarma, entailing five procedures, is the purification therapy used in Ayurvedic medicine.
- The higher degree of pungency compared to the traditional mix, is believed to make the nutrients penetrate deeper to particular tissues that need to be stimulated for pain relief.
- Traditionally naga chillies are used for treating asthma, gastro-intestinal abnormalities, toothache, muscle pain, arthritis, etc.

5. **National Geosciences Awards**

Context:

The Minister of Parliamentary Affairs, Coal and Mines conferred the National Geosciences Awards for the year 2018 for outstanding contributions in the field of geosciences, mining and allied areas to 22 scientists

About the National Geosciences Awards:

- The awards scheme originated in 1966 when the GOI instituted the National Mineral Awards.
- The National Mineral Awards scheme was enlarged into the National Geosciences Awards (NGA) scheme from the year 2009 onwards to foster further research in geosciences.
- These awards are given in ten categories namely:
 - * Mineral exploration
 - * Groundwater exploration
 - * Mining technology
 - * Mineral beneficiation
 - * Sustainable mineral development
 - * Basic and applied geosciences
 - * Geo-environmental studies
 - * Natural hazards investigation
 - * Award for Excellence
 - * Young Scientist Award

6. **National Service Scheme**

- The National Service Scheme (NSS) is a Central Sector Scheme of the Government of India, under the Ministry of Youth Affairs & Sports.
- It gives opportunities to school students of classes XI and XII, and university/college students to take part in various government led community service activities and programmes.
- The chief objective of the NSS is to offer students and young people a first-hand experience in delivering service to the community.
- It was started in the year 1969.
- Motto of NSS: "Not Me But You"
- All volunteers wear the NSS badge which is a symbol of pride and honour for them. The badge signifies that they are ready for service round the clock.

The benefits that students get from being a part of this scheme are:

- They can get skills to become accomplished social leaders in the future
- They get experience which will help them become efficient administrators
- It will help them understand human nature better
- It will also help them understand the rich cultural diversity of India
- It will help them have national pride through a better knowledge of the country
- NSS organises camps, parades, youth festivals, etc. as part of its activities.

Context:

- The President of India presented the National Service Scheme Awards at New Delhi

7. **Ramanujan prize for U.K. mathematician**

- The SASTRA Ramanujan Prize, founded by Shanmugha Arts, Science, Technology & Research Academy (SASTRA) located near Kumbakonam, is awarded every year to a young mathematician, judged to have done outstanding work in Ramanujan's fields of interest.
- The prize carries a citation and an award of \$10,000.
- It is conferred annually on mathematicians from across the world:
 - * Who are less than 32 years of age
 - * Who are working in an area influenced by Srinivasa Ramanujan.
- The award was instituted in 2005.
- The SASTRA Ramanujan Prize for 2019 will be awarded to mathematician Adam Harper, Assistant Professor with the University of Warwick, England.
- The citation said Mr. Harper was awarded the prize "for several outstanding contributions to analytic and probabilistic number theory."

8. Sardar Patel National Unity Award

Context:

- The Government of India has instituted the 'Sardar Patel National Unity Award' as the highest civilian award for contribution to the unity and integrity of India.

Details

- The award seeks to recognize notable and inspiring contributions to promote the cause of national unity and integrity and to reinforce the value of a strong and united India.
- The award will be announced on the occasion of National Unity Day, i.e. the birth anniversary of Sardar Patel
- The award shall be conferred by the President under his hand and seal and presented by him in a presentation ceremony along with the Padma award presentation ceremony held at the Rashtrapati Bhawan.
 - * The award would consist of a medal and a citation.
 - * No monetary grant or cash award would be attached to this award.
 - * Not more than three awards would be given in a year. It would not be conferred posthumously except in very rare and highly deserving cases.
 - * Nominations can be sent by any Indian national, institution, or organisation based in India. Individuals can also nominate themselves. State/ UT governments or ministries in the GOI can also send nominations.

9. Swachh Mahotsav 2019

Context:

- The Swachh Mahotsav 2019 was held at New Delhi organised by the Union Ministry of Jal Shakti. The President gave away the Swachh Bharat Awards in various categories.

Swachh Bharat Awards 2019

- Best Swachh Iconic Place award: Vaishno Devi Shrine Board in Jammu and Kashmir.
- Swachh Award in Swachhta Action Plan category: Ministry of Railways
- Swachhta Pakhwada Award: Department of Defence
- PSU Category award for contribution to Swachh Bharat Kosh: Power Grid Corporation
- Award for Open Defecation Free (ODF) and Behavior Change: Gujarat and Sikkim
- Ganga Gram: Village Baghori in Uttarkashi
- Awards were also given to youngsters in the Swachh Bharat Summer Internship category.

10. Vishwakarma Rashtriya Puraskar and National Safety Awards

Awards

Context

- The Labour Minister gave away the Vishwakarma Rashtriya Puraskar and the National Safety Awards for the performance year 2017.

Details

- This award scheme is operated by the Directorate General Factory Advice Service & Labour Institutes (DGFASLI) in Mumbai.
- This is an attached office of the Ministry of Labour and Employment.

Vishwakarma Rashtriya Puraskar:

- This award was previously known as ShramVir National Awards.
- It was initiated in 1965 by the Labour Ministry.
- It is awarded in recognition of outstanding suggestions given by a worker or a group of workers and implemented by the management during the previous calendar year, resulting in improvement in quality, productivity, savings to the unit including savings in foreign currency and working conditions such as safety, health and environmental conservation in the industrial undertakings where "Suggestion Schemes" are in operation.
- A cash prize and a merit certificate are given in three categories.

National Safety Awards

- This award was also initiated in 1965.
- This award is given in recognition of outstanding safety performance of industrial establishments, construction sites, ports and installations under the Atomic Energy Regulatory Board (AERB).
- The objective behind the award is to stimulate and maintain the interests of both the management and the workers in accident prevention programs.
- The awardees get a shield and a merit certificate.
- These awards are given in 12 schemes (10 for factories/ installations/construction sites and 2 for ports).

11. World's Most Liveable Cities

Context

- The Economist Intelligence Unit (EIU) released its annual Global Liveability Index, measuring the most livable cities in the world in 2019.

Details

- The EIU said its ranking of 140 cities is based on their scores (out of 100) in five broad categories -- stability, healthcare, culture and environment, education, and infrastructure.
- Each factor in a city is rated as acceptable, tolerable, uncomfortable, undesirable or intolerable.

