

UPSC MONTHLY MAGAZINE

MARCH - 2018



Fugitive Economic Offenders Bill, 2018

An anchor to the drowning banks

Stubble Burning
Pollution Control

Euthanasia
Right to die with dignity

Macron Visit to India
A new Diplomatic outreach

**Facebook, Cambridge
Analytica and Data Mining**
Privacy under threat?

INCREDIBLE RESULTS

— IAS 2016 —

8 Ranks
in Top 50

18 Ranks
in Top 100

215 Ranks
In The Final List



Rank 2
Anmol Sher
Singh Bedi



Rank 5
Abhilash
Mishra



Rank 12
Tejaswi
Rana



Rank 30
Prabhash
Kumar



Rank 32
Avdhesh
Meena



Ganga
Singh
Rank-33



Anu S
Rank-42



Surabhi
Gautam
Rank-50



Manuj
Jindal
Rank-53



Tanai
Sultania
Rank-63



Parikh
Mirant Jatin
Rank-67



Rohit
Vyas
Rank-69



Abhishek
Chourasiya
Rank-72



Rajarshi
Shah
Rank-81



Prateek
Jain
Rank-82



Nair Prajit
Prabhakaran
Rank-87



Sushil
Kumar
Rank-96



Devendra
Kumar
Rank-97



Swarn
Prabhat
Rank-105



Hirani
Adityavikram
Rank-113



Varun
Singla
Rank-114



Shaurya
suman
Rank-119



Nitish
Agarwal
Rank-122



Ann Mary
George
Rank-123



Anand
Shankar
Rank-127



Rishav
Kumar Jha
Rank-128



Prabhat
Ranjan Pathak
Rank-137



Akanksha
Rana
Rank-163



Padmini
Solanki
Rank-170



Amogh
Gopinath
Rank-171



Bindu
Madhav
Garikapati
Rank-172



Rahul
Gupta
Rank-182



Sagar
Bagmar
Rank-186



Abhay
Soni
Rank-188



Tare Anuj
Milind
Rank-189



Anurag
Jain
Rank-198



Arpit
Vijayvargiya
Rank-201



Deepak
Shukla
Rank-202



Videh
Khare
Rank-205



Akhil
Mahajan
Rank-213



Nitika
Pant
Rank-217



Tuhin
Sinha
Rank-219



Keshav
Kumar
Rank-222



Keshav
Kumar
Rank-230



mohit
Garg
Rank-238



Pansuria
Toral Pravinbhai
Rank-239



Odke Digvijay
Govind
Rank-247



Bogati
jagadeeswar
Rank-249



Abhishek
Surana
Rank-250



Pushkin
Jain
Rank-252



Amit
Verma
Rank-253



Shrey Vats
Rank-260



Suchismita
Kanungoe
Rank-261



Sri Hari Prasad
Gopishetty
Rank-268



Aditi Mor
Rank-277



Zade Parikshit
Sanjayrao
Rank-280



Prachi
Ailawadhi
Rank-290



Guru
Prasad
Rank-299



Shashank
Shekhar Singh
Rank-306



Aaditya
Mishra
Rank-309



Amilineni
Bhargav Teja
Rank-314



Aman
Bishla
Rank-315



Arihant
Singhi
Rank-322



Mitika
Dahiya
Rank-325



Ashima
Mittal
Rank-328



Aastha
Suman
Rank-331



Ankur
Rank-341



Avneet
Punia
Rank-356



S Chitharanjan
Rank-357



Ranjan
Rajeev
Rank-358



Godhani
Aksharkumar P
Rank-365



Sumit
Balecha
Rank-368



Basuki Nath
Jha
Rank-378



Mayank
Mishra
Rank-379



Mrinal Prakash
Mishra
Rank-380



Kaustuva
Rank-381



Sambit
Mishra
Rank-385

OUR RESULTS IN THE PAST YEARS

IAS Result 2015



IAS Result 2014



IAS Result 2013



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POLITY

1. Ama Gaon, Ama Bikas (Our village, Our development)

- The programme was launched on the occasion of the birth anniversary of former Chief Minister Biju Patnaik, which is observed as Panchayati Raj Day in the State every year.
- It is bid to reach out to people in rural areas, involve them in the development process
- Chief Minister also flagged off mobile video vans for 'Ama Gaon Ama Vikas' programme that will move across the State to highlight various welfare schemes of the State government at villages.
- Through these Wi-Fi enabled vans, people can directly air their grievances to the Chief Minister's Office through at the State Secretariat
- This initiative will help people in solving their grievances in an expeditious manner.

2. Arbitration and Conciliation (Amendment) Bill, 2018

- It is a part of the efforts of the Government to encourage institutional arbitration for settlement of disputes and make India a centre of robust Alternative Dispute Resolution (ADR) mechanism.

Features

- To facilitate speedy appointment of arbitrators through designated arbitral institutions by the Supreme Court or the High Court, without having any requirement to approach the court in this regard.
- The Chairperson of ACI shall be a person who has been a Judge of the Supreme Court or Chief Justice or Judge of any High Court or any eminent person. Further, the other Members would include an eminent academician etc. besides other Government nominees
- A new section 42A is proposed to be inserted to provide that the arbitrator and the arbitral institutions shall keep confidentiality of all arbitral proceedings except award. Further, a new section 42B protects an Arbitrator from suit or other legal proceedings for any action or omission done in good faith in the course of arbitration proceedings.

Arbitration Council of India (ACI)

- The amendment provides for creation of an independent body namely the Arbitration Council of India (ACI) which will grade arbitral institution and accredit arbitrators by laying down norms and take all such steps as may be necessary to promote and encourage arbitration, conciliation, mediation and other ADR Mechanism and for that purpose evolve policy and guidelines for the establishment, operation and maintenance of uniform professional standards in respect of all matters relating to arbitration and ADR mechanism.

- The Council shall also maintain an electronic depository of all arbitral awards

Advantages

- It will facilitate achieving the goal of improving institutional arbitration by establishing an independent body to lay down standards,
- make arbitration process more party friendly,
- Cost effective and ensure timely disposal of arbitration cases.

3. SC shuts the door on foreign law firms

- Keeping India's legal market exclusively for Indians, the Supreme Court ruled that foreign law firms or foreign lawyers cannot practice law in the country either on the litigation or non-litigation side.
- This means overseas lawyers or firms cannot open offices in the country, appear in courts or before any authority or render other legal services, such as giving opinions or drafting documents.
- Any dispute in this issue would be decided by the Bar Council of India.

Arbitration Proceedings

- The court also ruled that foreign law firms and lawyers did not have an "absolute right" to conduct arbitration proceedings and disputes arising out of contracts relating to international commercial arbitration.
- Though they might not be debarred from conducting arbitration in India arising out of international commercial arbitration, they would be governed by the code of conduct applicable to the legal profession in India.

BPO's

- The court said Business Process Outsourcing (BPO) companies providing a range of services to customers like word processing, secretarial support, transcription and proof reading services, travel desk support services and others would not come under the Advocates Act. T

Practice in other countries

- Sections of the legal fraternity have been opposing their entry, contending that Indian advocates are not allowed to practise in the U.K., the U.S., Australia and other nations, except on fulfilling onerous restrictions like qualifying tests, experience and work permit.
- It was also argued that foreign lawyers cannot be allowed to practise in India without reciprocity.

What did Bar Council of India say?

- It contended that even non-litigious practice came under the term 'practice of law', and that could be done only by those enrolled under the Advocates Act in the country.

- They should follow the Advocate ACT 1961 and the rules laid down by BCI. If any foreign lawyer commits a professional misconduct, then under BCI rules, we can hold them accountable and initiate disciplinary action,

What was the objection of Indian law firms?

- Indian law firms would not be able to compete with foreign firms and that the latter had greater money power and may control the legal market.

What was the stand of Political Parties?

- Both the NDA and the UPA government were considering a proposal to permit foreign law firms in the country to practice law in matters not involving litigation and on a reciprocal basis.
- As a result Centre may not be able to throw open the legal services sector to overseas players.
- The parties felt barring them in the arbitration sector would scupper India's ambition to be a global arbitration hub, and **only help Singapore, London or Paris take over these arbitration opportunities.**

4. Fifteenth Finance Commission has come at a time of momentous changes in Indian fiscal federalism

- The replacement of the Planning Commission by the National Institution for Transforming India (NITI) Aayog
- The removal of the distinction between plan and non-plan expenditure in the budgets of the union and the states
- The 101st constitutional amendment resulting in the introduction of the long-awaited goods and services tax

Impact

- The replacement of the Planning Commission—a parallel channel of resource transfers to states not envisaged under the Constitution—by NITI Aayog—which does not have an allocative role—is expected to address the problem of multiple channels of resource transfers that bedevilled fiscal federalism in the country so far.
 - * The main functions of NITI Aayog, among others, are to provide a shared vision of national development priorities, and to foster cooperative federalism through structured support initiatives and mechanisms with the states on a continuous basis.
- The replacement of the Planning Commission, with the removal of the practice of classifying expenditure into plan and non-plan, has conferred full freedom to the XV-FC to look at the entire revenue expenditure in totality, instead of a fragmented view of resource allocations.

- * As observed by the High Level Committee on "Efficient Management of Public Expenditure" (Rangarajan Committee, 2011), the non-plan and plan distinction in the budget was neither able to provide developmental and non-developmental dimensions of public expenditure, nor was it an appropriate budgetary framework.

- The GST being a destination-based tax has shifted the tax base from production to consumption.
 - * This may impact revenue yield from indirect taxes as between the predominantly producing and consuming states.
 - * As the revenue impact of the GST across the states is not yet known, the XV-FC will have the challenging task of addressing this issue as its recommendations are applicable till 2024–25, beyond the five-year duration of compensation scheme for states that may suffer revenue loss, following the introduction of GST.
- Besides these major changes, there is a slowdown in the growth of the economy since last year and pressures building up on both the union and state finances. There are incipient signs of states, which so far, by and large, adhered to the Fiscal Responsibility and Budget Management (FRBM) limits, slipping on them.

Functions of Finance Commission

- The XV-FC has a major task on hand in putting in place a transfer system consistent with the recent changes in fiscal federalism, promoting cooperative fiscal federalism and ensuring fiscal stability.
- XV-FC is mandated to review the current status of finance, deficit, debt levels, and fiscal discipline efforts of the union and the states and recommend a fiscal consolidation road map for sound fiscal management.
- The important additional items included in the ToR of XV-FC relate to the review of cash balances and examination of whether revenue deficit grants should be provided at all.
 - * Currently, eleven states are receiving revenue deficit grants from the Centre as the 14th FC had felt that the devolution it recommended might not suffice to cover their revenue gaps and gave them this extra succor. Among the 11 states assessed to be revenue deficit, as many as eight are special category states.
 - * During the 2015-20 period, these grants are estimated to be around Rs 1.95 lakh crore
 - * The deficit grants have been criticized mainly on the ground that they create perverse incentives to states to remain profligate and not exploit their revenue resources to their full potential.

On Populist Schemes

- Given that how the states exercise control on expenditure on “populist measures” is one of the performance criteria based on which incentives are to be given to them, the commission has the task of defining what constitutes populist policies.
- An official source said the Commission is likely to take the view that subsidies are not populist, but it might have to examine whether assorted other giveaways such as farm loan waivers and pre-election freebies are.

So it encourages the XV-FC, through a framework of incentives and deterrents, to reward states that control expenditure on populist measures and deter states that do not exercise such controls.

Issues

- It may be inappropriate for the XV-FC to deter populist programmes introduced and implemented by a state government in the exercise of its sovereign functions. If a programme is “wasteful” or “unnecessary,” the proper authority to take deterrent action may be the electorate, not the finance commission.
- The Supreme Court has stated:
 - * The court can strike down a law or scheme only based on its vires or unconstitutionality but not on the basis of its viability. When a regime of accountability is available within the Scheme, it is not proper for the Court to strike it down, unless it violates any constitutional principle. (Bhim Singh v Union of India and Others)

Implementation

- Other areas where states’ performance will be gauged for assessing their eligibility for Centre’s transfers are also mostly related to how they implement Centre’s policies and programmes, including its flagship schemes, direct benefit transfers, digital economy, ease of doing business, sanitation etc.
- The Commission will rely on 2011 census – and not 1971 census- to assess the performance or states in moving towards replacement rate of population growth.

Cesses and surcharges

- In the Centre’s case, cesses and surcharges have become a way to create a revenue pool that doesn’t have to be shared with then states.
- Currently, cesses and surcharges are around 14% of the Centre’s gross tax revenue. Although the Commission hasn’t been given any mandate to review these, sources said, it might prepare a ‘robust paper’ on the issue of cesses, examining the legality of these imposts.

5. Centre plans law on online hate speechContext

- Home Ministry has written to the Law Commission to prepare a draft law on hate speeches

- The provisions will deal with offensive messages sent through social media and online messaging applications.
- The Law Commission has also been asked to include its earlier recommendations, and those from the Viswanathan and M.P. Bezbaruah committees, to give a “comprehensive draft law.”
- Once the Law Commission submits its final proposal, the States would be asked to send their comments since the proposed amendment falls under the Concurrent List of the Constitution.

T.K. Viswanathan CommitteeBackground

- Lok Sabha Secretary General **T.K. Viswanathan submitted a report recommending stricter laws to curb online hate speech.**
- The panel was formed after Section 66A of the Information Technology Act, 2000, was scrapped by the Supreme Court in 2015.
- The 267th report of the Law Commission had recommended inserting additional provisions in Sections 153, 505 of the Indian Penal Code (IPC).

Proposed 153 C and 505 A IPC**The proposed 153 C IPC — ‘incitement to hatred,’**

- The proposed law says, “Whoever on grounds of religion, race, caste or community, sex, gender identity, sexual orientation, place of birth, residence, language, disability or tribe, uses any means of communication to - (a) gravely threaten any person or group of persons with the intention to cause fear of injury or alarm; or (b) advocate hatred towards any person or group of persons that causes, or is likely to cause, incitement to commit an offence.”
- Punishment: Up to two years or fine of Rs 5,000 or both.

The other provision Section 505 A IPC - ‘causing fear, alarm or provocation of violence’

- “Whoever in public intentionally....uses words, or displays any writing, sign, or other visible representation which is gravely threatening, or derogatory; (i) within the hearing or sight of a person, causing fear or alarm, or; (ii) with the intent to provoke the use of unlawful violence, against that person or another, shall be punished with imprisonment for a term which may extend to one year and/or fine up to ₹5000, or both.”
- Punishment: Up to a year, or Rs 5000 or both.

Amendment to Code of Criminal Procedure, 1973

- Add sections 25 B and 25 C — creating the post of a State Cyber Crime Coordinator and District Cyber Crime Cell, respectively.

Issue Area

- Section 505A, for instance, refers to “highly disparaging, indecent, abusive, inflammatory, false or grossly offensive information” and “derogatory information.” These are extremely broad terms, not having any guiding jurisprudence within Indian or international law, which may be helpful in restrictively interpreting them.
- The T.K. Viswanathan committee, in addition, seeks to bring, within the scope of the prospective Sections 153C and 505A, electronic speech. As per its recommendations, ‘means of communication’ would include “any words either spoken or written, signs, visible representations, information, audio, video or combination of both transmitted, retransmitted or sent through any telecommunication service, communication device or computer resource.”
 - * This could have the impact of bringing in a provision that has some similar effects as that of the now defunct Section 66A of the Information Technology Act.

6. Tihar apparel to be worn by movie stars

- Clothes designed by women inmates of Tihar Jail will be used in a Bollywood movie named Marksheet.
- The apparel are products of the fashion lab that was set up at Tihar
- This is the first time that jail inmates will be designing clothes for a feature film.
- The fashion lab was set up in accordance with the Skill India Mission launched by the government. The prison authorities had set up the lab with a private institute.
- The institute also trains inmates in the slash-and-spread method and in tracing the basic bodice.
- The lab is equipped with sewing machines, sewing kits and ironing machines, giving the trainees their first experience of designing a dress from scratch.

7. State nod for religious minority tag for Lingayats

- The Karnataka cabinet accepted an expert panel report favouring separate religious minority status for Lingayats and Veerashaivas, who believe in 12th century social reformer Basavanna’s philosophy.
- This was based on the suggestions of the seven-member committee headed by retired high court judge Nagamohan Das.

Who will be called Lingayats?

- The cabinet decided to grant minority status to Veerashaivas, who consider Basavanna dharma guru (religious head), believe in vachanas (verses) as sacred text and wear Ishta Linga (symbolic representation of a formless god) will also be considered as Lingayats.

- Lingayats are followers of Basavanna and the sharanas, whose philosophy is expressed in thousands of vachanas. In several vachanas, the sharanas have rejected the Vedas, shastras, smritis and the Upanishads.

Who are Veerashaivas?