Ranking

- With an overall rating of 99.1 out of a possible 100, Vienna has been named the most livable city in the world for the second year in a row.
- The top two cities were followed by Sydney, Osaka and Calgary.
- Europe claimed eight of the top 20 spots, with cities in Japan, Australia, New Zealand and Canada making up the rest

India

- The national capital has dropped by six places to rank 118th on a list of the world's most liveable cities due to increase in cases of petty crimes and poor air quality
- It has received substantial downgrades on their scores owing to problems linked to climate change, such as poor air quality, undesirable average temperatures and inadequate water provision

12. New Bill wants engineers to register, follow ethics code

Context

- A Bill is being drafted under the supervision of All India Council of Technical Education (AICTE) and the Ministry of Human Resource Development (MHRD) which will make it compulsory for engineers to register with a body to practice their craft

Details

- The suggestion for a Bill came from E. Sreedharan, architect of the Delhi Metro Rail, who mooted a code of ethics and a council.
- The basic idea is like lawyers, architects, pharmacists and medical practitioners, engineers should get registered and there must be professional ethics and code which they all have to follow.
- If they don't follow, their registration can get cancelled.

Technology Ethics (Tech Ethics)

- It is a field of study that seeks to understand and resolve moral issues that surround the development and practical application of mechanical and electronic technology.
 - * It is the application of ethical thinking to the practical concerns of technology.
- Tech ethics focuses on subjects such as the relationship between technology and human values and well-being, the condition in which technological advances occur and the social repercussions for technological advancements.

13. Livestock 'traffic' fine transforms Arunachal's dirtiest village

Context:

Ledum in East Siang district had prescribed penalties for roaming pigs and cows, which has transformed the dirty village.

Details:

- In the Ledum village in Arunachal Pradesh's East Siang district, fines were imposed on livestock loitering on the road leading to district headquarters Pasighat.
- The quantum of fine read: a bullet for a pig, Rs.500 for a cow and possibility of it being auctioned off.
- It was difficult at first to impose the fine, as some village youth came out with their hunting guns and began shooting the pigs to let people know the rules were not to be taken lightly.
- Ledum has 112 Adi households while few families belong to the Galo community.
 - * A gun is a prized possession for many men belonging to the Adi community whose festivals include "Aran" involving community hunting.
 - * Yakjong dance is also performed in the Aran festival.
- In 2016-17, the village committee collected Rs.5,000 in 'bovine fine'. The collection slumped to Rs.2,500 and Rs.1,500 during the subsequent financial years. Only 500 has been collected since April 2019.
- The villagers also imposed 100 as penalty on those who threw plastic and other wastes around. As a result, the village is spic and span.
- This is remarkable for a village that was once tagged dirtiest in central Arunachal Pradesh.
- The villagers have also added value by making Ledum a mural village.
 - * 15-20 members of the Arunachal Akademi of Fine Arts are painting the walls of the houses with a blend of traditional and modern art.
 - * The artwork is being readied ahead of the first Easterly Essence Ledum Festival in October, 2019.
- Ledum located in foothills of central Arunachal Pradesh was identified during the British rule in India, because of its geographical location and water quality.

Adi and Galo Tribes:

- The Adipeople are one of the most populous groups of indigenous peoples in the state of Arunachal Pradesh.
- A few thousand are also found in the Tibet Autonomous Region of China where they are called the Lhoba together with some of the Mishmi people.
- The Galo are a central Eastern Himalayan tribe, who are descendants of Abo Tani and speak the Tani language and Galo language.
- The Galo people primarily inhabit Arunachal Pradesh.
- Other names which have been used to reference the Galo in the past include Duba, Doba, Dobah Abor, Gallong Abor, Galong, Gallong Adi, etc.
- The Galo have been listed as a scheduled tribe under the name Gallong since 1950.

14. Giant earthworm found at the foot of Western Ghats

- Giant earthworm has been spotted in Kollamogaru village, in the Western Ghats.
- The earthworm measures over three feet in length i.e, 950 mm.
- It is the first time that such a large earthworm has been sighted in the Western Ghats and the coastal belt.
- Morphological study of the newly discovered earthworm has tentatively indicated that it belongs to the genus of *Moniligaster*.
- *Drawida nilamburensis*, belonging to the *Moniligastridae* family, reported in the year 2008, is by far the largest earthworm spotted in India. This specimen, from the Nilgiris, measured up to 1,000 mm in length.

PRACTICE QUESTIONS

1. Consider the following statements with reference to cholerae:

1. Cholerae bacteria have developed resistance against most routinely used antibiotics.
2. Cholerae is caused by eating food or drinking water contaminated with a bacterium called *Vibrio cholerae*

Which of the statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

2. Which of the following statements describes the 'Build for Digital India' programme?

- A. It is a programme for educating government servants about the techniques in e-Governance.
- B. It is a scheme for building more Common Service Centres (CSCs) across rural India.
- C. It is a scholarship programme for school children who have interest towards innovations in computer science.
- D. It is a platform for engineering students to develop technology-based solutions for key social issues.

3. Consider the following statements with reference to the Electors Verification Programme (EVP) introduced by the Election Commission:

1. Through EVP, voters can update and verify details in the electoral roll in order to remove logical errors like multiple entries and missing names among others.
2. Both online and offline modes are available for voters to participate in the EVP.
3. A voter will not be able to tag his/her family members in the same EVP account to verify and update the respective data.

Which of the statement/s is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 1 and 2 only
- D. 1, 2 and 3 only

4. Which of the following is not one of the four 'mathas' founded by Shankaracharya across India?

- A. Dwaraka
- B. Puri
- C. Kanyakumari
- D. Sringeri

5. Which of the following organizations releases the Special Report on Climate Change and Land?

- A. World Meteorological Organization
- B. Climate Action Network
- C. Intergovernmental Panel on Climate Change
- D. Global Atmosphere Watch

6. Consider the following statements with reference to Ajmer Dargah:

1. A Dargah is the tomb or shrine of an Islamic saint.
2. Ajmer Dargah was built as the mausoleum of Nizamuddin Auliya.
3. It has a square structure of the royal darbar called Mehfil Khana.

Which of the statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. 1 and 3 only

7. Which of the following historic sites has the rock cut relief sculpture known as Penance of Arjuna or the Descent of the Ganga?