- Veerashaivas are worshippers of Lord Shiva.
- They precede Basavanna, the founder of Lingayatism.
- Veerashaivas do not worship any God other than Shiva and can be found spread across India.
- They are found largely in Karnataka, Andhra Pradesh and Kerala. Those who consume non-vegetarian food call themselves Kshatriya Shaiva while those who are vegetarians call themselves Brahmana Shaiva.
- All sects of the Veerashaiva follow the ‘Pancha Peeta’, five mutts. Kashi mutt, Rameshwaram Mutt, Ujjaini Mutt, Rambhapura Mutt and Srishaila Mutt are the core holy places for the community.

There are many differences

- Veerashaiva and Lingayat ways of life are different. Their beliefs, practices and faith are different. Veerashaiva worship Lord Shiva, the one mentioned in Hindu mythology.
 - * But the Shiva that Basavanna referred to is not the Hindu mythological Shiva. Basavanna’s Shiva is a formless, seamless figurative entity. Lingayats argue that this was the very reason that Basavanna never mentioned about the Hindu mythological Shiva in any of his Vachanas.
- In terms of religious practice, Veerashaivas encourage such rituals in stark contrast.
 - * Basavanna propagated only the worship of Ishta Linga. He did not encourage rituals and ceremonies of offering, prayer and sacrifice.

Why the rift?

- Lingayats are revolting against oppression by the Veerashaivas.
- The community alleges that Veerashaivas are attempting to destroy the very idea of Lingayatism by tampering with History and Basavanna’s Vachanas.
- The Pancha Peeta mutts were given the responsibility of propagating Basavanna’s Vachanas and popularising Lingayatism.
- Lingayats allege that the Vachanas were tampered with to allow Veerashaivas propagate their own idea through Basavanna’s words.

8. Office of profit

- The expression “office of profit” has not been defined in the Constitution or in the Representation of the People Act, 1951. Its ambit has to be inferred only from pronouncements of courts and other competent authorities, like the Election Commission and the President.

- In India, the concept of "office of profit" disqualifying the holder was imported from Britain and it made its appearance for the first time in the Act of 1909, which embodied the Morley-Minto Reforms proposals.
- An office of profit is a term used to refer to executive appointments. The basic idea was — and remains — that the legislators should not be vulnerable to temptations an executive can offer.

In Indian context-

- According article 102 (1) (a) and article 191 (1) (e) of the Indian constitution bars members of both houses of Parliament and state assembly/council for holding any office of profit.
- According to above articles a person shall be disqualified for being elected as, and for being, a member of either House of Parliament/state assembly if he holds any office of profit under the Government of India or of any State, other than an office declared by Parliament/respective assemblies by law not to disqualify its holder.

Meaning

- Office-> if they have the office to work
 - * "The word 'office' is of indefinite content. It has various meanings
 - * The Supreme Court in case of *Statesman (Private) Ltd. v. H.R. Deb and Ors*, Said that: "An office means no more than a position to which certain duties are attached According to Earl Jowett's Dictionary a public office is one which entitles a man to act in the affairs of others without their appointment or permission"
- Profit->obtaining any pecuniary Gain- If the office carries with it, or entitles the holder to, any pecuniary gain other than reimbursement of out of pocket/ actual expenses, then the office will be an office of profit for the purpose of Article 102 (1)(a)

103. Decision on questions as to disqualifications of members

- If any question arises as to whether a member of either House of Parliament has become subject to any of the disqualifications mentioned in clause (1) of Article 102, the question shall be referred for the decision of the President and his decision shall be final
- Before giving any decision on any such question, the President shall obtain the opinion of the Election Commission and shall act according to such opinion

Rationale for the disqualification for holding an Office of Profit-

- The underlying concept behind these two articles is the principle of separation of power between the functionaries of a state like legislative, judiciary and executive.
- The principle of separation of powers enjoins that the three organs of the government- the executive, the legislature and the judiciary should be separate from each other

- This is to ensure the isolation, immunity or independence of one branch of government from the actions or interference of another and to ensure checks and balances.

This provision is thus designed to protect the democratic fabric of the country from being executive patronage and also secures the independence of MPs from the influence of the so that they discharge their functions without fear or favor The presumption is that if corrupted by Government a legislature receives benefits from the Executive than he may not be able to independently scrutinize the actions of the Government. It ensures that the parliament does not contain persons who may be obligated to the government and be amenable to its influence because they are receiving favors and benefits from it

Supreme Court in case of *Shivamurthy Swami vs. Agadi Sanganna Andanappa* said the test which may be applied to determine whether an office is "office of profit" under the state government thus:-

- Whether the Government makes the appointment;
- Whether the Government has the right to remove or dismiss the holder;
- Whether the Government pays the remuneration;
- What are the functions of the holder
- Does the Government exercise any control over the performance of those functions?

Joint Parliamentary Committee Recommendation

The Committee suggested the definition of "office-of-profit" as:

- Any office under the control of the Government of India, or the government of a state, whether or not the salary or remuneration for such office is paid out of the public revenue of the government of India or of the government of state
- Any office under a body, which is wholly or partially owned by the government of India or the government of any state and the salary or remuneration is paid by such body
- Any office the holder of which is capable of exercising executive powers delegated by the government including disbursement of funds, allotment of lands, issuing of licenses and permits or making of public appointments or granting of such other favors of substantial nature or legislative, judicial or quasi-judicial functions. Since the judicial decisions gave varying interpretations depending upon the facts of each case

Previous cases-

- In 2006 Sonia Gandhi resigned from Lok Sabha after the issue of office of profit was raised. (She was holding chairmanship of National Advisory Council). Later the prevention of disqualification act was amended in 2006 to add the position of NAC chairperson to the list of exempted posts.
- Jaya Bachchan was disqualified from the Rajya Sabha, while she was also chairperson of the Uttar Pradesh Film Development Federation.

Parliamentary Secretaries- President declines assent to Delhi govt's bill

- The Delhi government had sought an amendment to the Delhi Members of Legislative Assembly (Removal of Disqualification) Act, 1997. The bill, aims to exclude the post of parliamentary secretary from the office of profit and exempt the post from disqualification provisions.
- President Pranab Mukherjee has rejected a bill passed by the Delhi assembly last year seeking to exempt 21 AAP MLAs appointed as parliamentary secretaries from the purview of 'office of profit' criteria.

Implications:

- Section 15 of the government of NCT of Delhi Act, 1991 says a person shall not remain an MLA if he or she holds any office of profit under the Centre or government of a state or UT.

What the law says?

- Various petitions in the High Court have challenged the appointment of Parliament Secretary, arguing that the post is in contradiction to Article 164 (1A) of the Constitution which provides for limiting the number of Ministers in the State Cabinets to 15 per cent of the total number of members of the State Legislative Assembly.
- Article 164 (1A) was inserted in the Constitution on the recommendation of the National Commission for Review of the Working of the Constitution headed by former Chief Justice of India, M.N. Venkatachaliah on misuse and drainage of public money to put a ban on over-sized cabinet.
- This was added by 91st CAA.

Judgments

- Because a Parliament Secretary often holds the rank of Minister of State, the Calcutta High Court, in Vishal Bhattacharya vs The State of West Bengal and Others (2015), in June 2015, quashed the appointment of 24 Parliamentary Secretaries in West Bengal dubbing it unconstitutional.
 - * Bombay High Court in 2009 for the appointment of two Parliamentary Secretaries in Goa in Aires Rodrigues vs The State of Goa, 2009 and by the
 - * Himachal Pradesh High Court in 2005 for the appointment of eight Chief Parliamentary Secretaries and four Parliamentary Secretaries in the State.
- In May 2015, the Hyderabad High Court stayed the appointment of Parliamentary Secretaries in Telangana
 - * The court ruled that parliamentary secretaries represented the government in the assembly and, while assisting the CM, would have the authority to pass orders. They would also participate in the decision-making process and take decisions themselves and this, in "spirit and substance", meant they were equivalent to Cabinet ministers.

Delhi's Case

- The number of Cabinet Ministers in Delhi cannot exceed 10 per cent of the total 70 seats — that is seven — as per Article 239AA of Constitution.
- As of now, only one Parliamentary Secretary to the Chief Minister is authorised.

Delhi High Court has set aside the Election Commission of India's (ECI) recommendation for disqualification of 20 Aam Aadmi Party (AAP) MLAs for holding office of profit

- HC quashed the Centre's notification disqualifying the AAP MLAs, saying the Election Commission's recommendation against the legislators was "bad in law" and "vitiated"
- The bench said that there was violation of natural justice and no oral hearing was given to the MLAs before disqualifying them as legislators

9. Should gambling be legalized?

- Gambling and betting is a State subject, the primary law on which States have framed their gambling legislation is an archaic, British-era law called the Public Gambling Act, 1867.
- Ironically, while India follows a British-era prohibitionist statute, the U.K. legalised and regulated various forms of gambling and betting many decades ago.

Definition

According to Bombay Prevention of Gambling Act, 1887

- Gambling as defined in the Act includes gaming and betting.
- Generally, gambling is referred to as card games where high stakes are involved and betting is referred to as casino games and putting a bet on an event such as a match.
- From the various provisions of the Central and State Act, one can infer that while gambling is prohibited in public or public gaming houses, **there is no prohibition on such activities in a private house.**

Different States and its laws

- Goa and Sikkim are the only exceptions which have allowed gambling and betting in their state, subject to regulation of their respective state Governments.
 - * The state of Goa has allowed gambling by enacting the Goa, Daman and Diu Public Gambling Act, 1976
- Sikkim has the most liberal gaming laws in the country.
 - * The state government allows casinos in five-star hotels (two are operational), online and paper lotteries and now even online gaming and betting.
 - * The state of Sikkim has legalized gambling by enacting Sikkim Regulation of Gambling (Amendment) 2005.

- * The State of Sikkim is the only state in India which has enacted a law for online gambling and sports betting. The Sikkim 'Online Gaming (Regulation) Act, 2008'

Games of Skill outside the Purview of Gambling

- The Gambling Legislations provide that the restrictions would not apply to games of "mere skill".
 - * 'Games of skill' refers to games which involve the use of a person's skill. For example, the uses of mental acumen or physical skill in games like chess and billiards.
 - * 'Games of chance', on the other hand, refers to games where winning is purely a matter of chance, or luck, such as the card game of 'Teen Patti'.
- In the case of State of Andhra Pradesh v. K. Satyanarayana & Ors. 11 ("Satyanarayana Judgment"), the SC specifically tested the game of rummy on the principle of skill versus chance and held that Rummy was not a game entirely based on chance like the 'three-card' game (i.e. 'flush', 'brag' etc.) which were games of pure chance. It was held that Rummy was a game involving a preponderance of skill rather than chance.
- In Dr. K.R. Lakshmanan v. State of Tamil Nadu, it was held that horse racing was a game of skill, and playing it for money will not be illegal.
- But if an objection is expressed by a state, online gaming will have to be stopped. For example, the Supreme Court recently upheld a ban by the Kerala Government on online lotteries conducted from Sikkim.

Why legalize gambling?

- First, gambling is already happening in a massive way. Law enforcement authorities are not able to stop it.
 - * Gambling and betting is mostly done surreptitiously, and is said to be controlled by underworld syndicates who use the unaccounted money earned from gambling activities for nefarious activities like terror financing. Legalising the activity will not only help curtail an important source of black money that is used by criminal syndicates
 - * It will also bring massive revenue to the state exchequer, which can be used for various constructive social schemes.
- A legal and regulated gambling sector will also help in creating large-scale employment opportunities.
 - * The regulated gambling industry in the U.S. employs over 2.5 lakh people
 - * While over 1 lakh individuals are employed in this sector in the U.K.

- Naysayers say that gambling is not morally correct in the Indian context. They suggest that it is responsible for addiction, loss of livelihoods and bankruptcy.
 - * There are numerous instances of people losing their livelihoods and committing suicide due to unchecked gambling even today

Law Commission

- The panel is of the opinion that lawful but strict regulation of gambling and betting would help curb illegal practices that generate black money. It would also shore up revenues of the government and generate employment.
- The commission suggested gambling be categorized as "proper gambling" and "small gambling". The former would involve high stakes and be feasible only for the rich. Poorer groups would be permitted "small gambling"

It should not be legalized?

- A majority of people still live on a meagre meal or two after toiling hard.
 - * They cannot afford to send their children to school or take care of their basic health needs.
 - * With Laws against betting there is a psychological edge which prevents them from gambling but with laws removed they will have free hand to betting. So the laws here are preventing them from losing their hard earned money.
- Companies will start host betting apps, tempting poor people to try their luck.
- What is the guarantee that legalizing betting will generate revenue as projected?

Challenges

- If Parliament wishes to legislate on the subject, it will be difficult to do so, as the subject of gambling figures in the State List.
 - * As a result, the Constitution will have to be amended first so that gambling can figure in the Concurrent List.
 - * Necessary infrastructure — police machinery, prosecutors, etc. — will have to be put in place.
- The problem of online gaming cannot be curbed by merely amending the Information Technology Act where it finds a mention.
 - * There has been a steep rise in online gambling of late and governments are trying to find ways of curbing the menace. Relevant provisos will have to be made in the new Act if gambling is to be regulated.

What should be done?

- A robust regulatory framework governing the gaming sector will ensure that people do not fall prey to the excesses of gambling.

- Awareness campaigns should educate people about the perils of excessive gambling; minors, habitual gamblers and vulnerable sections should be excluded from having access to gaming facilities; and
- Limits must be imposed on the amounts that can be wagered, based on a person's financial capabilities

10. Supreme Court to examine constitutional validity of polygamy, 'nikah halala' among Muslims

Polygamy allows a Muslim man to have four wives,

- Nikah Halala deals with the process in which a Muslim woman, in order to remarry her former husband, has to marry a different person and get divorced from him.
- Nikah Mutah (Shia) is a private and verbal temporary marriage contract in which the duration of the marriage and the mahr (gift which the bridegroom must make to the bride) must be specified and agreed upon in advance.
 - * It is a private contract made in a verbal or written format.
 - * A declaration of the intent to marry and an acceptance of the terms are required as in other forms of marriage in Islam
 - * Preconditions for 'nikah mutah' are: The bride must not be married, she must be Muslim, she should be chaste and not addicted to fornication. She may not be a virgin, if her father is absent and cannot give consent. At the end of contract, marriage ends and women undergo iddah, a period of abstinence from marriage (intercourse)," the plea stated.
- Nikah Misyar is a type of Sunni marriage contract husband and wife give up several rights by their own free will, such as living together, equal division of nights between wives in cases of polygyny, the wife's rights to housing, and maintenance money ("nafaqa"), and the husband's right of home keeping, and access etc. and it is practiced by sunnis.

What did SC do?

- The Constitution Bench in the case of Shayara Bano etc. vs Union of India & Ors has declared Triple Talaq Unconstitutional
- Issued notices to the Centre and other parties, agreed to let the matter be heard by a Constitution Bench given its importance.
- A copy of the petition will be served on the Attorney General.
- The bench, however, declined to issue notice to the Law Commission of India.

What do the Petitioners say?

- A Hyderabad-based lawyer, has contended said the Muslim Personal Law allows a man to marry up to four wives, which "treats women as men's chattel, and reduces their status to an object of desire to be possessed by men."

- * That while Muslim law allows a man to have multiple wives by way of the temporary marriages or polygamy, the same permission is not extended to women and therefore the law violates the fundamental rights of Muslim women.
- * By considering the woman an object of man's desire causes gross affront to the dignity of women

- **Another petition, filed by a Delhi-based woman,** has said that by virtue of the Muslim Personal Law, section 494 of IPC (marrying again during lifetime of husband or wife) was rendered inapplicable to Muslims and no married woman from the community has the avenue to file a complaint against her husband for the offence of bigamy.

- * 494. Marrying again during lifetime of husband or wife.—Whoever, having a husband or wife living, marries in any case in which such marriage is void by reason of its taking place during the life of such husband or wife, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also be liable to fine.

Decisions in the past

- Gujarat High Court held that a Muslim cannot be prosecuted for Bigamy [S.494 IPC] in the absence of a Uniform Civil Code
- The Kerala High Court today held that enforcement of Section 494 of IPC (marrying again during lifetime of husband or wife) is applicable to all offenders irrespective of their religion but subject to personal laws.
 - * The Kerala High Court observed that a Muslim man can marry four women under Muslim personal law and if he marries a fifth wife he can very well be prosecuted under Sec 494 of IPC.

What do they want?

- Upadhyay has sought a declaration that Section 2 of the Muslim Personal Law (Shariat) Application Act, 1937, is "unconstitutional and violative of Articles 14, 15 and 21 of the Constitution, insofar as it seeks to recognize and validate the practice of polygamy and nikah halala"
- Section 2 of the Shariat Act says that Muslim marriages shall be governed by the Muslim Personal Law

11. Fodder Scam: Lalu gets 14 years in jail

Context

- A special CBI court has sentenced the former Bihar CM Lalu Prasad Yadav to a total of 14 years for two more convictions concerning his involvement in the fodder scam
- Lalu was held guilty of two separate offences — one under the Indian Penal Code and the other under the Prevention of Corruption Act was handed separate sentences of seven years each.

Background

- The fodder scam concerned embezzlement of public money earmarked for promotion of animal husbandry by officials of the department tasked with the job.
- The combine raised forged bills to withdraw Rs 970 crore from government treasuries, the amount far exceeding the budget of the animal husbandry department.

Penalties

- Mr. Prasad was sentenced to 14 years in jail, seven years each under Sections of 120(B), 419, 420, 467, 468 of the IPC and the Prevention of Corruption Act.
 - * This is the maximum sentence awarded to any politician in the fodder scam.
- He was also imposed a fine of Rs 60 lakh and directed the Enforcement Directorate to confiscate the assets of Lalu and other convicts, which may have been acquired from the illegal income they received by fraudulently withdrawing Rs 3.76 crore from the Dumka treasury between December 1995 and January 1996.
- Considering the volume of fraudulent withdrawals, the court also slapped a cumulative fine of Rs 5.1 crore on the 19 convicts.

Give social service duties to those sentenced to 6 months or 1 year: SC**Context**

- SC is hearing a matter relating to inhuman conditions prevailing in 1,382 prisons across the country.
- 240 jails across the country are housing inmates 150% above their normal capacity.

Criminals sentenced to imprisonment for six months or a year should be allocated social service duties rather than be put in already overflowing prisons

Prison staff-prisoner ratio

- Of about 77,000 sanctioned posts, 24500 lie vacant.
- Tamil Nadu and U.P. are some of the worst cases in prison staff-inmate ratio.
- Only about 5,000 prison staff monitor over 92,000 inmates in Uttar Pradesh. Tamil Nadu has about 4,000 prison staffers to monitor 13,000 prisoners.

Women Issues

- There are 18 jails exclusively for women.
- Plus there are separate areas for women in other jails, but there is complete disproportionality as far as space for women inmates are concerned.
- These jails were not modelled to house women inmates, especially those with minor children staying with them.

SC suggestions

- Supreme Court judgment had encouraged the need for open prisons. It had urged for steps like the appointment of counsellors and support persons for prisoners, particularly first-time offenders.

- The court had suggested steps like more family visits for prisoners and use of phones and video-conferencing not only between a prisoner and family, but also his lawyers.
- It had directed the State Legal Services Authorities (SLSAs) to conduct a study and performance audit of prisons. It wanted the government to constitute a Board of Visitors to initiate prison reforms.

12. SARAS

- Marketing of products of the SHG women is one of the major concerns of the Ministry of Rural Development. In order to empower the rural women artisans and to bring them above the poverty line, through access to better market and marketing systems, the Ministry of Rural Development has been supporting the organisation of exhibitions under the brand name of SARAS where Self Help Groups from different states participate and sell their products.
- The SARAS AajeevikaMela in New Delhi is an endeavour of DAY-NRLM to provide to the rural women producers a national platform and an opportunity to showcase their products, and seek buyers, either individuals or bulk buyers for sale nationally / internationally.

13. IT Applications to be used for elections by EC**SAMADHAN: Public Grievance Redressal and Monitoring System:**

- A comprehensive, robust and reliable public Grievance Redress System has been developed by the Election Commission to provide a common platform for all complaints, grievances, concerns and suggestions lodged by any member of the public, including our various stakeholders like political parties, candidates, civil society groups etc. a citizen has the multi-modal facility to lodge any election-related complaint via bouquet of channels/sources like website, email, letter, fax, SMS, call center (Call center number is 1950) etc.
- A mobile app shall also be made available for the people, so that they can submit complaints with photographs/videos on the common platform.

SUVIDHA: Single Window Permission System

- A single window system for giving election-related permission/clearance within 24 hours has been created.
- In this system, candidates and political parties can apply for permissions for meetings, rallies, vehicles, temporary election office, loudspeakers etc at a single location, where back-end convergence of various authorities/departments has been done.
- This system is put in place at every RO level in each sub-division which will provide for applying, processing, granting and monitoring permissions in a synergistic manner.
- However in case of permission for helicopter usage/ landing and use of helipads, the application shall have to be submitted at least 36 hours in advance.

SUGAM: Vehicle Management System:

- It is an IT based Vehicle Management System with the facility of issuance of requisition letters for vehicles, capturing of vehicle details with address, mobile number and bank details of owner and drive, transfer of vehicles from one district to another district etc.

ECONOMY

1. 80:20 Gold Import Scheme

Why now?

- A CAG report published in 2016 found that the 80:20 scheme had resulted in a loss of Rs 1 lakh crore to the exchequer.
- Indian Bullion and Jewellers Association (IBJA) had forewarned the Reserve Bank of India
- A sub-committee of the Public Accounts Committee headed by BJP MP Nishikant Dubey has reportedly sought details from the Revenue Department and any alleged link with the PNB fraud
 - * The Directorate of Revenue Intelligence (DRI) was not in favour of the 80:20 gold import scheme launched in 2013
 - * To support the earning of one US dollar (around Rs 60 then) for jewellers, the government had to bear the expenditure in the form of duty foregone of Rs 221.75. Through the process known as round-tripping, black money that goes out of the country returns as white money.
- Used for round tripping of black money and money laundering

What prompted the scheme?

- In response to a stressed current account deficit in 2012-13 due to a surge in gold imports, the government at the time introduced an import scheme in 2013, which mandated that 20% of all gold imports would have to be exported.
- Under the scheme, up to 80% of gold imports could be sold in the country and while at least 20% of imports had to be exported before bringing in new consignments
- The scheme was designed to restrict the import of gold, conserve foreign exchange by imposing export obligations, and ensure that the premium from purchase and sale of gold resided in the hands of public agencies

Who could import gold under the scheme?

- At the time of its implementation, the 20:80 scheme was open only to banks and to public sector companies such as the Metals and Minerals Trading Corporation and the State Trading Corporation of India.
- In May 2014, the RBI in consultation with the government widened the scheme to also allow Premium Trading Houses (PTH) and Star Trading Houses (STH), both private sector entities, to import gold.

Why were the rules eased in May 2014?

- The 80:20 scheme was relaxed in May 2014 by the RBI at the behest of the Finance Ministry. Jewellers, bullion dealers, authorised dealer banks and trade bodies had approached the Ministry requesting a relaxation of the policy.
- The curbs were eased after crude oil prices dropped to a four-year low. The easing of rules allowed more agencies to import gold.

How did the scheme fare?

- According to the Commerce Ministry, a review of the scheme found that since liberalisation in May 2014, gold imports had increased substantially, averaging about 140-150 tonnes a month.
- Within this, the government found that gold imported by STHs and PTHs increased 320% following the May 2014 decision compared with the earlier period.
- The share of these entities in the total gold imported into the country also increased from 20% before May to 60% after, according to the government.

What was the impact of the abolition?

- Gold imports averaged 33.6 million tonnes per month before STHs and PTHs were allowed to import under the 20:80 scheme

2. Contract Farming

- Under contract farming inputs material may be provided by purchasing party for a particular crop and there is a crop buyback agreement in advance. Quality is specified in advance.
- This is mainly entered into by big corporate who are in business of food processing.

Laws

- In India, contract farming is regulated under the Indian Contract Act, 1872. The Act has many general provisions that are relevant to contract farming, including the formation of contracts, obligations of parties, and consequences in case of breach of contract.
- In addition, the model APMC (agricultural produce market committee) Act, 2003 provides specific provisions for contract farming, like compulsory registration of contract farming sponsors and dispute settlement.

Advantages

- It removes uncertainty of Income for the farmer and he can fetch good prices.
- The arrangement can offer both an assured market and access to production support

- It has also come to be viewed as an effective approach to help **solve many of the market access and input supply problems faced by small farmers.**
- There are also potential benefits for national economies as contract farming leads to economies of scale
- From the standpoint of corporate bodies, farming reduces the supply risk, while the farmers enter into contractual arrangements with companies in order to **minimize price risks.**

Issues of concern

- **Monopsony (a market situation in which there is only one buyer):** Typically, contract firms enter into an agreement with farmers to grow differentiated crops. This turns the firm into a sole buyer and farmers into price-takers. Contracting firms can exploit this situation to their advantage by offering lower prices to farmers.
- Farmers selling to a buyer other than the one with whom they hold a contract (known as side selling, extra-contractual marketing or, in the Philippines, "pole vaulting")
- Using inputs supplied by the company for purposes other than intended.
- Company sometimes fails to buy products at the agreed prices or in the agreed quantities, or arbitrarily downgrades produce quality.

India needs a model contract farming cos -

- More than 50% population is in Agriculture Industry and the Industry is stagnating.
- Agriculture being state subject for much uniformity a model contract farming at union level is required.
- GOI's promise to double the income of farmers by 2019 requires measures like formation of model contract farming would be one of the step to achieve the goal.
- Dependency on seeds and fertilizers also a much needed financial impetus to agriculture Industry, farmers can avail it easily if contract farming model is placed.

Way Forward

- The **existence of an adequate legal framework is thus crucial** for the successful implementation and long-term sustainability of contract farming operations.
- It is also important to protect them from risks that may occur during contractual execution, such as abuse of power by the stronger bargaining party or breach of contract.
- Strengthening farmer organizations to improve their contract negotiating skills can redress the potential for subsequent misunderstandings

- **Foster more competition:** The government needs to create market-based incentives for both farmers and buyers. It should improve farmers' connectivity to spot markets and mandis across the country. E-NAM (National Agricultural Market) is a great initiative in that direction. This would encourage contracting sponsors to raise their bids and compete to enrol farmers to secure input supplies.

Draft Model Contract Farming Act, 2018

- The Ministry of Agriculture has released a draft Model Contract Farming Act, 2018.
- The draft Model Act seeks to create a regulatory and policy framework for contract farming.
- Based on this draft Model Act, legislatures of states can enact a law on contract farming as contracts fall under the Concurrent List of the Constitution.

What is the existing regulatory structure?

- Currently, contract farming requires registration with the Agricultural Produce Marketing Committee (APMC) in few states.
- This means that contractual agreements are recorded with the APMCs which can also resolve disputes arising out of these contracts.
- Further, market fees and levies are paid to the APMC to undertake contract farming.

What are the issues with the current structure, and how does the draft Model Act seek to address them?

- Role of APMCs which are designated as an authority for registration and dispute settlement in most states,
- Provisions of stockholding limits on produce under contract farming, and
- Poor publicity of contract farming among the farmers about its benefits.

Details

- The model contract farming Act proposes a state-level agency, the Contract Farming (Development and Facilitation) Authority, which would put contract farming outside the ambit of the APMC.
- The draft Model Act provides for establishing a state-level Contract Farming (Promotion and Facilitation) Authority to ensure implementation of the draft Model Act.
- Under the draft Model Act, every agreement should be registered with a Registering and Agreement Recording Committee, which will be set up consisting of officials from departments such as agriculture, animal husbandry, marketing, and rural development. Such a Committee can be set up at the district, taluka or block levels.

Issue Area

- The model Act requires the sponsor and the farmers to register the contracts with a registering and agreement recording committee. Registration imposes additional procedures and costs on the parties, and small and medium farmers cannot easily afford these costs.
- The bureaucratic hurdles instituted in the form of a new regulator to oversee contract enforcement will be counterproductive.

Way forward

- The government should focus on providing an enabling environment by fostering competition and bridging information asymmetries between farmers and buyers. Unless this ecosystem is provided, there is very little reason to believe that the new model Act can promote contract farming.

3. Deendayal Hastkala Sankul

- It is a trade facilitation centre for handicrafts – at Varanasi.
- This Centre would help the artisans and weavers showcase their skills to the world, and facilitate a brighter future for them.
- Deendayal Hastkala Sankul is a state-of-the-art facility to provide all-round support to weavers and artisans of Varanasi & nearby areas.
- The Crafts Museum in the Sankul will preserve the traditional handloom/handicrafts products of Varanasi and showcase the handloom & handicraft products, which will be an inspiration for the new generation, scholars, designers and tourists.

What is unique about the setup?

- The complex is equipped with automated Building Management Systems (BMS), central air conditioning and ventilation systems, power backup, fire protection and public address systems, lifts/escalators for ease of public movement on all levels and centrally monitored CCTV system for safety and security.

Significance

- It would result in increased demand of handicrafts
- It will improve earnings of artisans and showcase their creations in front of the world
- It will enable weavers/artisans enhance their income by directly engaging with domestic and international buyers.
- Boost the tourism potential of Varanasi, and indeed the economy of the city.

4. Energy Drinks

- The legislation that dealt with food safety in India was the Prevention of Food Adulteration Act, 1954

Food Safety and Standards Authority of India (FSSAI) Notification

- Companies selling beverages that have caffeine will have to abide by norms defined by the food regulator, FSSAI
- Non-alcoholic beverages with more than 145mg of caffeine per litre will be labelled as 'caffeinated beverage' and caffeine content in these beverages should not cross 300mg per litre irrespective of the source of the caffeine
- Earlier, the regulator had suggested an upper limit of 320mg.
- Besides disclosure of quantum of caffeine in the beverage, companies will have to mention on the labels that one should "consume not more than 500ml per day".

Carbonated Drinks

- Carbonated beverages, including colas, will not fall in the category unless the caffeine content crosses 145mg per litre. Carbonated beverages do not disclose the quantum of caffeine on the labels but state that the beverage contains caffeine

Issue Area

- Energy drinks have a very high content of caffeine and sugar that work at making you feel fresh and energized. And too much of caffeine can cause jitters, a fast heartbeat, and trouble sleeping
- Also, though the sugar provides a burst of energy, called as 'sugar crash' — when this energy wears off. This makes one feel very tired all over again.
- Presence of quinine, that's used in drinks for giving them the fizz, is Further, bad for the bones
- The high sugar content can lead to weight gain, and also cause cavities
- Adverse cardiovascular events related to consuming energy drinks, including abnormal heart rhythms (arrhythmias) or improper beating of the heart, whether irregular, too fast or too slow.

5. Energy Transition Index

- This is published by World Economic Forum's (WEF)
- The report titled *Fostering Effective Energy Transition*, ranks countries on how well they are able to balance energy security and access with environmental sustainability and affordability.

What did the report say?

- According to the report India has taken "bold measures" to improve energy access, energy efficiency, and to improve the deployment of renewable sources of energy.
- However, energy transition in the country will require "large investments, and an enabling environment and robust regulatory frameworks to support the transition"

- A considerable share of India's population still lacks access to electricity and clean cooking fuel

India

- India has been ranked at 78th, lower than its emerging market peers like Brazil and China, among 114 countries
- Between 2013 and 2018, India improved its performance score by 5.6 percentage points, mainly with improved energy access, reduced subsidies and reduced import costs

Other Countries

- Among its emerging market peers Brazil stood at the 38th place, Russia at 70th and China at 76th place. The overall list was topped by Sweden, followed by Norway at the 2nd position and Switzerland at the 3rd rank.

6. Fintech

Context

- The Centre has set up a steering committee to go into various issues relating to Fintech space in India.
- The committee will be headed by Subhash Chandra Garg, Secretary, Department of Economic Affairs.

Fintech

- Computer programs and other technology used to support or enable banking and financial services.
- Will look into the regulatory regime for the fintech industry and explore the creation of a regulatory 'sandbox model' to foster new ideas.

Sandbox

- A sandbox is a hub where regulators enable limited roll-out of new products to customers to ensure they do not pose any risk to consumers or to the stability of the sector.
- In general, a sandbox is an isolated computing environment in which a program or file can be executed without affecting the application in which it runs.

Other Areas

- The committee will work with government agencies such as UIDAI to explore creation and use of unique enterprise identification number.
- It will also look into the possibility of international co-operation opportunities in Fintech with countries such as Singapore, the U.K., China and others.
- The committee will consider means of using data with GSTN and data residing with information utilities such as credit information companies (CICs) and others in open domain with a view to developing applications for financing of micro, small and medium enterprises (MSMEs).

- It will also develop regulatory interventions e.g., regulatory sandbox model, that will enhance the role of Fintech in sectors identified for focused interventions. The idea is to facilitate ease of doing business in the Fintech sector.

7. Fugitive Economic Offenders Bill, 2018

- The Bill would help in laying down measures to deter economic offenders from evading the process of Indian law by remaining outside the jurisdiction of Indian courts.
- A Fugitive Economic Offender is a person against whom an arrest warrant has been issued in respect of a scheduled offence and who has left India so as to avoid criminal prosecution, or being abroad, refuses to return to India to face criminal prosecution.
- A scheduled offence refers to a list of economic offences contained in the Schedule to this Bill.
- Further, in order to ensure that Courts are not overburdened with such cases, only those cases where the total value involved in such offences is 100 crore rupees or more, is within the purview of this Bill.

Why was it required?