- A. Halebidu
- B. Mahabalipuram
- C. Muziris
- D. Adichanellur

8. Consider the following statements about the Association of World Election Bodies (A-WEB):

1. The A-WEB was founded in the year 1957.
2. India is a founding member
3. It has 115 members and 20 regional associations or organisations as associate members.

Which of the statement/s is/are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 3 only

9. Consider the following statements:

1. Ethanol can be produced from sugarcane, maize, wheat.
2. Ethanol is a flammable, colourless liquid.

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

10. Consider the following statements

1. Apache is an advanced multi role heavy attack helicopter.
2. India has signed a contract with Russian government for apache helicopters

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

11. Consider the following statements:

1. River Yarlung Zangbo is known as the Brahmaputra in India.
2. The River forms the world's largest and deepest canyon.
3. It originates at Angsi Glacier in western Tibet.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

12. Consider the following statements:

1. Exercise Malabar is a trilateral naval exercise.
2. It involves China, Japan and India as permanent partners.

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:

1. Eastern Economic Forum is an international forum always held in Vladivostok, Russia
2. It is held biannually

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

14. Consider the following statements:

1. Unlawful Activities (Prevention) Act 2019, does not allow government to designate individuals as terrorists.
2. It allows National Investigation Agency officers, of rank of Inspector or above, to investigate cases.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

15. Consider the following statements:

1. Sex-sorted semen can be used to ensure that only female calves or heifers are born.
2. Artificial insemination can improve the fertility and milk production capacity of the calves they produce.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

16. Consider the following statements:

1. Food Safety and Standards Authority of India (FSSAI) is a statutory body.
2. Ministry of Health & Family Welfare is the administrative Ministry of FSSAI.

Which of the given statement/s is/are correct?

Options:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

17. 'Transformation of Aspirational Districts' is under the aegis of

- A. NITI Aayog
- B. Ministry of Housing and Urban Affairs
- C. Ministry of Health and Family Welfare
- D. Ministry of Agriculture & Farmers Welfare

18. Central Bureau of Investigation (CBI) operates under the jurisdiction of

- A. Ministry of Home affairs
- B. Ministry of Defence
- C. Ministry of Parliamentary Affairs
- D. Ministry of Personnel, Public Grievances and Pensions

19. Consider the following statements:

1. Measles is a highly infectious illness caused by the rubeola virus.
2. Rubella causes irreversible birth defects.

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

20. Consider the statements:

1. Great Indian bustard is classified as critically endangered as per IUCN Red data list.
2. These birds are often found in the same habitat as blackbuck.

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

21. Consider the following statements:

1. National Commission for Protection of Child Rights is a constitutional body.
2. Its Mandate is to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and the UN Convention on the Rights of the Child.
3. As per the commissions' definition "Children" includes individuals of age of upto 18 years.

Which of the given statement/s is/are correct?

Options:

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

22. "Craniopagus" is:

- A. A medical condition where twins are born with fused brain and skull
- B. A medical condition where a part of the brain becomes inflamed and causes symptoms that present as fever
- C. A new species of spider found in the forests of Kerala
- D. None of the above

23. Which of the following is the biggest Harappan site?

- A. Mohenjo-daro
- B. Rakhigarhi
- C. Lothal
- D. Kalibangan

24. The peninsula of Crimea is located between which of the following seas?

- A. Black Sea and Sea of Azov
- B. Adriatic Sea and Ionian Sea
- C. Mediterranean Sea and Ligurian Sea
- D. North Sea and Celtic Sea

25. Consider the following statements with reference to Armed Forces (Special Powers) Act:

1. The Armed Forces (Assam and Manipur) Special Powers Act was passed in 1948.
2. The Act grants special powers to security forces to maintain public order in disturbed areas.

Which of the given statement/s is/are correct?

Options:

- A. 1 Only
- B. 2 Only
- C. Both 1 and 2
- D. Neither 1 nor 2

26. What is the importance of 'Gram Stain' test in medical science?

- A. A test to identify different types of bacteria.
- B. A test to diagnose colour blindness.
- C. A test to assess the degree of burns.
- D. None of the above.

27. Consider the following statements about the National Cancer Tissue Biobank (NCTB):

- 1. The NCTB is set up at the Indian Institute of Technology, Delhi.
- 2. It has the capacity to stock 50,000 genomic samples from cancer patients.
- 3. It operates in collaboration with the Indian Council for Medical Research (ICMR).

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. 3 Only

28. Consider the following statements with respect to "Sentinelese" tribes :

- 1. Sentinelese are designated as a Particularly Vulnerable Tribal Group.
- 2. They inhabit the North Sentinel Island of Andaman and Nicobar islands.
- 3. They are considered one of the most isolated tribes in the world.

Which of the given statement/s is/are correct?

Options:

- A. 1 Only
- B. 2 Only
- C. 1 and 2 Only
- D. 1, 2 and 3

29. Nilgiri Tahr is the state animal of:

- A. Tamil Nadu
- B. Kerala
- C. Andhra Pradesh
- D. Karnataka

30. Consider the following statements:

- 1. Saharias are not classified under the category of particularly vulnerable tribal group.
- 2. Saharias are majorly found in Madhyapradesh and also in Rajasthan.

Which of the given statement/s is/are correct?

Options:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

31. Consider the following statements:

- 1. The keystone species of the Mukurthi National Park is the Nilgiri tahr
- 2. Mukurthi National Park is a part of Nilgiri Biosphere Reserve

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

32. Consider the following statements:

- 1. Goiter is a swelling of the neck resulting from enlargement of the thyroid gland.
- 2. The most common cause of goiter is an excess of iodine in the diet.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

33. Consider the following statements regarding the United Nations convention to combat desertification (UNCCD)

- 1. It stems from a direct recommendation of the Rio Conference's Agenda 21
- 2. It is the only internationally legally binding framework set up to address the problem of desertification.

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

34. Consider the following statements:

- 1. In India fortification of salt with iodine is mandatory, for direct human consumption.
- 2. The Supreme Court has mandated universal iodization.

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

35. Consider the following statements:

1. When the natural gas is liquefied, its volume reduces by 600 times from its gaseous state.
2. Liquefied natural gas (LNG) is converted back to natural gas through a process known as Regasification.

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

36. Consider the following statements:

1. The Smart Cities Mission is undertaken by the Urban Development Ministry.
2. The Smart Cities Mission works in partnership with the state governments in which the different cities are located.

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

37. Consider the following statements with respect to Gwadar Port:

1. Gwadar Port is situated on the Arabian Sea.
2. It lies to the West of Chabahar port.

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

38. Consider the following statements:

1. Motihari-Amlekhganj oil pipeline is a project between India and Bangladesh.
2. It is South Asia's first cross-border oil product pipeline.

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

39. Consider the following statements:

1. The Association of Southeast Asian Nations (ASEAN) is a regional intergovernmental organization comprising six countries in Southeast Asia.
2. India is a Member of ASEAN
3. ASEAN is headquartered at Jakarta in Indonesia

Which of the given statement/s is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 3 only
- D. 1 and 3 only

40. Consider the following statements with respect to National Commission for Scheduled Tribes:

1. National Commission for Scheduled Tribes is a constitutional body.
2. It is the central authority for declaring an area as a tribal area.

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

41. Consider the following statements with respect to the Sixth Schedule of Indian Constitution:

1. Sixth Schedule is related to the administration of the North Eastern states of Arunachal Pradesh, Manipur, Tripura and Mizoram.
2. The Sixth Schedule provides for District Councils and Regional Councils.

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:

1. Brucellosis is a zoonotic disease.
2. Brucellosis causes early abortions in animals, and prevents the addition of new calves to the animal population.

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

43. Consider the following statements:

1. Namami Gange is an integrated Ganga Conservation Programme that comprehensively addresses pollution issues in River Ganga.
2. Cleaning of River Yamuna is also part of the Namami Gange Mission.

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

44. Consider the following statements:

1. Pangong Tso is an endorheic lake.
2. It is a brackish water lake.

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

45. Consider the following statements:

1. Earth's mass is 8 times the mass of the exoplanet K2-18b.
2. K2-18b planet orbits the cool dwarf star K2-18.
3. K2-18b was discovered by NASA's Kepler spacecraft.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. 1, 2 and 3

46. Index of Industrial Production (IIP) is:

- A. An index which shows the growth rates in different industry groups of the economy in a stipulated period of time.
- B. An index which shows the price of a representative basket of wholesale goods.
- C. An index which shows the inflation rate at retail level.
- D. None of the above

47. The Line of Actual Control (LAC) is a demarcation line that separates

- A. Indian-controlled territory from Pakistan-controlled
- B. Indian-controlled territory from Chinese-controlled territory
- C. Indian-controlled territory from Bangladesh-controlled territory
- D. None of the above

48. Consider the following statements:

1. Article 43 of the Indian constitution directs the states to provide for its citizens a uniform civil code (UCC).
2. Uniform Civil Code (UCC) is defined in the Indian Constitution.

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

49. The Directive Principles of State Policy (DPSP) has been taken from the constitution of:

- A. Ireland
- B. The U.S.A
- C. Britain
- D. Russia

50. Which of the following countries do not have a Shore based Test Facility?

- A. India
- B. China
- C. United States of America
- D. Pakistan

51. The Chairman of the Defence Acquisition Council is:

- A. Prime Minister
- B. Home Minister
- C. Defence Minister
- D. National Security Advisor

52. Which of the following festivals is associated with the performance of 'Pulikali', a folk art form of Kerala?

- A. Pongal
- B. Onam
- C. Bihu
- D. Dussehra

53. Consider the following statements with reference to 'Mangu Mutt' located in Puri, Odisha.

1. It is an important shrine revered by the followers of Sikhism.
2. It is believed that the shrine was visited by Guru Nanak.

Which of the statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

54. What are the applications of Carbon Nanotubes?

- A. Optical blinders that reduce unwanted glare.
- B. Space telescopes for spotting exo-planets.
- C. Supply of power to wearable devices.
- D. All of the above.

55. Consider the following statements with reference to the scheme of 'Remission of Duties or Taxes on Export Product' (RoDTEP):

1. The objective of the scheme is to provide incentives to exporters.
2. The scheme will not result in any decline of revenue for the government
3. The scheme will replace the Merchandise Exports from India Scheme (MEIS).

Which of the statement/s is/are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 3 only

56. Consider the following statements:

1. The primary reason behind the vulture population getting nearly wiped out in India was the drug Diclofenac.
2. The drug Diclofenac was commonly administered to cattle to treat inflammation.

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

57. Nandankanan Zoological Park is located in:

- A. Madhya Pradesh
- B. Assam
- C. Tamil Nadu
- D. Odisha

58. "Vallam Kali" is

- A. An annual Hindu mela held at Kamakhya Temple Assam
- B. A traditional boat race held in the state of Kerala
- C. A traditional performing art from the state of Kerala
- D. A type of hand-painted or block-printed cotton textile produced in the state of Andhra Pradesh

59. The IUCN Red List classifies White-backed vulture as:

- A. Extinct in the Wild
- B. Critically Endangered
- C. Endangered
- D. Vulnerable

60. Consider the following statements::

1. The Rohingya Muslims are an ethnic minority that live mainly in the Myanmar's Rakhine State.
2. They have been facing persecution in the Buddhist-majority Myanmar.

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

61. Consider the following statements:

1. Article 32 provides the right to Constitutional remedies.
2. Article 32 in the Indian constitution describes the power of High Courts to issue writs.

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

62. Consider the following statements:

1. Habeas corpus is a judicial mandate to a prison official ordering that an inmate be brought to the court.
2. It is a procedure for challenging why a person has been imprisoned.
3. This writ can be issued against a public authority only.

Which of the given statement/s is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 only
- D. 1, 2 and 3

63. Consider the following statements:

1. Solomon Islands is a sovereign state.
2. It lies to the east of Papua New Guinea.

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. Consider the following statements with respect to the exceptions under the Anti-defection law:

1. When 2/3rd of the legislators of a party decide to merge into another party, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.
2. A split in a political party won't be considered a defection if a complete political party merges with another political party.

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

65. Consider the following statements:

1. INS Khanderi is the second of the Indian Navy's six Kalvari-class submarines.
2. It is a diesel-electric attack submarine.

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

66. Consider the following statements:

1. All the NBFCs are regulated by Reserve Bank of India.
2. NBFCs cannot accept demand deposits.
3. Deposit insurance facility of the Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs.

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

67. Which of the following diseases is/are transmitted by Aedes aegypti mosquitoes?

1. Yellow fever
2. Dengue
3. Chikungunya
4. Malaria

Choose the correct answer.

- A. 1 only
- B. 1 and 2 only
- C. 1 and 4 only
- D. 1, 2 and 3 only

68. Consider the following statements:

1. "Aran" is an important festival of the Adi community of Arunachal Pradesh.
2. Rodent trapping is the main activity of the festival.