- The existing civil and criminal provisions in law are not entirely adequate to deal with the severity of the problem.
- It is, therefore, felt necessary to provide an effective, expeditious and constitutionally permissible deterrent to ensure that such actions are curbed.
- It may be mentioned that the non-conviction-based asset confiscation for corruption-related cases is enabled under provisions of United Nations Convention against Corruption (ratified by India in 2011). The Bill adopts this principle.

Salient features of the Bill:

- Application before the Special Court for a declaration that an individual is a fugitive economic offender;
- Attachment of the property of a fugitive economic offender;
- Issue of a notice by the Special Court to the individual alleged to be a fugitive economic offender;
- Confiscation of the property of an individual declared as a fugitive economic offender resulting from the proceeds of crime;
- Confiscation of other property belonging to such offender in India and abroad, including benami property;
- Disentitlement of the fugitive economic offender from defending any civil claim;
- An Administrator will be appointed to manage and dispose of the confiscated property under the Act.

If at any point of time in the course of the proceeding prior to the declaration, however, the alleged Fugitive Economic Offender returns to India and submits to the appropriate jurisdictional Court, proceedings under the proposed Act would cease by law. All necessary constitutional safeguards in terms of providing hearing to the person through counsel, allowing him time to file a reply, serving notice of summons to him, whether in India or abroad and appeal to the High Court have been provided for

Impact:

- The Bill is expected to re-establish the rule of law with respect to the fugitive economic offenders as they would be forced to return to India to face trial for scheduled offences.
- This would also help the banks and other financial institutions to achieve higher recovery from financial defaults committed by such fugitive economic offenders, improving the financial health of such institutions.
- It is expected that the special forum to be created for expeditious confiscation of the proceeds of crime, in India or abroad, would coerce the fugitive to return to India to submit to the jurisdiction of Courts in India to face the law in respect of scheduled offences.

Issue Area

- From the provision in the Code of Criminal Procedure for attachment of the property of 'proclaimed offenders', to sections in Acts targeting smugglers, foreign exchange offenders and traffickers in narcotics, proceedings for forfeiture of property have been marked by shortcomings and procedural delays.
- laws deemed draconian, such as the Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act, 1976, have not exactly been a success.
- Experience has shown that disposal of confiscated assets is not easy, especially at a price sufficient to recoup losses or pay off all creditors.
- Under the Fugitive Economic Offenders Bill, confiscation is not limited to the proceeds of crime, and extends to any asset owned by an offender, including benami property. Such clauses are liable for legal challenge, especially if there are third party interests and doubts about real ownership. Care must be taken to draft a law that is free from legal infirmities from the point of view of fundamental rights and due process.

Way Forward

- While the utility and effectiveness of laws are best assessed in the implementation, it is important to ensure they are fair and reasonable. The shortcomings in previous laws must be avoided, and the new legal regime impartially enforced.

National Financial Reporting Authority (NFRA)

Composition

- One post of Chairperson, three posts of full-time Members and one post of Secretary for NFRA.
 - * Chairperson shall be a person of eminence and having expertise in accountancy, auditing, finance or law to be appointed by the Central Government

Aim

- As per the Companies Act, 2013 the NFRA is tasked with the job of recommending accounting and auditing standards, ensuring compliance with them and overseeing the quality of service of the accounting and audit professions.
- It has also been given the power to investigate matters of professional misconduct by chartered accountants or CA firms, impose penalty and debar the CA or firm for up to 10 years.
- The Act states that "no other institute or body shall initiate or continue any proceedings in such matters of misconduct where the National Financial Reporting Authority has initiated an investigation."

Impact:

- The decision is expected to result in improved foreign/domestic investments, enhancement of economic growth, supporting the globalization of business by meeting international practices, and assist in further development of audit profession

Jurisdiction:

- The jurisdiction of NFRA for investigation of Chartered Accountants and their firms under section 132 of the Act would extend to listed companies and large unlisted public companies, the thresholds for which shall be prescribed in the Rules. The Central Government can also refer such other entities for investigation where public interest would be involved.
- The inherent regulatory role of Institute of Chartered Accountants of India (ICAI) as provided for in the Chartered Accountants Act, 1949 shall continue in respect of its members in general and specifically with respect to audits pertaining to private limited companies, and public unlisted companies below the threshold limit to be notified in the rules.
- Further, ICAI shall continue to play its advisory role with respect to accounting and auditing standards and policies by making its recommendations to NFRA.
- The Quality Review Board (QRB) will also continue quality audit in respect of private limited companies, public unlisted companies below prescribed threshold and also with respect to audit of those companies that may be delegated to QRB by NFRA.

8. Happiness Quotient

- The Madhya Pradesh government had set up the 'Anand Vibhag', or the happiness department, in 2016.

- Now, it is launching an exercise to interact with the people of the State and find out how happy they were.
- Questionnaire for this will come from the Indian Institute of Technology-Kharagpur (the only institute to have a happiness centre) to measure the happiness quotient of the State's residents

9. International Competition Network (ICN)

- It is an informal, virtual network that seeks to facilitate cooperation between competition law authorities globally.
- Its first annual conference was held in Naples, Italy in September 2002
- The ICN provides competition authorities with a specialized yet informal venue for maintaining regular contacts and addressing practical competition concerns.
- The ICN is a results-based, project-oriented organization
- ICN comprises 138 competition authorities from 125 jurisdictions.

India

- India to host 17th Annual Conference of International Competition Network 2018

Why have the ICN?

Economic globalization has resulted in an increasing number of investigations and reviews of mergers, cartels and unilateral conduct that transcend jurisdictional boundaries. Agencies need to cooperate with each other on cross-border cases in order to reduce the risk of:

- sub-optimal enforcement if an agency only has a partial picture of the situation; and
- Inconsistent outcomes if different jurisdictions reach different conclusions about the same practice.

The ICN helps facilitate cooperation and convergence, where appropriate. This is good for competition agencies, governments, businesses, and ultimately consumers

10. Krishi Unnati Mela

What is it?

- 'Krishi Unnati Mela' is aimed at creating awareness about the latest technological developments in the agriculture and allied sectors among farmers.

Theme

- The theme of the fair is doubling farmer's income by 2022.
- Theme pavilions on doubling farmers income, live demonstrations on micro-irrigation, wastewater utilisation, animal husbandry and fisheries are among the major attractions of the fair.

Jaivik Kheti Portal

- PM Narendra Modi has launched a new Jaivik Kheti Portal to promote organic farming / jaivik kheti across the country.

- This portal will promote Rasayan Mukh Bharat Abhiyan and prohibits the use of chemical fertilizers for farming purpose.
- Accordingly, this portal will provide information on important central government schemes – Rashtriya Krishi Vikas Yojana (RKVY), Paramparagat Krishi Vikas Yojana, Micro-irrigation and MIDH.

11. Lithium

- Lithium is part of the alkali metal group.
- It is highly reactive and flammable.
- Due to its high reactivity, it hardly occurs in the Free State in nature and is always found in the form of compounds.
- Under standard conditions, it is the lightest metal and the lightest solid element.

World Reserves

- Chile had the largest lithium reserves worldwide in 2017 by a large margin. Chile had an estimated 7.5 million metric tons of lithium reserves.
- China came in second with reserves estimated at 3.2 million metric tons. Mineral reserves are defined as those minerals that were extractable or producible at the time of estimate.
- Australia was the top country in terms of lithium mine production in 2017, producing 18,700 metric tons of lithium that year.
- Then comes Argentina and Portugal
- But in terms of Production
 - * Australia is the world leader in lithium production. Australia has the Greenbushes, which is the world's largest known single lithium reserve
 - * Chile produces the second most lithium
 - * China produces the third most lithium

Importance

- It powers electric vehicles (EVs).
- Lithium is used primarily in batteries, glass and ceramics, with other uses including rocket fuel and lasers.
- Lithium salts have proven to be useful as a mood-stabilizing drug in the treatment of bipolar disorder in humans.

India's first lithium ion battery facility

- Suzuki Motor will invest more than Rs 1,150 crore along with Japanese partners Toshiba and Denso to set up India's first lithium ion battery facility in Gujarat.
- It will be the location for the factory that will make rechargeable batteries for electric and hybrid vehicles.

12. LoU discontinuation by RBI

- A LoU is an assurance given by one bank to another to meet a liability on behalf of a customer.
- LoUs are used in international banking transactions.

- A LoU is issued for overseas import remittances and involves four parties — an issuing bank, a receiving bank, an importer and a beneficiary entity overseas.
- According to norms, the term of a LoU is 180 days, and can be rolled over once for six months.
- Since LoUs are a form of lending, they are typically backed by security.
- LoUs are conveyed from bank to bank through Society for Worldwide Interbank Financial Telecommunication (SWIFT) instructions
- It is also known as buyers' credit in banking parlance — because of their attractive pricing.

Facts

- It is estimated that overall, bank finance for imports into India is around \$140 billion, of which over 60% is funded through such buyers' credit.

RBI has clamped down and issued directives saying that existing Letters of Undertaking would be honoured,

It will impact

- Reserve Bank of India's decision to discontinue issuance of LoU/Letter of Comfort (LoC) for trade credits
- A number of SMEs are extremely dependent on LoUs for raising funding at a reasonable cost. These SMEs are involved in exports and are tier-1 suppliers to large corporates.
- According to industry estimates, around 25,000 small firms and 75,000 medium-sized firms will be affected by the ban.
- The gems and jewellery sector, the pain would be prolonged because LoUs were the main source of funding.
- Even exporters who use imported material to make goods for exports.
 - * Indian traders aren't having a good time fighting global restrictions (protectionist policies in developed markets/ trade wars), problems in the domestic market (demand, labour), and currency imbalances across markets. Banning of LoUs will hit exporters hard since they use these instruments heavily to buy raw materials that are used to make export materials.
 - * The seriousness of the problem is best illustrated by the fact that Indian exports of goods and services, as a percentage of gross domestic product (GDP) in the September 2017 quarter, was lower than what it was 12 years ago, in the September 2005 quarter

'Not much impact'

- According to exporters' body FIEO, the discontinuation of Letter of Undertaking (LoU) and Letter of Comfort (LoC) by the RBI will not have much impact on trade as such instruments are being used by just about 5 per cent of importers.

Where is actual problem?

- RBI didn't have adequate powers to regulate public sector banks, and it could not remove any of their directors or liquidate such a lender, as it can in the case of private sector banks.

RBI has Powers

- Very much like the government exercising control through the board and through circulars, even the RBI has a board position in each public sector bank.
- Further, the RBI representative is on the management committee (that approves loans beyond a certain ticket size), the audit committee, the committee of directors (for reviewing vigilance cases) and the remuneration committee of each of these banks. So, not only does the RBI have regulatory oversight, it has board and sub-committee presence in each public sector bank, which should give the RBI much greater insights than it would get into a private bank.
- Also, the RBI is party to the selection of the whole-time directors of the bank through the selection committee and through its membership on the Banks Board Bureau.
- The RBI has powers to remove the non-official directors appointed by the Union government as well as the shareholder directors if they do not fulfil the fit-and-proper criteria— section 3AB and 3B of the Banking Companies (Acquisition and Transfer of Undertakings) Act.
- Moreover, the RBI has powers to appoint an additional director as per section 9A of the above Act. Theoretically, the RBI has a significant say in the constitution of the board of a public sector bank.

While there is a great deal of reform to be undertaken in the governance and management of public sector banks, the line that the governor has taken, of inadequate powers to act, may be untenable. The framework for the exercise of powers in private sector banks is different from the framework for public sector banks. This has to be recognized.

Way forward

- The RBI's stance is valid, as is its discomfort with knee-jerk reactions and the blame games since the fraud came to light.
- In the very same vein, its omnibus ban of LoUs will impact the \$85 billion buyers' credit market that was mostly conducted in accordance with the law of the land.
- If an individual or some failed systems of a bank were indeed to blame, why should bona fide transactions suffer? Perhaps the RBI could have tightened the norms for LoUs and introduced safeguards based on the latest learnings. It is still not too late to do that.
- The RBI must strengthen and tighten existing regulations rather than completely discontinue a legitimate product

13. Pesticide Management Bill, 2017

- The centre released a draft of the bill, intended to replace the existing Insecticides Act of 1968
- Regulate all pesticides, not just those insecticides that appear in the Schedule of the 1968 Act;
- Lay down a condition that every pesticide should have its expected performance disclosed and usage instructions included in its application for registration;
- Increase penalties for different kinds of offences;
- The bill raised penalties on the sale of prohibited or spurious pesticides to Rs50 lakh and up to five years' imprisonment, from the current Rs2,000 and up to three years' imprisonment.
- Expand the constitution of the Central Insecticides/Pesticides Board to include new departments and farmer representatives

Advantages

- The Bill, however, diversifies representation on the Central Insecticide Board. It proposes to include farmers, state-level directors of agriculture from various agro-climatic zones and members of institutions such as the National Institution of Occupational Health and the Central Groundwater Board.
- The Insecticide Act does not specify guidelines for registering chemicals used as fungicides or weedicides. If this Bill is passed, it will apply to any biological and chemical substances used on plants, including fungicides, weedicides, herbicides and biopesticides.

Issues

- The Anupam Verma Committee review of 66 pesticides has shown that without independent data generation on the safety of pesticides, reviews are relying on the pesticides industry for the data. This is ridden with conflict of interest.
 - * The Anupam Verma Committee, set up to review the continued use of 66 pesticides that have been barred/restricted for use in farming in other countries, has recommended a ban on 13 'extremely hazardous' pesticides, phasing out of six 'moderately hazardous' ones by 2020, and review of 27 pesticides in 2018.
 - * This is the first time a decision to ban such a big number of pesticides was taken. There are 261 pesticides registered in India but only 28 had been banned so far.
- The proposed Bill does not strengthen the hands of the state governments in any significant way. Agriculture is a state subject according to the Constitution. The Bill should empower the state governments not just in terms of licensing of trade but also give them a role in the registration process, an authority to prohibit or place restrictions on the sale of a pesticide, to regulate marketing and advertising and to lay down conditions that sale should be against prescription by specified authorities.

- The Bill extends the duration of the ban that the states can impose from 90 days to 240 days. But the power to grant or revoke registration of all pesticides sold in India will continue to vest with the Central Insecticide Board and its Registration Committee, which govern the manufacture, sale and use of insecticides across the country.
- the draft bill does not provide for automatic review of cleared pesticides after several years of usage, and farmers and labourers will not be able to seek compensation
- The draft which comes almost nine years after a similar Bill was introduced in Parliament by the then UPA government
 - * The Parliamentary panel then had suggested that pesticide inspectors should also be held responsible for growth and approval of spurious pesticide, which the new draft hasn't incorporated.

Way forward

- The pesticides industry should be mandated to give a part of their turnover for a fund that will go to state governments, which in turn will generate independent data, and also to set up adequate surveillance and checks that make regulation scientific and effective.

14. Shakti Sthala world's largest solar park

- The world's largest solar park, Shakti Sthala, has a capacity of 2,000 MW and has set up at an investment of Rs16,500 crore at Pavagada in Karnataka's Tumakuru district
- The solar project, touted as the largest in the world, is spread over 13,000 acres and five villages. It is part of the "Karnataka Solar Policy 2014-2021" which aims to decrease dependence on traditional power sources and move to environmentally friendly ones to meet the growing power needs of the state.
- The park ties in with the centre's scheme to generate 100 gigawatts (GW) of solar power by 2020.

15. Serious Fraud Investigation Office (SFIO)

- It is a fraud investigating agency
 - * This office was set up to investigate corporate frauds of very serious and complex nature.
 - * The mandate of SFIO is limited to investigating frauds relating to a company under the Companies Act and its investigation is considered separate from other normal investigation into the affairs of the company.
- It is under the jurisdiction of the Ministry of Corporate Affairs
- The SFIO is involved in major fraud probes and is the co-ordinating agency with the Income Tax Department and the Central Bureau of Investigation.

Why was it setup?

- SFIO was set up in the backdrop of stock market scams of 2000-02, failure of non-financial banking companies, phenomena of vanishing companies and plantation companies.
- Based on the recommendation of Naresh Chandra Committee on corporate governance (which was set up by the Government on 21 August 2002) and in the backdrop of stock market scams as also the failure of non-banking companies resulting in huge financial loss to the public, Vajpayee Government decided to setup SFIO on 9 January 2003

As per the resolution of 2nd July 2003, SFIO is to take up only investigation of frauds characterized by:

- complexity, and having inter-departmental and multi-disciplinary ramifications;
- substantial involvement of public interest to be judged by size, either in terms of monetary misappropriation, or in terms of the persons affected, and
- The possibility of investigations leading to, or contributing towards, a clear improvement in systems, laws or procedures.

Process

- SFIO gets into the investigation only upon receiving an order from the central government in this regard.
- In other words, it cannot take up cases suo moto.
- Further, if any case has been assigned by the Central Government to the SFIO for investigation under Companies Act, 2013 no other investigating agency of the Central Government or any State Government can proceed with investigation in such cases and in case any such investigation has already been initiated, it cannot be proceeded further with, and the concerned agency have to transfer the relevant documents and records in respect of such offences to Serious Fraud Investigation Office.

Can they Arrest?

- The Serious Fraud Investigation Office (SFIO) now has powers to arrest people for violations of companies law
- The director as well as additional or assistant director level officials at the SFIO can arrest a person if they believe he or she is guilty of any offence with regard to the case being probed
- The SFIO director would be the competent authority for all decisions pertaining to arrest.
- The arrest of a person in connection with a government or a foreign company under investigation can be made by the SFIO only "with prior written approval of the central government".
- The SFIO would maintain an arrest register which would have entries about particulars of the arrestee, date and time of arrest as well as other relevant information pertaining to every arrest made by the agency's officers.

Vanishing Companies

Company would be deemed to be a vanishing company, if it is found to have:

- Failed to file returns with Registrar of Companies (ROC) or with Stock Exchange (if it continues to be a listed company) for a period of two years;
- It is not maintaining its registered office at the address notified with the Registrar of Companies/ Stock Exchange; and
- None of its Directors are traceable.

Criteria

- The criteria for "vanishing companies" are identified by the Coordination and Monitoring Committee (CMC)- a joint mechanism between the securities market regulator, Securities and Exchange Board of India (SEBI), the central bank, RBI and the Ministry of Corporate Affairs (MCA) - set up by Government of India in 1999.

16. Sukhad Yatra App

- It is a mobile application has been prepared by National Highways Authority of India, to empower the Highway user.
- The key feature of the app includes provision for the user to enter road quality-related information or to report any accident or pothole on the highway.
- It also provides users with real-time data related to waiting time expected at Plazas and various facilities like points of interest, highway nest/nest mini, etc., available across the highway.
- The app can also be used by the users to purchase the FASTag tag and further facilitate the highway user experience.

A toll-free number, 1033, will enable users to report an emergency condition, or highway-related feedback, across the highway. The service has also integrated with various ambulance/tow away services along the road to ensure rapid response time in emergency. The service is supported by a multi-lingual support and user location tracking features to provide the user with accurate and responsive complaint resolution.

17. Udyam Sakhi Portal

- Ministry of Micro, Small & Medium Enterprises
- The portal is a network for nurturing entrepreneurship and creating business models for low cost products and services in order to empower women and make them self-reliant and self-sufficient.
- The portal provides assistance through its platform for entrepreneurship learning tools, incubation facility, training programs for fund raising, providing mentors, one-on-one investor meet, provide market survey facility and technical assistance.

18. World Happiness Index

- The World Happiness Report is a measure of happiness published by the United Nations Sustainable Development Solutions Network.
- The report takes into account GDP per capita, life expectancy, social support and freedom to make life choices as indicators of happiness.
- In those surveys, people give scores from 1 to 10 on how much social support they feel they have if something goes wrong, their freedom to make their own life choices, their sense of how corrupt their society is and how generous they are.
- It was first published in 2012.

2018 March

- India has been ranked 133rd in a global list of the happiest countries
- It is a drop of 11 places from last year's 122nd rank.
- The country was ranked 118th in 2016.
- India's ranking was far behind from other neighboring countries such as Pakistan, Nepal and China
- Myanmar has been placed at 130th position.
- Among the South Asian Association for Regional Cooperation (SAARC) countries,
 - * Pakistan was ranked 75th
 - * Bhutan has been placed at 97th rank
 - * Nepal was ranked at 101st
 - * Bangladesh is ranked at 115th
 - * Sri Lanka at 116th position.
 - * Afghanistan fared worse than India ranked 145th.

Performance of various countries:

- Finland, which was ranked 5th last year, displaced Norway to be the world's happiest country. Norway dropped to 2nd position in the index.
- The United States, which was ranked 14th last year, dropped four places to be at 18th position, while the United Kingdom was ranked 20th respectively.
- The African countries - Tanzania (153rd), South Sudan (154th), Central African Republic (155th) and Burundi (156th) occupied the bottom positions in the happiness index.

19. Discrimination in health insurance policies "unconstitutional"

- In a significant judgment, the Delhi High Court termed "unconstitutional" for discrimination in health insurance policies of individuals with genetic disorders.

Present Status

- Most policies have exclusionary clauses that deny clients' claims if they suffer from such disorders

What did the Judgement Say?

- "The exclusionary clause of 'genetic disorders,' in the insurance policy, is too broad, ambiguous and discriminatory — hence violative of Article 14 of the Constitution,"
- The court directed the Insurance Regulatory Development Authority of India to re-look at the exclusionary clauses in insurance contracts and ensure that insurance companies do not reject claims on the basis of exclusions relating to genetic disorders.
- The court further said that insurance companies are free to structure their contracts based on reasonable and intelligible factors which should not be arbitrary and in any case cannot be 'exclusionary'.

Context

- The Patient was suffering from Hypertrophic Obstructive Cardio Myopathy (HOCM).
- On claiming insurance cover United India Insurance Company Limited had rejected. The trial court then directed it to honor the medical claim of a person who was suffering from genetic disorder.

HOCM

- HOCM is an autosomal dominant genetic disorder in about 60% of cases. The remainder are related to spontaneous mutations.
- A condition in which the heart muscle becomes abnormally thick. This makes it hard for the heart to pump blood.
- HOCM is an autosomal dominant genetic disorder in about 60% of cases. The remainder are related to spontaneous mutations.

20. CAG flags Railways' parlous finances

Context

- The reported operating ratio of 96.5% in 2016-17 does not reflect the true financial performance of Indian Railways, as this would have deteriorated to 99.54% if the actual expenditure on pension payments was taken into account, according to the CAG report tabled in Parliament.
- An operating ratio of 99.54% means that Railways is spending 99.54 paise to earn 100 paise.

Revisiting the passenger and other tariffs to reduce losses in core activities

- The practice of issuing of free and concessional fare passes [or] tickets to various beneficiaries needs to be scaled down
- The CAG said passenger fares and freight charges should be based on the cost involved so that it brings both rationality and flexibility in pricing, considering the financial health of Railways and the current market scenario.
- The huge backlog of renewal and replacement of over aged assets in railway system needs to be addressed for safe running of trains.

- There is a need to strengthen internal control mechanisms to reduce instances of misclassification of expenditure
- The Indian Railways should follow the system of disclosing significant accounting policies forming the basis of preparation of financial statements such as accounting of fixed assets, depreciation and investments.

21. SEBI for phased roll-out of governance norms

Context

- SEBI plans to introduce new corporate governance norms as proposed by the Kotak Committee, in a phased manner for listed entities, with only the bigger companies required to comply in the initial phase as opposed to all the listed companies.

Uday Kotak Committee

Sebi has set up a committee under the chairmanship of Uday Kotak to advise it on issues relating to corporate governance in Indian firms.

- **Minimum number of board of directors:** The Committee has proposed that now board of directors shall comprise not less than six directors. Also board of directors shall have an optimum combination of executive and non-executive directors with at least one woman as an independent director and not less than 50% of the board of directors shall comprise of non-executive directors.
- **Minimum number of board meetings:** These boards shall meet at least 4-5 times a year, with a maximum time gap of one hundred and twenty days between any two meetings and at least once a year. Under this meeting, the board shall specifically discuss strategy, budgets, board evaluation, risk management, ESG (environment, sustainability and governance) and succession planning. Listed entity shall, at least once every year, undertake a formal interaction between the non-executive directors and the senior management.
- **Minimum compensation and remuneration:** Top 500 listed entities by market capitalisation shall pay compensation to each independent director as Rs 5 lakh per annum, whether through sitting fees or profit linked commissions. Provided that, this provision will not apply in case of inadequacy of profits in accordance with Section 197 of Companies Act, 2013 – minimum sitting fees for every board meeting of Rs 50,000 for top 100 entities by market capitalisation and Rs 25,000 for next 400 entities.
- The panel proposed that **audit committees** should monitor the flow of funds to unlisted subsidiaries, including those established overseas, and that listed entities should put in place proper regulatory framework while sharing unpublished price-sensitive information with promoters or any other significant shareholders.

Compliance conditions

- Board of the regulator, which has representation from the government and the Reserve Bank of India (RBI), will also review the compliance requirements for investors wanting to trade in the derivatives market. This is part of the regulator's attempts to ensure that only well-informed investors with the required risk appetite trade in derivatives.
- The regulator is likely to make it compulsory for brokers to insist on the net worth certificates of investors who want to trade in the derivatives segment beyond a certain threshold limit, so as to ensure that the exposure is well within the risk taking capacities of the individual.

22. Time to move beyond subsidies

What is the allegation?

The complaint of the United States Trade Representative (USTR) is that India is violating its commitments under the Agreement on Subsidies and Countervailing Measures (SCM Agreement) using five of the most used export promotion schemes, namely,

- The export-oriented units scheme and sector-specific schemes, including
 - * Electronics hardware technology parks scheme,
 - * Merchandise exports from India scheme,
 - * Export promotion capital goods scheme,
 - * Special economic zones and
 - * Duty-free import authorization scheme.

Violations

- The main argument of the USTR is that India's five export promotion schemes violate Articles 3.1(a) and 3.2 of the SCM Agreement, since the two provisions prohibit granting of export subsidies.

How is this benchmark decided?

- Until 2015, India had the flexibility to use export subsidies as it is among the 20 developing countries included in Annex VII of the agreement that are allowed to use these subsidies as long as their per capita Gross National Product (GNP) had not crossed \$1,000, at constant 1990 dollars, for three consecutive years.
- Annex VII Countries
 - * Least-developed countries designated as such by the United Nations which are Members of the WTO.
 - * Other developing country Members with a GNP per capita less than \$1,000 per annum
- This provision applicable to the Annex VII countries was an exception to the special provisions provided to the developing countries (the so-called "**special and differential treatment**") for phasing out export subsidies.

- **Except Annex VII countries, all other developing countries were allowed a period of eight years from the entry into force of the WTO Agreement, i.e. 1995, to eliminate export subsidies.**
- India had crossed the \$1,000 GNP per capita threshold in 2015 became known when the WTO Secretariat produced its calculations in 2017.
- An interpretation provided in a 2001 report of the Chairman of the Committee on Subsidies and Countervailing Measures, which is also considered as the document providing the methodology for implementing Annex VII of the agreement, says that countries **like India must eliminate export subsidies immediately upon crossing the above-mentioned threshold.**

Extension sought

- In a submission made in 2011, India, along with Bolivia, Egypt, Honduras, Nicaragua and Sri Lanka, argued that the Annex VII countries should be eligible to enjoy the provisions applicable to the other developing countries, namely, those that had GNP per capita above the threshold.
- Additionally, they were allowed to enter into consultations with the Committee on Subsidies and Countervailing Measures, not later than one year before the expiry of the transition period, to determine if there was a justification for the extension of this period, after examining all of their relevant economic, financial and development needs.
- But this proposal, like all other proposals made as a part of the Doha Round negotiations, remains unaddressed.

US advances in the past

- It needs to be pointed out that this is not the first time that the U.S. has put India's export promotion schemes under the scanner; although this is the first instance when it's Trade Administration has initiated a WTO dispute involving these schemes.
- In 2010, the U.S. had questioned the export incentives provided to the textiles and clothing sector as a whole, arguing that this sector had a share in global trade exceeding 3.25% and had therefore become export competitive.
 - * The U.S. in the past has pointed out that according to Article 27.5 of the SCM Agreement, any Annex VII **developing country which had reached export competitiveness in one or more products must gradually phase out export subsidies on such products over a period of eight years.**
- There was, therefore, considerable pressure on the Department of Commerce to consider its future strategies regarding export promotion schemes.

Foreign Trade Policy (FTP)

- The Foreign Trade Policy (FTP) of the National Democratic Alliance government unveiled in 2015 did some serious introspection about the future of export promotion schemes, the first time that any government had done so
- The policymakers recognized that the extant WTO rules and those under negotiation were aimed at eventually phasing out export subsidies.
- The FTP took this as a pointer to the direction which export promotion efforts in the country must take in the future: **a movement towards more fundamental systemic measures and away from incentives and subsidies.**
- A similar note was sounded in the **mid-term review of the FTP released in December 2017.**

What is the issue now?

- Contrary to the pronouncements made in the FTP, the government has continued to increase its outlays on export promotion schemes.
- In 2016-17, the total outlay on export promotion schemes was Rs. 58,600 crore, an increase of more than 28% in three years.
- During this period, the largest export promotion scheme in place currently, the Merchandise Exports from India Scheme (MEIS), was introduced to promote exports by offsetting the infrastructural inefficiencies faced by exports of specified goods and to provide a level playing field.
 - * This helps to increase the MEIS benefits for all labour-intensive and MSME sector products by 2%.

Way forward

- While the real impact of these subsidies has never been clearly measured, what has been quite evident is they have benefited the rent-seekers.
- There is, therefore, **a strong case for the government to invest in trade-related infrastructure and trade facilitation measures**, which can deliver tangible results on the export front.

23. Algorithmic Trading/Algo Trading /Black Box Trading

- It is a trading system that utilizes advanced and complex mathematical models and formulas to make high-speed decisions and transactions in the financial markets.
- Algorithmic trading involves the use of fast computer programs and complex algorithms to create and determine trading strategies for optimal returns.
- Algorithmic trading is not an attempt to make a trading profit. It is simply a way to minimize the cost, market impact and risk in execution of an order
- It is widely used by investment banks, pension funds, mutual funds, and hedge funds because these institutional traders need to execute large orders in markets that cannot support all of the size at once.

What is the need for regulation?

- To minimize instances of misuse of such systems
- Instances of flash crashes that have happened overseas, and also in India a few times, could be minimized.

Steps taken in the past

- India is one of the very few countries in the world which has mechanism for controlling the misuse of algo. SEBI provided for high order to trade ratio penalty system. This penalty would be enhanced further

Background:

- Many countries and regulators, including the International Organization of Securities Commissions (IOSCO), have been debating on this issue for many years, only India had been able to come out with proper regulations.

24. Integrated Scheme for Development of Silk Industry

- The core objective of the scheme is to improve the productivity and quality of silk through R&D intervention.
- The scheme will promote Women Empowerment and livelihood opportunities to SC/ST and other weaker sections of the society. The scheme will help to increase productive employment from 85 lakhs to 1 crore persons by 2020.

The Scheme has four components

- Research & Development (R&D), Training, Transfer of Technology and IT Initiatives
- Seed Organizations and farmers extension centres
- Coordination and Market Development for seed, yarn and silk products
- Quality Certification System (QCS) by creating amongst others a chain of Silk Testing facilities, Farm based & post-cocoon Technology Up-gradation, and Export Brand Promotion.

Impact:

- The scheme is expected to increase the silk production
- The scheme aims to achieve self-sufficiency in silk production by 2022

25. MCX launches world's first brass futures contracts

- Multi Commodity Exchange of India (MCX) launched futures trading in brass for the first time globally, which will facilitate brass stakeholders to hedge their price risk.
- Brass futures will not only provide its stakeholders with a more organised and robust price discovery platform, but will also help them to use a national level benchmark price as a ready reference to enable them to mitigate their price risk
- MCX Brass futures is the first non-ferrous contract with compulsory delivery option.

Significance

- The contract will lead to best price discovery for brass, which is of key relevance to its stakeholders including importers, exporters, manufacturers, refiners, and processors among others in the country
- MCX would provide a price discovery platform to the physical market participants and thus the brass value chain would get a single price to benchmark and hedge their risk exposure

Brass

- Brass is an alloy, which primarily contains around 55-60 per cent copper and the rest is zinc, with small amounts of lead and iron.

Production and imports

- The estimated annual production of brass in India is approximately between 100,000-150,000 tonne, which includes production through primary metal and recycled brass.
- India imports huge quantities of brass scrap from the US, the Middle East, Africa and Europe which is then separated and recycled to make brass.
- It is the largest exporter of finished brass products.
- Out of the 5,000 small and medium units producing brass in the country, about 3,000 are located at Jamnagar, accounting for 80 per cent of the brass produced in India. The rest of the companies are spread across Moradabad in Uttar Pradesh and Jagadhari in Haryana.

Uses

- It is used in industries like electrical appliance, marine engines, pump parts, switch gears, sanitary ware, automobiles and defence.

26. North-East Industrial Development Scheme (NEIDS)

- The Union Cabinet has approved this scheme with financial outlay of Rs.3000 crores upto March, 2020
- Under the Scheme incentives shall be provided to new industrial units that will be set up in the North Eastern States including Sikkim
- Government will incentivize primarily the MSME Sector through this scheme.
- Government is also providing specific incentive through the scheme to generate employment.

27. Payment of Gratuity (Amendment) Bill 2017

- Gratuity is a monetary benefit given by the employer to his employee at the time of retirement.
- It is a defined benefit plan where no contributions are made by the employee.