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 marginal cost of fund based lending rate (MCLR):

1. Banks are not allowed to lend at a rate below MCLR.
2. MCLR is an internal benchmark.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

70. Consider the following statements with respect to Ayushman Bharat–PM Jan Arogya Yojana:

1. The scheme provides a defined benefit cover of Rs. 5 lakh per individual per year.
2. Pre and post-hospitalisation expenses are not covered under the scheme.
3. Beneficiary will be allowed to take cashless benefits from any public or private empanelled hospitals across India.

Which of the given statement/s is/are NOT correct?

- A. 1 only
- B. 1 and 2 only
- C. 3 only
- D. 2 and 3 only

71. Consider the following statements with respect to "Astra Missile":

1. It is a beyond visual range missile.
3. It is the first air-to-air missile developed by India.
4. It has a strike range of 700 km.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

72. Which of the following is/are the objectives of Janani Suraksha Yojana (JSY):

1. Reducing Maternal Mortality
2. Reducing Infant Mortality
3. Promoting Institutional delivery among pregnant women

Choose the correct option:

- A. 1 and 3 only
- B. 1 and 2 only
- C. 3 only
- D. 1, 2 and 3

73. Consider the following statements with respect to LCA Tejas:

1. LCA Tejas is an indigenous multirole combat aircraft.
2. It can carry air-to-air, air-to-surface, precision-guided and standoff weaponry.

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

74. Consider the following statements:

1. POSHAN Abhiyaan targets to reduce stunting among children in the age group 0-6 years to 25% by 2022.
2. National Council on India's Nutrition set up under the POSHAN Abhiyaan, is chaired by the Chairman of the NITI Aayog.

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

75. Consider the following statements:

1. Bharat Net Project is the world's largest rural broadband connectivity programme using Optical fiber.
2. The project is being funded by NITI Aayog.

Which of the given statement/s is/are NOT correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

76. Which of the following DO NOT amount to disqualification under the Anti-defection law?

1. An independent member joining a political party within 6 months of being elected.
2. A nominated member joining a political party within 6 months of his/her nomination to the house.
3. A member abstaining from voting, contrary to the directions of the party he/she belongs to.

Choose the correct option:

- A. 1 Only
- B. 2 Only
- C. 1 and 2 only
- D. 1 and 3 only

77. Consider the following statements with respect to RBI guidelines on Concurrent Audit System:

1. RBI mandates that the concurrent audit of banks be done by external auditors only.
2. The age limit for retired staff engaged as concurrent auditors has been capped at 60 years.
3. The head of internal audit in the bank should participate in the selection of concurrent auditors.

Which of the given statement/s is/are correct?

- A. 1 and 2 only
- B. 3 only
- C. 2 and 3 only
- D. 1 and 3 only

78. With reference to National Investigation Agency:

1. It deals with offenses of terrorism only
2. it does not extend to citizens of India outside India
3. It extends to persons on ships and aircrafts registered in India wherever they may be

Which of above statements is/ are incorrect?

- A. 1 only
- B. 1 and 2 only
- C. 1, 2 and 3
- D. None

79. Yellow Vest movement recently seen in news was a protest in which country?

- A. United Kingdom
- B. USA
- C. France
- D. Germany

80. Consider the following statements about IMMSAREX

1. It is the world's largest international maritime warfare exercise
2. It is hosted and administered by the United States Navy

Which of above statements is/ are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

81. Which of the following islands are part of the Pacific Ocean?

1. Comoro Islands
2. Nauru Island
3. Solomon Islands
4. Agalega Islands
5. Assumption Islands

Choose the correct option:

- A. 1, 2 and 3 only
- B. 4 and 5 only
- C. 2 and 3 only
- D. 1, 4, and 5 only

82. Consider the following statements:

1. "Khaan Quest" is a bilateral exercise between India and Mongolia.

2. It is an annual exercise organised for sharing of practices for multinational peacekeeping operations.

Which of the given statement/s is/are not correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

83. Consider the following statements:

1. The fiscal deficit is the difference between the government's total expenditure and its total receipts (excluding borrowing).
2. It is an indication of the total borrowings needed by the government.
3. Fiscal responsibility and Budget Management Act concerns both Fiscal and Revenue deficit.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

84. Which of the following countries border the Caspian Sea?

1. Iran
2. Azerbaijan
3. Russia
4. Kazakhstan
5. Uzbekistan

Options:

- A. 1, 2 and 4
- B. 1, 2, 4 and 5
- C. 1, 2, 3 and 4
- D. 1, 2, 3, 4 and 5

85. Consider the following statements:

1. GST Council is a statutory body for making recommendations to the Union and State Government on issues related to Goods and Service Tax.
2. The GST Council will suo moto notify the rate of tax to be levied under the Central Goods and Services Tax Act.

Which of the given statement/s is/are not correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

86. Consider the following statements with respect to Biomining:

1. It is the process of using microorganisms to extract metals from rock ores or mine waste.
2. Bioleaching, biooxidation and bioremediation are biomining processes.

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. Consider the following pairs:

1. Garba – Rajasthan
2. Changu – Odisha
3. Dhimsa – Assam

Which of the given pairs are correctly matched?

- A. 1 and 3 Only
- B. 2 Only
- C. 2 and 3 Only
- D. 1, 2 and 3

88. Consider the following statements with respect to The Framework Convention on Tobacco Control (FCTC):

1. It is the world's first public health treaty enacted under the World Health Organization (WHO).
2. India has ratified FCTC.
3. The treaty is legally binding on the parties to the convention.

Which of the given statement/s is/are correct?

- A. 1 and 2 Only
- B. 2 Only
- C. 1 and 3 Only
- D. 1, 2 and 3

89. "Bhut Jolokia" recently seen in news is:

- A. A tribal dance performed by the lotha tribesmen.
- B. The Naga Chilli which is one of the hottest chilies in the world.
- C. India's first dragon blood oozing tree.
- D. An instrument made out of dried gourd and a thin rubber drum associated with Bengali folk music.

90. Consider the following statements:

1. Aadhaar Cards are issued by Unique Identification Authority of India (UIDAI) only.

2. UIDAI functions under NITI Aayog.

3. Foreign Nationals residing in India are eligible to apply for Aadhaar Card.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1 and 3 only

91. Consider the following statements with respect to "Nirbhaya Fund":

1. It was created with a Rs. 100 crore corpus, aimed at enhancing the safety and security for women in the country.

2. It is a non-lapsable corpus fund.

3. The Fund is administered by the Ministry of Women and Child Development.

Which of the given statement/s is/are correct?

- A. 1 and 3 only
- B. 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

92. Which of the following are classified as Critically Vulnerable Coastal Areas?

1. Sundarban region of West Bengal
2. Vembanad in Kerala
3. Bhitarkanika in Odisha

Choose the correct option:

- A. 1 only
- B. 1 and 2 only
- C. 1, 2 and 3
- D. 3 only

93. Consider the following statements:

1. The Sustainable Development Goal 3 dealing with consolidated goal on health explicitly mentions Tuberculosis.

2. The Government is committed to achieving the target of TB elimination by 2030 in line with the WHO targets for TB elimination.

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

94. Consider the following statements:

1. The Large Sky Area Multi-Object Fibre Spectroscopic Telescope (LAMOST) aims at conducting a 5-year spectroscopic survey of 10 million Milky Way stars.
2. It is a Schmidt telescope operated by NASA.

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

95. "Operation Megdhoot" refers to:

- A. The code name of an operation of the Indian Armed Forces to capture the Siachen Glacier in the Kashmir region
- B. The Cloud seeding operation undertaken by the government of Delhi to tackle the unprecedented smog choking it.
- C. The code name of an operation where experimental solar-powered drone was used as atmospheric satellite, intended to act as relay stations for providing internet access to remote areas.
- D. The initiative taken up by the Ministry of Culture to restore the literary works of Kalidasa.

96. Consider the following statements with respect to Co-operative banks:

1. State Co-operative banks can seek refinance facility from RBI.
2. Co-operative banks can open their branches in foreign countries.
3. The administration and supervision of the co-operative banks completely fall under the purview of the state government.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 1 and 2 only
- D. 3 only

97. Consider the following statements with respect to Insurance Regulatory Development Authority of India:

1. It is an autonomous, statutory body.
2. IRDAI was established after the recommendations of the Malhotra Committee report of 1994.
3. The members and the chairman of IRDAI are appointed by the Government of India.

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

98. Consider the following statements:

1. Anaemia is a condition in which a person has a lower-than-normal number of platelets and white blood cells.
2. Worm infestation and deficiency of vitamin b12 are among the causes of Anaemia.
3. The reduction of anemia is one of the important objectives of the POSHAN Abhiyaan.

Which of the given statement/s is/are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 only
- D. 2 only

99. Consider the following statements:

1. Economic Advisory Council is an independent body constituted to advise the government on economic and related issue.
2. It is a non-constitutional and non-statutory body.
3. It can provide policy advice only on the reference from the Prime Minister.

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. 3 only

100. Consider the following statement with respect to Inter Governmental Panel on Climate Change:

1. IPCC functions under the United Nations Framework Convention on Climate Change
2. It was formed by the World Meteorological Organisation and United Nations Environment Programme
3. IPCC has received the Nobel Prize for Peace.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 only
- D. 1, 2 and 3

101. Consider the following statements with respect to Ajanta Caves:

1. The themes of paintings in Ajanta caves include life of Buddha, Jatakas and Avadanas.
2. Ajanta caves are recognised as World Heritage Site by UNESCO.
3. In the Ajanta cave complex, there are more number of "Vihara" than "Chaitya".

Which of the given statement/s is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 3 only
- D. 1, 2 and 3

102. Consider the following statements with respect to "Chabahar Port":

1. Chabahar Port lies in the Gulf of Aden.
2. It is located on the Makran Coast.
3. It is the only Iranian port with direct access to the ocean.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 and 3 only
- C. 2 only
- D. 3 only

103. Consider the following statements:

1. Call money, notice money and term money are long term funds.
2. A fall in call money rate indicates a rise in the liquidity.

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

104. Consider the following statements with respect to Organisation of Islamic Cooperation (OIC):

1. The OIC has permanent delegations to the United Nations.
2. It is the second-largest inter-governmental organization after the United Nations.
3. It works to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony.

Which of the given statement/s is/are correct?

- A. 1 only
- B. 3 only
- C. 1 and 2 only
- D. 1, 2 and 3

105. Consider the following statements:

1. Nandankanan Zoological Park is the only conservation breeding centre of Indian Pangolins in the world.
2. It is the only zoological park in India to become an institutional member of World Association of Zoos and Aquarium (WAZA).

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only.
- C. Both 1 and 2
- D. Neither 1 nor 2

106. Consider the following statements about the Insurance Regulatory & Development Authority:

1. It is a constitutional body.
2. The objectives of the IRDAI include promotion of competition while ensuring the financial security of the Insurance market.

Which of the above statement/s is/are correct?

- A. 1 Only
- B. 2 Only
- C. Both 1 and 2
- D. Neither 1 nor 2

107. With reference to RBI, Which of the following best describes 'Prompt Corrective Action'?

- A. It is a facility in which banks borrow the money from RBI to correct its mismatches in liquidity.
- B. It refers to the actions taken by RBI under Open Market Operations.
- C. Under this, certain restrictions are imposed on the banks like they are restricted from opening new branches and paying dividends.
- D. None of the above

108. Which of the following is correctly matched?

1. Bandipur National Park : Karnataka
2. Corbett National Park : Himachal Pradesh
3. The Great Himalayan National Park: Uttarakhand

Select the correct answer using the code given below:

- A. 1 only

- B. 1 and 2 only
- C. 2 and 3 only
- D. All of the above

109. 'Allocation of seats in the Council of States' under the Indian Constitution is related to which schedule?

- A. 5th schedule
- B. 6th schedule
- C. 10th schedule
- D. 4th schedule

110. Which of the following help in bringing about fiscal consolidation?

- 1. Rationalising taxes
- 2. Reducing subsidies
- 3. Introduction of GST
- 4. Raising interest-free loans

Select the correct answer using the codes given below:

- A. Only 2 and 3
- B. Only 1 and 2
- C. Only 1, 2 and 3
- D. All of the above

111. Which of these pollutants are NOT included in measurement of air quality under the National Ambient Air Quality Standards:

- 1. Carbon dioxide
- 2. Carbon monoxide
- 3. Ammonia
- 4. Lead
- 5. Ozone

Choose the correct option:

- A. 1 only
- B. 2 only
- C. 1 and 5 only
- D. 3 and 5 only

112. Consider the following statements:

- 1. Finance Commission is a Constitutional Body.
- 2. It gives recommendations on the distribution of tax proceeds between the Centre and the States
- 3. The Chairman and the members of the Finance

Commission are appointed by the Prime Minister.