Background

- Introduced in 1972, the Act was enacted to provide for a scheme for the payment of gratuity to employees engaged in factories, mines, oilfields, plantations, ports, railway companies, shops and other establishments.

- Employees who have rendered a minimum five years of continuous service with the establishment employing ten or more persons fall under the Act.
- The Payment of Gratuity Act follows the rule of 'Once Covered, Always Covered'. This means that once an organization comes under the Act, it will always remain covered even if the number of employees falls below 10.
- Even if the organization has less than 10 employees, the law does not restrict the employer from paying gratuity to his employees.

The 2017 bill seeks to amend the Act on two issues.

- First, it empowers the government to notify the period of maternity leave eligible for qualifying as continuous service and determine the amount of gratuity available to employees.
 - * Under the Act, the maximum maternity leave (Section 2A) was based on the maternity leave stated under the Maternity Benefit Act, 1961. After the amendment of the Maternity Act in 2017, the maximum maternity leave under the Maternity Act was changed from 12 weeks to 26 weeks. The present bill sought to remove the reference of 12 weeks in the Act and empowers the government to notify the maximum maternity leave.
- Secondly, the Act had introduced a ceiling of Rs. 10 lakh on the maximum amount of gratuity payable to an employee through an amendment in 2010.
 - * The provision was based on the Central Civil Services (Pension) Rules, 1972 enacted for government employees.
 - * After the implementation of the 7th Central Pay Commission, the ceiling gratuity for Central Government employees has been enhanced from Rs. 10 lakh to Rs. 20 lakh.
 - * Seeking to amend the current provision (Section 4) of the Payment of Gratuity Act, 1972, the bill empowers the government to notify the ceiling proposed instead of amending the Act.
 - * This amendment was sought so that the limit can be revised from time to time with the increase in wage and inflation and future pay commissions.

28. Toll-operate-Transfer (ToT) model

Context

- Macquarie Group wins India's first ToT project with a bid of Rs9,681.5 crore
- It is a Sydney-based infrastructure asset management company

ToT

- Under this newly launched ToT model, the right to collect user-fee or toll on selected national highway stretches built through public funding is proposed to be auctioned and assigned to a concessionaire for a period of 30 years against an upfront payment of a lump-sum amount to the government.

- The concessionaire is also responsible for the operation and maintenance of the roads during the tenure.
- The model concession agreement also seeks to address the risks associated with such a long concession contract, with several provisions designed to deal with eventualities like roadway expansion, high toll traffic variation, etc., to ensure that concessionaires are not exposed to undue risks.

Merits

- Various national highways will be auctioned in bundles for a stipulated period to generate funds for India's ambitious road building project
- Once it is successful in the highways sector, other sectors such as power transmission, oil and natural gas could replicate the same model, thereby unlocking the huge off budget funding\

29. Voluntary Vehicle Fleet Modernization Programme (V-VMP)

Under V-VMP, the road ministry has proposed that vehicle owners scrapping their old vehicles will get monetary incentives to buy a new vehicle in three forms to aid adoption of this programme:

- Scrap value from old vehicle
- Automobile manufacturers' special discount
- Partial excise duty exemption.
- The scheme is likely to be applicable on **vehicles are below BS IV standards.**

30. Discrimination in health insurance policies "unconstitutional"

- In a significant judgment, the Delhi High Court termed "unconstitutional" for discrimination in health insurance policies of individuals with genetic disorders.

Present Status

- Most policies have exclusionary clauses that deny clients' claims if they suffer from such disorders

What did the Judgement Say?

- "The exclusionary clause of 'genetic disorders' in the insurance policy, is too broad, ambiguous and discriminatory — hence violative of Article 14 of the Constitution,"
- The court directed the Insurance Regulatory Development Authority of India to re-look at the exclusionary clauses in insurance contracts and ensure that insurance companies do not reject claims on the basis of exclusions relating to genetic disorders.
- The court further said that insurance companies are free to structure their contracts based on reasonable and intelligible factors which should not be arbitrary and in any case cannot be 'exclusionary'.

Context

- The Patient was suffering from Hypertrophic Obstructive Cardio Myopathy (HOCM).
- On claiming insurance cover United India Insurance Company Limited had rejected. The trial court then directed it to honor the medical claim of a person who was suffering from genetic disorder.

HOCM

- HOCM is an autosomal dominant genetic disorder in about 60% of cases. The remainder are related to spontaneous mutations.
- A condition in which the heart muscle becomes abnormally thick. This makes it hard for the heart to pump blood.
- HOCM is an autosomal dominant genetic disorder in about 60% of cases. The remainder are related to spontaneous mutations.

Genetic disorders now part of Insurance Schemes

- In a significant directive, the Insurance Regulatory and Development Authority of India (IRDAI) has asked insurers not to reject claims on the basis of exclusions related to genetic disorders.
- The directive comes in the wake of a recent judgment of the Delhi High Court in the case of United India Insurance Company Ltd vs Jai Parkash Tayal, which held that the exclusionary clause arising from 'genetic disorders' in the policy is violative of Article 14 of the Constitution.
- It also asked insurance companies not to include 'Genetic Disorders' under the list of exclusions in new health insurance policies issued in respect of their existing products and also in the new products launched or filed under the existing norms for health insurance products.

31. Renewable energy as a champion sector

Ge India currently meets almost 90% of its annual requirement of solar panels through imports (mainly China), impeding the growth of a nascent domestic solar manufacturing sector.

Policy support for the solar sector is increasingly focussed on domestic manufacturing, both in the form of capital subsidies and considerations of trade regulation.

Distortions

- First, implementing trade remedies that have anti-competition implications has become commonplace, with clean energy becoming its newest victim.
 - * Two large solar energy markets, India and the United States, have either imposed or are contemplating the imposition of safeguards duty on solar panels.
 - * Trade remedies are attractive because they create tangible short-term benefits such as job creation, reduction in trade deficit, and higher local tax collection.

- * However, such a move would also result in higher tariffs and make solar power less attractive for the already financially strained and RE-sceptical utilities.
- Second, it is vital that **India remains compliant with the global trade regime..**
 - * Previous measures (for example, the Domestic Content Requirement or DCR scheme) to assuage the concerns of the domestic solar manufacturers were challenged and overturned at the World Trade Organization (WTO).
 - * The DCR scheme did not impose any restrictions on imported sources and only sought to secure an assured market for domestically manufactured panels.
 - * Other countries opposed the scheme as it discriminated against foreign solar cell suppliers.
 - * Council on Energy, Environment, and Water (CEEW) analysis suggests that backing this programme could generate only 31,200 jobs as against one million full-time job opportunities had India followed through in achieving its solar and wind energy targets of 160 GW
- Third, India's solar sector is currently caught in **inter-ministerial cross-fire.**
 - * The severity of the issue is evident in the power given to both the Ministry of Finance (MoF) and the Ministry of Commerce and Industry (MoCI) to implement trade remedies (safeguard duties and anti-dumping duties or ADD, respectively).
 - * Further, the Ministry of New and Renewable Energy (MNRE) has been grappling with issues posed by the MoF regarding the re-classification of solar panels as electrical motors (the current classification is photosensitive semiconductor devices), imposing additional duties and cesses on importers.
 - * An inter-ministerial committee headed by the MNRE must be constituted to coordinate moves among the MoF, the MoCI, the Ministry of Power, and the Central and State Electricity Regulatory Commissions. This committee should consider deliberate policy and regulatory nudges and broader government fiscal concerns.
- Fourth, developers and manufacturers in the **sector need to voice their needs clearly and respond to policy implications in an unequivocal manner.**
 - * Emergence of differences within these groups has led to problems. Multiple industry associations, each claiming to represent the interest of the majority.
 - * To ensure a long innings for the sector, the industry needs one unified voice representing the key concerns of each stakeholder-category, without ignoring the broader interests of the sector.

Way forward

Effectively balancing India's goals of energy access, enhanced energy security, and climate ambition, is not impossible, but definitely difficult.

- * To get ahead in that race, India will need a comprehensive strategy on issues such as effective sourcing of critical minerals, investment in R&D, access to patient venture capital, and fiscal benefits for the industries of the future.
- * The sector urgently requires a clear strategy and a coordinated approach to reduce the variables that make for an uncertain market.

32. Trade warContext

- U.S. President Donald Trump announced tariffs on up to \$60 billion of Chinese goods.

Details

- The threat of a global trade war sent stock markets sliding and investors rushing for the safety of currencies like the yen and government bonds
- Another bruising week for stocks has left global equity markets heading for their first quarterly loss since early 2016 as a spike in volatility, rising inflation and the specter of a trade war spooked investors who had enjoyed a multi-year bull run.
- European stocks fell broadly, with the Euro Stoxx index dropping 0.9 percent.

Why is this being done?

- The United States runs a \$375 billion goods trade deficit with China.
- The tariffs and investment restrictions will be imposed under the U.S. Trade Representative's "Section 301" investigation into alleged misappropriation of U.S. intellectual property by China.

China

- China announced plans for reciprocal tariffs on 128 U.S. products that include pork, wine, fruit and steel.
- Beijing said it will take measures against the U.S. goods in two stages if it cannot reach an agreement with Washington.

Safety

- Amid the uncertain global economic climate, investors seeking safer assets jumped into government bonds in Europe and the United States.
- Many investors also turned to the Japanese yen, a currency likely to benefit from a full-fledged trade war.

Raghuram Rajan

- Global economic recovery could be hit if the trade war between the U.S. and China escalates
- He advised that one should stay away from a trade war particularly at a time when the economy the world over was in the process of recovery.

33. Set aside divestment proceeds for sick PSUs' revival: panel

- A Parliamentary panel has recommended the earmarking of a defined portion of proceeds from the divestment of State-owned enterprises for funding revival, restructuring and modernization proposals of sick public sector undertakings (PSUs) that have the potential to turn around.

Divestment target

- The government had set a target of raising Rs. 80,000 crore in 2018-19 by selling stakes in the State-owned firms, with strategic divestment of 24 CPSEs (central public sector undertakings) on the cards and privatization of Air India on track.
- Besides, NITI Aayog is preparing another list of sick PSUs that can be privatized
 - * The Prime Minister's Office (PMO) had asked the think-tank to look into the viability of sick State-run companies.
 - * The Aayog had already recommended strategic divestment of 40 sick public sector undertakings.
- In its report, the Parliamentary Standing Committee on Industry said it was of the firm opinion that while making a decision to disinvest PSUs, especially those that are profit-making, the government must accord due consideration to the jobs supported by them, the track record of their contribution to the national economy, their capex (capital expenditure) creation potential and also their role in balancing the social/regional fabric.
- The committee observed that timely approval of revival/restructuring/modernization plans of CPSEs with accurate cost estimates, availability of funds with the government and the timely disposal of such funds are crucial factors.

34. Adulterators to face life imprisonment

- The Maharashtra government will impose exemplary punishment on food and milk adulterators, and plans to increase the penalty up to life imprisonment.
- Govt will follow the law commission of India's report of 2017 to curb adulteration

Penalties

- The Law Commission's report had recommended amendment to the Indian Penal Code (IPC), increasing the fine from ₹1,000 to ₹10 lakh
- Amendments to Sections 272 (adulteration of food and drinks) and 273 (sale of noxious food).
- impose a minimum punishment of 10 years and maximum of life imprisonment on food and milk adulterators

35. Air India Disinvestment**Context**

- The government issued a Preliminary Information Memorandum (PIM) while inviting an expression of interest (Eoi) from parties to sell 76% of its stake in the national carrier Air India, which owns 100% share

Background

- NITI Aayog had said the debt-laden Air India that it was “unviable” to provide financial support to the national carrier

Disinvestment is good

- Air India has a debt of Rs 51,890 crore. Its huge debt is due to Mismanagement and incompetence. Its constant losses and its dependency on Govt for bail out should be considered as prime reasons for disinvestments
- The government’s narrative that state-owned carrier Air India was moving towards profitability, the Comptroller and Auditor General (CAG) on Friday said that the R105-crore operating profit posted by the airline in FY16 was actually an operating loss of R321.4 crore. CAG officials said figures reported by the airline are “actually under-reporting of loss”.
- Tax payers money is wasted in bailing out which will affect the fiscal prudence of Govt
- This will wake up other organizations like BSNL which has been supported by Govt, to mend ways and bring about reforms or face the axe.
- Govt should be a regulator and not Provider. This will break the momentum of Private sector and goes against established norms of Market economy.

Disinvestment is bad

- Number of employees will go unemployed in a single day leading to fury and bleak future
- Providing them employment will be a huge ask for the government as the rate of unemployment is constantly increasing in the volatile markets
- Arvind Panagariya had said that writing off some debt of Air India, so as to make it attractive to prospective investors but convincing different stakeholders like banks, financial institutions and Airports Authority of India will be a tough ask.
- if Air India is withdrawn from the aviation scene, “private airlines would indulge in gouging and that (will not be) in the interest of the consumers

How to bring about Change?

- Induction of professionals to run the airline.
- Air India has high employee-to-aircraft ratio, which keeps the airline away from profitability. This has to be worked out.
- The Parliamentary panel also suggested to give it five years for its revival

Way forward

- A If the disinvestment of Air India and its subsidiaries is inevitable, then the interests of employees should be protected

36. Kadaknath chicken gets GI tag- Madhya Pradesh

- The protein-rich meat of Kadaknath, chicks and eggs are sold at a much higher rate than other varieties of chicken.
- The breed is native to Jhabua, Alirajpur and parts of Dhar district of Madhya Pradesh

37. Backstop Resources Theory

- This theory states that as the demand for a resource that is in limited supply increases, it will kick in a process that result in the exploitation of other alternative resources to meet human needs.
- For instance, as the demand for oil increases even as its available supply decreases, this will cause the price of oil to shoot up and push businesses to look for alternative sources of energy.
- The theory implies that humans need not worry about running out of resources as prices will always provide an incentive to tap into alternative resources and develop technology for efficient use of these resources.
- Backstop Resource is a sustainable natural resource that is used in place of, and as a substitute for, finite, exhaustible natural resources that have been exhausted. A sustainable resource is one in which the amount used today cannot reduce the amount available tomorrow. An example is solar energy.

INTERNATIONAL RELATIONS

1. Assumption Island -Indian Naval Base in Seychelles

- Seychelles government has provided India a plot of land in its Assumption Island to build its first naval base in the Indian Ocean region.
- The project has acquired significance following China acquiring its first African naval base in Djibouti in November 2015.

Significance of this Naval Base:

- Once ready, the naval base to be built by the defence forces of India, and Seychelles will help India exercise greater control over the Indian Ocean's western region all the way to the piracy-prone eastern African coastline.
- The base will be one of the major staging posts for a large maritime security network that India is setting up with the help of the various Indian Ocean region partner countries.
- The new facility will allow Indian forces to refuel miles from their home base

Other developments:

- Apart from the naval base, India is set to acquire a fully operational Coastal Radar System (CRS) based in Seychelles from March 2016.
 - * The CRS will provide India with the ability to gather intelligence and assist in surveillance operations of the vital energy lanes near Seychelles.
- Security operation in the Indian Ocean region will also be helped by the leadership role that Seychelles has secured for itself in the Contact Group for Piracy off the Coast of Somalia (CGPCS), which will hold its first meeting in Mumbai in January, 2016.
- India has been steadily increasing its maritime and security cooperation with Seychelles and a new patrol vessel from India will be handed over to Seychelles in mid-January 2016.

Issues

- Assumption is close to the Aldabra Atoll - rich biodiversity, unique plants and animals and an abundance of birds. We need to protect the atoll. Once there is a military base, there will be an element of control and locals will not have access even in the vicinity the island
- People feel it is like giving away the country's sovereignty

2. Boao Forum for Asia (BFA)

- China's equivalent of the World Economic Forum.

- It is a non-profit organisation that hosts high-level forums for leaders from government, business and academia in Asia and other continents to share their vision on the most pressing issues in this dynamic region and the world at large.
- It has its fixed address in Bo'ao, Hainan province, China, although the Secretariat is based in Beijing. The forum known as the "Asian Davos"

Comprehensive and Progressive Agreement for Trans-Pacific Partnership

- It is also known as TPP11
- The CPTPP is a new free trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam.
- The countries signing the agreement, account for more than 13% of the world economy, have agreed to bring down tariffs on cross-border trade by as much as 98% after domestic ratification.
- The CPTPP will strategically set the terms of trade in the Asia-Pacific region.
- With the exclusion of the US, the CPTPP is putting on hold 20 provisions even as it incorporates the original TPP

3. Crime Free Zone

- The director generals of the Border Security Force (BSF) and Border Guard Bangladesh (BGB) declared an 8.3 km stretch of the Indo-Bangladesh border as a 'crime-free zone'
- Both border guarding forces with the help of the civil administrations of the two countries, NGOs and the local populace will help in ensuring that no crime takes place along the stretch that covers the Gunarmath and Kalyani Border Out Posts (BOPs) in India and the Puthkhali and Daulatpur BOPs across the border.
- These will be manned round-the-clock and if there is any emergency, both forces will move together.