Which of the given statement/s is/are incorrect?

- A. 1 Only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 3 only

113. Consider the following statements with respect to Sendai Framework:

- 1. It is a voluntary, non-binding agreement on disaster risk reduction.
- 2. It is the successor of Hyogo Framework for Action.
- 3. India is a signatory to Sendai Framework.

Which of the given statement/s is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2 and 3
- D. 2 and 3 only

114. The Dasara festival in Mysore was first initiated by

- A. Krishnaraja Wodeyar
- B. Chamaraja Wodeyar IV
- C. Jayachamarajendra Wodeyar
- D. Raja Wodeyar I

115. Consider the following statements

- 1. Darbar Sahib Kartarpur shrine was established by Sikh faith founder Guru Nanak Dev.
- 2. Kartarpur gurdwara is on the banks of River Ravi

Which of the given statement/s is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. Neither 1 nor 2

ANSWER KEYS

1	C
2	D
3	C
4	C
5	C
6	D
7	B
8	C
9	C
10	A
11	D
12	A
13	A
14	B
15	C
16	C
17	A
18	D
19	C
20	C

21	B
22	A
23	B
24	A
25	B
26	A
27	C
28	D
29	A
30	B
31	C
32	A
33	C
34	C
35	C
36	D
37	A
38	B
39	C
40	A

41	B
42	C
43	C
44	C
45	D
46	A
47	B
48	D
49	A
50	D
51	C
52	B
53	C
54	D
55	B
56	C
57	D
58	B
59	B
60	C

61	A
62	A
63	C
64	C
65	C
66	B
67	D
68	C
69	C
70	B
71	B
72	D
73	C
74	A
75	B
76	B
77	B
78	B
79	C
80	D

81	C
82	A
83	D
84	C
85	C
86	A
87	B
88	D
89	B
90	D
91	B
92	C
93	A
94	A
95	A
96	A
97	D
98	B
99	A
100	D

101	D
102	B
103	B
104	D
105	C
106	B
107	C
108	A
109	D
110	C
111	A
112	D
113	C
114	D
115	C

MAINS PRACTICE QUESTIONS

1. Do you agree with the opinion that immigrants are often found depriving locals of their rights and opportunities? Suggest measures for establishing a harmonious relationship between immigrants and locals.
2. In India, industry and infrastructure related makeover is a prerequisite for the adoption of electric vehicles. Discuss.
3. A convergence between global powers is imperative for the formulation of policies against climate change. Discuss in the context of Brazil's initial refusal of international support in the Amazon fire crisis.
4. The UN High Commissioner for Refugees has been at the forefront of solving humanitarian crises across the world. Illustrate with suitable examples.
5. Starvation deaths continue to eat into the right to life and dignity of social fabric and a radical, new measure like community kitchens need to be set up across the country to feed the poor and the hungry. Discuss.
6. Unlike national economies, border economies owe their existence to cross-border economic opportunities. Elucidate. In the context of suspension of economic ties between India and Pakistan, suggest alternative measures to keep border economies afloat.
7. Violence on doctors and hospitals is a complex phenomenon and will require multidimensional institutional response. A law for deterrence alone might not have the desired impact. Discuss.
8. Chinese shoppers have adopted facial payments in cashless drive. What are the concerns that facial payment system rises. Is it feasible to adopt such a system in India? Comment.
9. India is in need of a movement on preventive health for all, in the backdrop of the increasing burden of non-communicable diseases among the population. Comment on the measures being undertaken in light of India's target to be free of industrial trans-fats by 2022.
10. The maiden visit by an Indian prime minister to Vladivostok is set to strengthen India's position in Asia-Pacific that has emerged as the kernel of future geo-strategy. Discuss.
11. The trade war between the U.S. and China has seen a significant escalation; it could bring the global economy closer to an economic slowdown, much earlier than its predicted onset in 2020. Discuss
12. The recent amendments to Unlawful Activities Prevention Act, 1967 (UAPA) impose indirect restriction on right to dissent which is detrimental for India's developing democratic society. Critically examine.
13. What is the significance of citizens' charters in ensuring inclusive development? Illustrate with suitable examples.
14. The identification of appropriate public infrastructure projects is an important factor in India's quest to become a \$5 trillion economy. Discuss.
15. Write a brief note on the Sentinelese Tribe. Discuss the steps taken by the government to protect them and the impact of removal of the Restricted Area Permit (RAP) in 2018.
16. Loss of deal with respect to Taliban peace talks indicates greater regional stability, than in its completion. Critically comment.
17. Though the idea of imposing a ban on Single Use Plastic sounds good, the question on the economics, availability and applicability of alternatives remains unanswered. India needs to chalk out a robust roadmap to achieve freedom from Single Use Plastic. Elucidate
18. India faces a severe problem of land degradation. Discuss the measures taken by the government to address the problem, also suggest the way forward.
19. Critically Analyse the Occupational Safety, Health and Working Conditions Code, 2019.