Why was this chosen?

- This stretch is one of the most vulnerable with cattle smuggling and other criminal activities like firearm smuggling and human trafficking
- The idea is to target the more difficult areas along the 913 km of Indo-Bangladesh border under the BSF's South Bengal Frontier.

What has been done?

- speedboats, motorcycles and equipment like thermal imagers and night vision goggles have been brought in
- Drones will also be used to keep a tight vigil on the border.

4. **European Bank for Reconstruction & Development**

- The European Bank for Reconstruction and Development (EBRD) is an international financial institution founded in 1991.
- The EBRD was founded to support countries of the former Eastern Bloc in the process of establishing their private sectors.
- As a multilateral developmental investment bank, the EBRD uses investment as a tool to build market economies.
- Initially focused on the countries of the former Eastern Bloc it expanded to support development in more than 30 countries from central Europe to central Asia.
- Besides Europe, member countries of the EBRD are from five continents (North America, Africa, Asia and Australia, see below), with the biggest shareholder being the United States
- The mandate of the EBRD stipulates that it must only work in countries that are committed to democratic principles. Respect for the environment is part of the strong corporate governance attached to all EBRD investments.
- It does not finance defence-related activities, the tobacco industry, selected alcoholic products, substances banned by international law and stand-alone gambling facilities

Who owns the EBRD?

- The EBRD is owned by 65 countries and two intergovernmental institutions: the European Union and the European Investment Bank (EIB).

Impact:

- Membership of EBRD would enhance India's international profile and promote its economic interests. Access to EBRD's Countries of Operation and sector knowledge.
- India's investment opportunities would get a boost.
- It would increase the scope of cooperation between India and EBRD through co-financing opportunities in manufacturing, services, Information Technology, and Energy.
- EBRD's core operations pertain to private sector development in their countries of operation. The membership would help India leverage the technical assistance and sectoral knowledge of the bank for the benefit of development of private sector.
- This would contribute to an improved investment climate in the country.
- The membership of EBRD would enhance the competitive strength of the Indian firms, and provide an enhanced access to international markets in terms of business opportunities, procurement activities, consultancy assignments etc.
- This would open up new vistas for Indian professionals on the one hand, and give a fillip to Indian exports on the other.

- Increased economic activities would have the employment generating potential.
- It would also enable Indian nationals to get the employment opportunity in the Bank.

5. **Freeze For Freeze**

- This is a Chinese proposal, known also as a "double freeze" or "double suspension"
- In this Process U.S.-South Korea will temporarily halt large-scale joint military exercises in exchange for North Korea freezing its nuclear activities.

6. **Indo-French Knowledge Summit**

- The Knowledge Summit is the First Franco-Indian Summit for university, scientific and technology cooperation with the broader objective to design a roadmap of Franco-India cooperation for the next five years, in collaboration with companies.
- The summit was organized by the French Embassy in India and co-hosted by the Ministry of Human Resource Development
- The common goal; increase student mobility, enlarge Research & Development collaborations and link campuses to companies by focusing on employability.

7. **Macron Visit to India**

"Joint Strategic Vision of India-France Cooperation in the Indian Ocean Region"

According to the Indo-French joint statement, the emerging challenges in Indian Ocean region are:

- Maritime traffic security in the face of the threats of terrorism and piracy, especially in the Horn of Africa;
- Respect of international law by all States, in particular freedom of navigation and overflight; fight against organized crime, trafficking, including in weapons of mass destruction, smuggling and illegal fishing (IUUs);
- Combating climate change and its consequences on security, particularly in terms of natural disasters;
- Protection of the environment and natural resources, including tackling oil spills; and aid to victims of disasters

Indian Ocean Rim Association (IORA)

- France is a dialogue partner of the Indian Ocean Rim Association (IORA), but it has been asking for a full member tag. As per the membership criteria, only littoral states can be part of IORA. France claims qualification through its territories in the Indian Ocean.
- India has been positive about French ambitions in IORA. However, the former French colonies of Mauritius and Seychelles are largely opposed to France becoming a member of the IORA as they believe that their voice in the group could get muffled.

- But, since decision-making in IORA is done through consensus, India cannot express support for France's membership openly. That's why, the joint statement only stated that India welcomes the prospect of France's "enhanced participation" at IORA.

Indian Ocean Commission

- It is an intergovernmental organization that was created in 1982 at Port Louis, Mauritius and institutionalized in 1984 by the Victoria Agreement in Seychelles.
- The COI is composed of five African Indian Ocean nations: Comoros, Madagascar, Mauritius, Réunion (an overseas region of France), and Seychelles.
- COI's principal mission is to strengthen the ties of friendship between the countries and to be a platform of solidarity for the entire population of the African Indian Ocean region. COI's mission also includes development, through projects related to sustainability for the region, aimed at protecting the region, improving the living conditions of the populations and preserving the various natural resources that the countries depend on.
- France has also offered that India become a member of the Indian Ocean Commission and encouraged "its growing involvement in European Union projects for the Indian Ocean".

Trishna

- A joint constellation of satellites is in the offing as is a satellite called "Trishna" or thirst that will map water resources on Earth.
- That India was committing to the development of a joint constellation of satellites with another country for the first time, showed the deep trust shared between New Delhi and Paris.

France-India Programme for the Future

- A French initiative aimed at fostering youth exchanges, which are vital for future growth of India-France ties.

Reciprocal logistics support deal

- The deal will facilitate the French and Indian armed forces to receive logistical support, supplies and services from each other during authorised port visits, joint exercises, joint training, humanitarian assistance and disaster relief efforts.
- The deal, which is similar to the logistical support pact with the US, is an indicator of the strategic depth and maturity in defence ties between the two countries.

Indo-French Centre for the Promotion of Advanced Research (IFCPAR/CEFIPRA)

- It is a model for international collaborative research in advanced areas of Science & Technology.
- The Centre was established in 1987 and is being supported by Department of Science & Technology, Government of India and the Ministry for Europe & Foreign Affairs, Government of France.

- Mandate has been to promote collaborative research between India and France in cutting edge Science and Technology

8. India by the Nile festival

- It is a mega annual cultural festival 'India by the Nile', organised to celebrate Indian culture and its diversity
- The 12-day event, the biggest foreign festival in Egypt, will host a wide range of events
- The festival which provides audiences an Indian cultural experience and encourages artistic collaborations between India and Egypt will be held in several cities such as Cairo, Alexandria and Port Said.
- focus this year is on classical culture which is very ancient like music, dance and yoga
- The festival, which is organised by the Embassy of India in Egypt and the Maulana Azad Centre for Indian Culture in collaboration with entertainment company Teamwork Arts, is a celebration of contemporary and classical music, dance, theatre, visual arts, film, food and literature.

9. Kabul Process

- It is an Afghan-led, Afghan-owned inclusive peace process.
- It brings together international organizations to reach an international consensus on fighting terrorism and to draw broader support for the cause.

Background

- The first 'Kabul Process' meeting was held on June 2017,
- The second meeting of 'Kabul Process' was held on 28th Feb with the participation of the representatives of 25 countries and three international organisations, the EU, UN and Nato, which is intended to discuss security and political issues in the country.

What would be done?

- Ghani proposed a ceasefire and a release of prisoners as part of a range of options including new elections, involving the militants, and a constitutional review as part of a pact with the Taliban to end a conflict
- Mr. Ghani promised to recognize the Taliban as a political party, called for confidence-building measures and asked them to recognize the Kabul regime and the constitution.
- The Taliban was told to open an office in Kabul; passports and freedom of travel were offered to those involved in negotiations.

What is Unique in this call for Peace?

- This time the difference is that the Afghan government has come up with a seven-point plan of engagement with the Taliban and invited the group for talks without preconditions: the previous formulation was that the Taliban should choose between war and peace.

- Mr. Ghani has not set any time limit for the Taliban to respond. He has said the views and proposals of the Taliban would be considered, thereby lobbing the ball into the Taliban's court.

What has been done in the Past?

- Over the years the U.S. had tried tactics including a troops surge, putting pressure on Pakistan to use its leverage with the Taliban and promoting secret talks.
- But nothing worked, and the Taliban has established a strong presence in almost two-thirds of Afghanistan, and is constantly on the offensive.
- It has shown a capacity to strike at the most fortified positions in Kabul, but knows it cannot capture the city as long as the Americans remain committed to the government's security.

How will it help Pakistan?

- Under global scrutiny for the FATF grey list, this reconciliation process is a chance for Pakistan to salvage its credibility as a nation working against terrorism outfits.

Is it a futile Process?

- the Taliban are now stronger than at any point since the Americans invaded Afghanistan
- they control more territory over 50 percent, can wage more suicide attacks, can threaten more districts, and have secured more regional support
- The Taliban fight a proxy war primarily to counter India's presence in Afghanistan, to guard Pakistan's supposed strategic depth, and to keep the Durand Line agenda off the table.
- Political backdrop has become more complex, when both Iran and Russia are getting more involved in the game with a determination to counter the U.S. presence in Afghanistan.
- Furthermore, the Taliban is not the only terrorist group threatening peace and security in Afghanistan. The Islamic State Khorasan Province (ISKP) branch has a foothold in the country now, trying to consolidate its position and broaden its powerbase.

The peace prospect for Afghanistan is as complicated as ever

10. Namaste Shalom

- It is a regular monthly magazine on bilateral relations between the two friendly nations.
- The festive occasion of Holi coincided with the Jewish festival of Purim.
- It will provide a platform for exchanging views between Indians and Jews the world over

11. Nerve Agents

- They are highly toxic chemicals that prevent the nervous system from working properly, and can be fatal.

- Nerve agents take different forms - including powder and gas - but they tend to be a liquid, which can seep through the skin.

What are the different types?

- Novichok agents are one of three classes of nerve agents - the other two are G-Agents and V-Agents.
- G-agents include sarin while V-agents include VX, an oily amber-coloured liquid.

What do they do to the body?

- Nerve agents disrupt normal messaging from the nerves to the muscles. This causes muscles to become paralysed and can lead to the loss of many bodily functions.
- Agents will act within seconds or minutes if inhaled and slightly more slowly if exposure is the result of skin contamination.

Novichok

- The name Novichok means 'newcomer' in Russian and applies to a group of advanced nerve agents developed by the Soviet Union in the 1970s and 1980s.
- One of the chemicals - called A-230 - is reportedly five to eight times more toxic than VX nerve agent, which can kill a person within minutes.

Chemical Weapons Convention (CWC)

- India has signed CWC in 1993. It is administered by the Organisation for the Prohibition of Chemical Weapons (OPCW).
- The parties' main obligation under the convention is to prohibit the use and production of chemical weapons, as well as the destruction of all current chemical weapons. The destruction activities are verified by the OPCW.
- Of the four United Nations Member States that are not parties to the treaty, Israel has signed but not ratified the treaty, and three states have not acceded to the treaty (North Korea, Egypt, and South Sudan). Taiwan, though not a Member State, has stated that it complies with the treaty

National Authority Chemicals Weapons Convention (NACWC)

- NACWC has been established under the Chemical Weapons Convention Act, 2000 for implementing the provisions of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, signed on behalf of the Government of India at Paris on the 14th day of January, 1993.
- NACWC is an office in the Cabinet Secretariat, Government of India.

12. Simla Agreement

- Between Indira Gandhi and President Zulfikar Ali Bhutto in 1972 was much more than a peace treaty seeking to reverse the consequences of the 1971 war.

- * The Shimla Agreement of 1972 broke Pakistan into two, but India also held 93,000 prisoners of war (POWs) who could constitute a major bargaining chip with Pakistan. India had also captured strategic locations in Kashmir and 5,000 square miles of Pakistan's territory in Sindh and south Punjab.
- It was a signpost in the sense that it involved a commitment from Pakistan to resolve all outstanding issues with India bilaterally.
 - * "That the two countries are resolved to settle their differences by peaceful means through bilateral negotiations or by any other peaceful means mutually agreed upon between them"

Objectives

- A mutual commitment to the peaceful resolution of all issues through direct bilateral approaches.
- To build the foundations of a cooperative relationship with special focus on people to people contacts.
- To uphold the inviolability of the Line of Control in Jammu and Kashmir, which is a most important CBM between India and Pakistan, and a key to durable peace.

India had three primary objectives at Shimla.

- First, a lasting solution to the Kashmir issue or, failing that, an agreement that would constrain Pakistan from involving third parties in discussions about the future of Kashmir.
- Second, it was hoped that the Agreement would allow for a new beginning in relations with Pakistan based upon Pakistan's acceptance of the new balance of power.
- Third, it left open the possibility of achieving both these objectives without pushing Pakistan to the wall and creating a revanchist anti-India regime.

Why did India not send PoW immediately?

- India was inclined to return the POWs but was constrained from doing so because they had surrendered to the joint India-Bangladesh command and could not be returned without the latter's concurrence.
- Dhaka made it clear that it would not return the POWs until Islamabad recognised Bangladesh, thus delaying the POWs' return until 1974.

Why it was not initiated?

- There was a near-consensus among Indian policymakers that India must not pull a "Versailles" on Pakistan.
- A humiliated Pakistan, it was argued, would inevitably turn revanchist (a policy of seeking to retaliate, especially to recover lost territory.).

- * P.N. Haksar, Gandhi's leading foreign policy advisor Invoking lessons from the past, he argued, "At the end of the Second World War, a lesson was learnt by the victorious powers not to treat the defeated nations and impose upon them a greater humiliation than that produced by the defeat itself. India, proud of its position as a responsible country in South Asia, had to act with wisdom and foresight in its dealings with the new Pakistan".

- This was the reason India did not force Pakistan to convert the ceasefire line in Kashmir into the international boundary when Pakistani President Zulfikar Ali Bhutto ruled out this option. It accepted the term Line of Control (LoC) instead, thus delinking it from UN resolutions and highlighting that Kashmir was a purely bilateral affair.
- This would further buttress India's status by also demonstrating a credible attempt at peace
- Gandhi was under pressure from various foreign leaders, including Leonid Brezhnev of the erstwhile Soviet Union, that Bhutto must not be sent back from Shimla "empty handed" because the resultant chaos in Pakistan could affect the whole region.

Two rival strategies at the apex level in the lead up to the Shimla talks.

- P.N. Dhar as the quintessential realist "sought to take full advantage of the military victory" and make Indian concessions (i.e. Pakistani POWs and territorial gains) "conditional" on Pakistan's acceptance of a final Kashmir settlement. If Pakistan rejected such an approach, his policy advice was that India should "continue a state of armed hostility short of war".
- The alternative constructivist approach was embodied by Haksar, who in addition to immediate territorial goals also sought an ambitious vision for "subcontinental peace and stability" by assisting in Pakistan's domestic transformation.
- The perceived opportunity to exploit the possibility for an internal transformation of Pakistan's body politic seems to have persuaded Indian policymakers to approach the Shimla negotiations preference to avoid weakening the new civilian leadership in Pakistan led by Zulfikar Ali Bhutto, and, simultaneously extracting new conflict resolution norms from the same leadership.
- Dhar suffered a minor heart attack with Haksar assuming the lead for the remainder of the summit. India's negotiating thrust, however, remained consistent.
 - * It is apparent that policymakers were torn between seeking immediate security gains and holding out for a more durable regional order.
- Key strategists, particularly Haksar, believed that a modicum of Indian benevolence might facilitate Pakistan's internal transformation at a critical turning point in the civil-military and socio-political balance in that state's history.

- Haksar's advice to Gandhi was that India had "a vested interest in seeing there is democracy in Pakistan".

Bhutto's Words

- Bhutto had solemnly assured her he would "gradually" make the LoC the permanent border, but he just could not put it in writing.
- "Aap mujh par bharosa keejiye (please trust me)" he promised to "forget the past and forge an entirely new relationship with India".
- In the late-1980s, I (P.N. Dhar) had taken this question to legendary spymaster and one of Gandhi's most trusted advisers, R.N. Kao. He not only answered it candidly but also allowed me to quote him: "I am as surprised as you are. Before leaving for Shimla, she had asked me, 'Can I trust Bhutto? People tell me that if I shake hands with him, I must immediately count my fingers:'"

What did this lead to?

- India was unable to prevent the military from taking power in Islamabad in 1977 and executing Bhutto.
- General Zia-ul-Haq's coup had a major bearing on India's other objectives.
- Zia's strategy was to use the Afghan insurgency in the 1980s to acquire sophisticated arms from the U.S. and induce Washington to ignore Pakistan's clandestine quest for nuclear weapons. Pakistan's acquisition of nuclear capability created a situation of deterrence negating India's superiority in conventional power and instated de facto military parity between the two countries.