20. With a year having passed since Section 377 of the Indian Penal Code was read down, LGBTI people continue to face discrimination, exclusion, abuse and harassment at work, school, health care settings and in public places. The Indian society needs a comprehensive legislation that guarantees equality to all persons on the basis of sexual orientation, gender identity and expression, marital status and other grounds. Discuss
21. How are e-cigarettes different from the conventional cigarettes? Discuss the potential health risks involved in smoking e-cigarettes?
22. The fact that Mob lynching has become a recurring phenomenon in India, surging hate, violence against minorities underscores the need for a special anti-lynching law in the country. Comment.
23. Regional Comprehensive Economic Partnership is considered a mega trade deal currently being negotiated. What are India's concerns with respect to joining the RCEP trade deal?
24. What is Line of Actual Control (LAC)? Write a note on its strategic significance.
25. Jan Soochana Portal launched by the Rajasthan government is the right step in making people, including the marginalised sections, a part of the governance process and must be used as a template by other states to enhance transparency and accountability in the Right to Information Act. Discuss.
26. Codification of different personal laws can help India arrive at certain universal principles that prioritise equity rather than imposition of a uniform code. Critically examine.
27. The 'polluter pays' principle is an effective tool to ensure the responsibility of the generators of pollution. Discuss.
28. How does the study of DNA samples help the early diagnosis and treatment of non-communicable diseases? Discuss.
29. What are single-use plastics? Discuss why, despite the fact that they pose a major environmental threat; they have not been banned in India yet.
30. The recent Godavari boat mishap underscores the criminal negligence on part of various government wings of Andhra Pradesh who failed to follow the 'safety mandate' recommended. Discuss.
31. In a diverse country like India, with multilingual characteristics, it is important to have "one language" as an official and link language for all the administrative purposes. Critically analyse.
32. India's biggest concern is the declining public expenditure. In order to revive demand and put the economy back on a growth trajectory, the government has to increase public expenditure in critical areas. Discuss.
33. Low birth weight needs particular policy attention among all the indicators of malnutrition, as it is the biggest contributor to child death and its rate of decline is among the lowest. Elucidate.
34. With reference to Public Safety Act of Jammu and Kashmir, critically analyse if "Preventive Detention" is a feature which is out of place in a democracy like India.
35. In this increasingly digital age, where the government is on a mission to move towards a cashless economy and promote e-governance and digitisation, access to Internet is absolutely essential. However, declaring access to the Internet as a citizen's right is not a defensible proposition. Critically comment.
36. Write a note on 'office of profit'. What is the underlying principle for including 'office of profit' as criterion for disqualification?
37. In India, there is an urgent need to include dementia as a national health and social priority with provisions to identify the disease as early as possible. Discuss.
38. While India's drone policy establishes an intricate system of registration and application procedures, it is lacking when it comes to thorough monitoring of drones. Critically examine.
39. The Indian Diaspora has played a major role in upgrading India's relationship worldwide. Substantiate.

- 40 Explain why India needs to rethink about its Water Governance Strategies and reorganize its institutional structure.
41. At a time when India is going through an economic slowdown, discuss the need for a Parliamentary Budget Office (PBO) or a similar independent fiscal institution. What are the challenges associated with the establishment of such an institution?
42. What is bio-mining? Examine its application in solid waste management and associated challenges.
43. At the Universal Health Coverage meeting in New York, India's Prime Minister emphasised that a healthy life is a basic right, underscoring that a healthy life is the right of every person. Write a note on India's approach towards the health sector.
44. The recent flow of events in Judicial appointments and transfers have raised questions on the credibility of the collegium system and the prevailing narrative that the Collegium system is a shield against executive interference in judicial appointments. Discuss.
45. The relative impermeability of Darknet has made it a major haven for drug dealers, arms traffickers, child pornography collectors and other criminals. Examine the statement and suggest measures to check the growth of Darknet.
- 46 What is Agroecology? What are the problems and concerns associated with implementing Agroecology in India?
47. What do you understand by Zero Budget Natural Farming (ZBNF)? Comment on its role in helping India achieve its goal of doubling farmers' income by 2022.
- 48 Why is India pushing for membership in the Nuclear Suppliers Group (NSG)? What are the impediments to India joining the group?
49. Chabahar port is considered the golden gateway to opportunities for India. Elucidate.
- 50 The increase in global temperatures and the concomitant natural disasters will make millions of people climate refugees. Analyse the statement and suggest the way forward.
51. In the current scenario where Silicosis continues to be an occupational health hazard in the mining sector, India needs a comprehensive Silicosis control programme with an emphasis on differential diagnosis of Silicosis from Tuberculosis, for effective treatment. Discuss.
52. Examine the controversy surrounding the Citizenship Amendment Bill, 2019. Why are the North Eastern states widely opposing it?
53. What are quantum computers? Do they have the potential to change the lives of the people?
54. Discuss about mangrove ecology and the impact of anthropological factors on mangrove depletion
55. With India's double burdens of undernutrition co-existing with equally high and increasing rates of overweight and obesity, there is an urgent need for redesigning of India's nutrition policy with a focus on diet-related non communicable diseases. Discuss
56. Analyse the areas of co-operation between India and Sri Lanka and discuss the measures that India must take in order to strengthen its ties, countering the increasing influence of China in the Island nation.
57. Write a brief note on the challenges facing the global food system. Is cultivated meat a sustainable alternative?
58. What do you understand by "Vaccine hesitancy"? Is vaccine hesitancy a public health threat in India? Discuss.

INTERVIEW TRANSCRIPT

Name: Varsha Meena

AIR: 580 (CSE 2017)

Chairperson: Manoj Soni

Duration: 35 minutes

Hometown: Dholpur, Rajasthan

About Varsha Meena

Optional Subject: Geography

Work Experience: No work experience

Education: B.Tech in Electric engineering, IIT Roorkee

Hobbies:

- Playing volleyball, origami, clay art
- Gold medalist in Inter-IIT sports meet
- Captain of IIT Roorkee girls' Volleyball team

About Dr. Manoj Soni

- Prior to this assignment, Dr. Soni has served three terms as Vice-Chancellor in Dr. Babasaheb Ambedkar Open University (BAOU) and The Maharaja Sayajirao University of Baroda.
- Dr. Soni has in the past served on the Boards of Governors of several institutions of higher education and public administration.
- He was also a member of a quasi-judicial body constituted by an Act of the Gujarat Legislature, which regulates the fee structure of the un-aided professional institutions in Gujarat.

Education Background

- Dr. Soni is scholar of Political Science with specialisation in International Relations Studies.
- Dr. Soni's doctoral research is on the "Post-Cold War International Systemic Transition and Indo-U.S. Relations".

Interview**Questions based on DAF and follow-up questions**

- So you are from Dholpur, how does it feel like to come to Dholpur house?
- Important historical incident of Dholpur
- Why do you think an IAS officer is more important than an electrical engineer?
- why do you think you are suitable for IAS?

Agriculture

- how far was green revolution successful?
- what were key elements of green revolution?
- what are the problems which our agriculture sector is facing?
- What is greenhouse?

- has share of agriculture in GDP increased or decreased?

Science and technology

- What are your views on artificial intelligence?
- Give an example where complete automation has happened in India?

Economy

- About the evolution of telecommunication sector in India?
- Recently there was a player of telecom industry in news? (Reliance Jio)
- so has TRAI raised any objection regarding the schemes of Jio?
- what are the issues in power sector in India?
- what are issues with manufacturing sector in India?
- what are smart cities?
- how smart villages are important for success of smart cities?
- what are few things that India should learn from China?
- Poverty, poor education and corruption are three main problems India is facing, so what will be your priority while tackling these issues?

Security

- How far has Indian government been successful in curbing insurgency in India?
- About Punjab insurgency?