13. Stockholm International Peace Research Institute

- It is an international institute based in Sweden
- It is dedicated to research into conflict, armaments, arms control and disarmament.
- SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

India's arms imports from U.S. up by 550%: report

- The U.S. recorded a blazing growth in its arms exports to India, recording over 550% growth in 2013-17 compared with the previous five years and become India's second supplier.
- Russia continued to be India's largest arms supplier, accounting for 62% of India's arms imports between 2013 and 2017.
- India was the world's largest importer of major arms in 2013-17 and accounted for 12% of the global total. Its imports increased by 24% between 2008-12 and 2013-17.
- India spent more than \$100 billion on buying new weapons and systems during 2008-17, with imports accounting for around 60-65% of the country's military requirements.

- Russia, the country's top arms supplier, accounted for 62% India's arms imports in 2013-17, followed by the US (15%) and Israel (11%)

Chinese arms

- While India continues to depend on imports for its arms requirements,
- China's arms imports fell by 19 per cent between 2008-12 and 2013-17.
- While it was the world's fifth largest arms importer in 2013-17, China has also emerged as the fifth largest arms exporter, with exports rising by 38% between 2008-12 and 2013-17.
- A majority of these weapons have been procured by countries in India's neighbourhood.

14. India to help build nuclear plant in Bangladesh

- India, Bangladesh and Russia have signed a tripartite memorandum of understanding (MoU) for cooperation in the construction of the Rooppur nuclear power plant in Bangladesh.
- The MoU was signed in Moscow by the Department of Atomic Energy of India, the Ministry of Science and Technology of Bangladesh and Rosatom.
- Russia is building the nuclear power plant in Bangladesh on a turnkey basis.
- Indian companies can be involved in construction and installation works and in the supply of equipment of a non-critical category.

15. Myanmar puts off border pact

- India is keen on signing agreement to streamline free movement along border
- However Myanmar has indefinitely deferred signing an agreement with India to streamline the free movement of people within 16 km along the border.
- Myanmar — citing "domestic compulsions" — has asked more time before the agreement is sealed.

What is being worked out?

- To give it shape, the Centre had asked four States — Arunachal Pradesh, Nagaland, Manipur and Mizoram — that share the unfenced border with Myanmar to distribute "border pass" to all the residents living within 16 km from the border.
- The domiciles were to be allotted border passes and those going across for agriculture, work or to meet relatives should carry the pass at all times.

Mapping

- India and Myanmar share a 1,643 km unfenced border along Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km) and Mizoram (510 km) and permit a 'free movement' regime upto 16 km beyond the border.

16. Make the neighbourhood first again

- President Yameen Abdul Gayoom has gone out of his way to challenge the Modi government, whether it is on his crackdown on the opposition, invitations to China, or even breaking with New Delhi's effort to isolate Pakistan at SAARC.
- In Nepal, the K.P. Sharma Oli government is certainly not India's first choice, and Kathmandu's invitation to the Pakistani Prime Minister this week confirms the chill
- In Sri Lanka, the recent local election results that have gone the way of the Mahinda Rajapaksa-backed party could be a portent of his future re-election.

Chinese Angle

- China opened up an array of alternative trade and connectivity options after the 2015 India-Nepal border blockade: from the highway to Lhasa, cross-border railway lines to the development of dry ports.
- In Sri Lanka, Bangladesh, the Maldives and Pakistan, China holds strategic real estate, which could also be fortified militarily in the future. At present, it means China has a stake in the internal politics of those countries.
- China stepped in to negotiate a Rohingya refugee return agreement between Myanmar and Bangladesh
- host a meeting of Afghanistan and Pakistan's foreign ministers to help calm tensions and bring both on board with the Belt and Road Initiative (BRI) connection between them
- offer to mediate between the Maldivian government and the opposition

India's Use of hard Power

- Theoretically, given its central location in South Asia and being the largest geographically and economically, India should be expected to hold greater sway over each of its neighbours.
- However, the "surgical strikes" on Pakistan of 2016 have been followed by a greater number of ceasefire violations and cross-border infiltration on the Line of Control.
- The 2015 Nepal blockade and a subsequent cut in Indian aid channelled through the government did not force the Nepali government to amend its constitution as intended, and the subsequent merger of Mr. Oli's Communist Party of Nepal (UML) with Prachanda's CPN(Maoist) is seen as a reversal of India's influence there.
- New Delhi's dire warnings about Mr. Yameen's emergency in the past month have led to the Maldives cancelling its participation in the Indian Navy's "Milan" exercises.
- Even in Bangladesh, the Indian Army chief, General Bipin Rawat's tough talking last week about immigration has drawn ire there, with Bangladesh's Home Minister Asaduzzaman Khan describing the remarks as untrue, unfounded and not helpful.

India's most potent tool is its soft power

- Its successes in Bhutan and Afghanistan, for example, have much more to do with its development assistance than its defence assistance.
- It's heartening, therefore, that after sharp drops in 2016 (of 36%) and 2017 (of 19%) year on year, the budget allocations for South Asia have seen an increase (of 6%) in 2018.

New Approach to China

- First, where possible, India should collaborate with China in the manner it has over the Bangladesh-China-India-Myanmar (BCIM) Economic corridor.
- Second, when it feels a project is a threat to its interests, India should make a counter-offer to the project, if necessary in collaboration with its Quadrilateral partners, Japan, the U.S. and Australia.
- Third, India should coexist with projects that do not necessitate intervention, while formulating a set of South Asian principles for sustainable development assistance that can be used across the region.

17. Trump Steel Policy

- 25 percent tariff on imported steel and a 10 percent tariff on imported aluminum will have on the economy.

What is the main Argument?

- The argument in favor of the tariffs is that they are a counterweight against foreign producers of aluminum and steel that have flooded the U.S. market, putting American companies at a disadvantage.
- To bring down the US trade deficit

What is Trade War?

- A trade war happens when one country puts up a trade barrier, like strict tariffs (which are border taxes on imports), to protect its economy from foreign competition — and another country decides to strike back with its own trade barriers.
- Canada and the European Union are both threatening to retaliate against the US after President Donald Trump announced that he planned to impose big tariffs on imported steel and aluminum by using an obscure trade law.
 - * EU signalled retaliation by threatening tariffs on 'iconic' US products: Levi's jeans, bourbon whiskey and motorbikes, including the now contentious Harley Davidson. In addition, it could target smaller products (in terms of volume of trade), including steel, T-shirts, bed linen, chewing tobacco, cranberries, and orange juice.
- Those tariffs will hurt the ability of Canada, Germany, and other countries to sell steel and aluminum to the US.
 - * The tariffs will end up inflicting substantial damage on them—particularly Canada, which accounts for almost 17% of the US' steel imports.

Chinese Angle

- China is a big importer of US soybeans, maize and meat. If it shifts these purchases to other countries, US farm producers— a powerful lobby— will suffer. China has been buying thousands of aircraft from Boeing, and can shift to Europe's Airbus.
- China can impose non-tariff barriers on American banks, insurance companies, airlines, and other service industries.
- Finally, it holds \$1.3 trillion of US treasury bonds in its forex reserves, and can dump these on the market. That will cause US bond prices to crash and US interest rates to skyrocket.

India

- Indian government reduced the tariff from 75 per cent to 50 per cent on Harley Davidson Bikes
 - * US says it was not enough and asked that it should be reciprocal, as the US imposes "zero tax" on the import of motorcycles.
- While India is among the top four manufacturers of steel globally, it exports less than 10 percent of its total production.
 - * India accounts for approximately 2 percent of U.S. steel imports—Canada, Brazil and Korea top the list. While the direct tariff impact on India will be minimal, global prices will likely remain under pressure
 - * India is likely to witness an increase in steel imports from South Korea and Japan in the near term due to global readjustment of trade patterns after the U.S. imposed a 25% import tariff on the commodity, rating agency ICRA said
 - * Both South Korea and Japan, which have free trade agreements (FTA) with India, are expected to raise their exports to countries with which they have such pacts, following the move by the U.S.
- China is the world's largest aluminum producer and accounts for over 50 percent of the metal's global trade. India accounts for only 5 percent of global primary aluminum production. In financial year 2016-17, India exported Rs 2,346 crore of aluminum and aluminum products to the U.S, according to Indian government data.

Why competition is required?

- Most economists support free trade because it allows free competition without any of the protective barriers imposed by governments. Such competition is believed to give consumers access to cheaper and better products from across the world, thus improving their standard of living over time.

Further, the tariffs imposed by Mr. Trump may also fail to address America's trade deficit with the rest of the world as long as Americans prefer foreign goods while foreigners prefer American assets.

Issue Area

- They're used to build cars, skyscrapers, roads, bridges, washing machines, refrigerators, and a whole host of other products. More expensive steel and aluminum means higher costs for the American businesses that make these products — higher costs that will likely get passed on to consumers.
- They can severely affect entire industries, cause unemployment to spike, and raise the price of vital goods in both or all of the countries involved.
- The World Trade Organization this week warned that Mr. Trump's trade war could lead the world into another recession.
- A major global trade war in the 1930s had disastrous results as it deepened the Great Depression.

What should be done?

- A better and more rational way would be for these countries to approach the WTO.
- Based on a WTO ruling in 2003, the US removed safeguard duties imposed on imported steel by President George W Bush.
- So if an anti-US trade coalition gathers force in multilateral forums such as the WTO, India should unobtrusively join that crowd, and make sure it does not stand out.

18. African Continental Free Trade Area**Context**

- 44 leaders signed an agreement to create the African Continental Free Trade Area (AfCFTA) in Kigali.
- If ratified by each country, AfCFTA will become one of the world's largest trading blocs.

What it intends to do?

- The African Continental Free Trade Area (CFTA) would remove barriers to trade, like tariffs and import quotas, allowing the free flow of goods and services between its members.

Significance

- The potential upside of a free trade area across the continent is significant as it will create a single market of up to 1.2 billion people and a collective GDP of more than \$2 trillion.
- It could bring \$3.6 billion in welfare gains to the continent through a boost in production and cheaper goods
- United Nations Economic Commission for Africa says intra-African trade can increase by 52% by 2022 when compared to 2010 trade levels.

Issue Area

- Nigeria, Africa's largest economy and most populous country, as well as a host of others did not sign the agreement.

Challenges

- Free trade will likely be hindered by the costs of moving goods within African countries and between neighbors.
- African countries need to become better connected not only via being signatories to a treaty but also through better road and rail networks.
- Even within individual countries, poor road networks pose a problem

19. Communications, Compatibility, Security Agreement (COMCASA)

- Communications and Information Security Memorandum of Agreement (CISMOA) in US parlance
- COMCASA essentially provides a legal framework for the transfer of Communications Security (COMSEC) equipment from the US to India that would facilitate 'interoperability' between Indian and US forces, and potentially with other militaries as well that use US-origin systems for secure tactical data links.
- The US, however, tightly controls COMSEC technology and provides access to only those countries that have signed a CISMOA / COMCASA with it.
- So, this will enable Indian military to obtain critical, secure and encrypted defence technologies from the other country.
- COMCASA creates the conditions for the Indian military to receive modern secure and net-enabled weapons systems such as precision armament, air-to-air missiles, space systems and navigation systems that are critical components in platforms like fighter aircraft and unmanned aerial systems. Hitherto India has had to purchase more expensive commercial communications equipment, raising the overall acquisition price of a platform

Context

- India close to signing COMCASA with US

20. Enemy Property ActWhat is enemy property?

- When nations go to war, they often seize the properties in their countries of the citizens and corporations of the enemy country.
- This happened during the First and the Second World Wars when both the United States and the United Kingdom seized properties of German corporations and citizens.
- Properties that are seized under these circumstances are referred to as 'alien properties' or 'enemy properties'. The idea behind seizing these properties is that an enemy country should not be allowed to take advantage of its assets in the other country during war.

India's Context

- When wars broke out between India and China in 1962, and India and Pakistan in 1965 and 1971, the central government took over properties of citizens of China and Pakistan in India under the Defence of India Acts.
- These Acts defined an 'enemy' as a country that committed an act of aggression against India, and its citizens. The properties of enemies in India were classified as enemy property.
- The properties included land, buildings, shares held in companies, gold and jewellery of the citizens of enemy countries.
- The responsibility of the administration of enemy properties was handed over to the Custodian of Enemy Property, an office under the central government.

Why was new law introduced?

- The Defence of India Acts were temporary laws that ceased to operate after the wars ended.
- To administer the enemy property seized during the wars, the government enacted the Enemy Property Act in 1968.
- This law laid down the powers of the Custodian of Enemy Property for management and preservation of the enemy properties.
- The reason for declaring any property as enemy property is to ensure that the enemy shouldn't have access to it. It is also done to **ensure that the income or usufruct from the property isn't used for the detriment of India.**

New Provisions

- The original Act defined "enemy" as "...a person or country who or which was an enemy, an enemy subject or an enemy firm, as the case may be... but does not include a citizen of India". This was a very important distinction, for the Act had mostly come to apply to those who had left India for Pakistan in 1947.
- The new Act states, "...the expression 'does not include citizen of India' shall exclude...those citizens of India, who are or have been legal heir and successor of an 'enemy'."
- In other words, the Act seeks to clearly discriminate against those Indian citizens whose forefathers or extended family members migrated to Pakistan in the ensuing years after partition.

Supreme Court judgement—Union of India & Another vs Raja Mohammed Amir Mohammad Khan.

- He is the son of the erstwhile Raja of Mahmudabad, Uttar Pradesh, who had migrated to Pakistan and become a citizen in 1957.
 - * The current Raja, who has also been a two-time MLA from Mahmudabad, has been petitioning the government of India to return his properties since 1979

- * The Supreme Court settled some of these questions in 2005. It ruled that the Custodian of Enemy Property was administering the property as a trustee, and the enemy continued to be its owner. Therefore, on the death of the enemy, the enemy property should be inherited by their legal heirs.
- * This was on similar lines of 1975 judgement of Hamida Begum vs M.K. Rangachari, Custodian and Others, in which the court recognized the custodian as just the protector of enemy property and not its owner

Laws and Ordinances

- In 2010, the government issued an Ordinance to expand the powers of the Custodian regarding enemy property. It sought to permanently vest enemy property in the Custodian even in case of the enemy's death or a change in his nationality. However, the Ordinance lapsed.
- The issue of enemy property attracted legislative interest again in 2016 when five more Ordinances were issued on the subject. These Ordinances went a step further and vested ownership rights over enemy property in the Custodian. This effectively negated the Supreme Court decision of 2005, and made the central government the owner of enemy property.

Value of the Property

- The number of enemy properties in India seem to have seen a steep rise since 2010 when they stood at 2,111. In 2014, 12,090 properties were listed and in 2015, 14,759. Currently, the government has identified 15,143 properties, with the maximum in Uttar Pradesh, followed by West Bengal.
- A majority of them belong to Pakistani citizens from the time of the wars, and are valued at Rs 1,04,339 crore.
- Pakistan enacted similar laws to take over properties and assets of Indian citizens and companies in Pakistan during the wars. Unlike India, it sold off these properties in 1971.

What is the issue now?

- Parliament makes the Custodian the owner of enemy property retrospectively from 1968.
- Second, it voids the legal sales undertaken by enemies of enemy properties since 1968. This means that a person who may have bought an enemy property in good faith when such sale and purchase was legal, now stands to lose the property.
- Third, it prohibits Indian citizens who are legal heirs of enemies from inheriting enemy property, and brings them within the definition of 'enemy'.
- Fourth, it prohibits civil courts and other authorities from hearing certain disputes relating to enemy property.

Further, following the passage of the Bill, judicial recourse on enemy property disputes will only be available before High Courts and the Supreme Court, limiting the options available to people whose property rights have been affected

21. Gulf Shield 1

- This was conducted by Ministry of defence of Saudi Arabia
- It is aimed at bolstering military and security cooperation and coordination
- The exercise seeks to strengthen the role of the military and security in the Gulf States' vision for their economy.
- It is considered the largest military drill in the region in terms of diversity of expertise and quality of weapons. It seeks to raise the military readiness of the participating countries, modernize joint mechanisms and enhance coordination and cooperation.

22. India Development Foundation of Overseas Indians

- The Union Cabinet approved closure of India Development Foundation of Overseas Indians (IDF-OI) to enhance synergies in channelizing diaspora's contributions to government's flagship programmes such as National Mission for Clean Ganga and Swachh Bharat Mission.
- In order to enhance synergies, improve efficiencies and avoid duplication of work, it was decided by the 9th Meeting of Board of Trustees of the IDF-OI that the Trust would be closed down

What is it?

- India Development Foundation of Overseas Indians (IDF-OI) is a "not for profit Trust" established in 2008 by the Ministry of Overseas Indian Affairs to serve as a credible institutional avenue to enable overseas Indians to engage in philanthropy to supplement India's social development efforts.
- In the past IDF-OI has helped in channelizing contributions from overseas Indian donors towards social development projects in Assam, Rajasthan and Gujarat in the areas of water conservation, rainwater harvesting, education and mainstreaming of differently abled children, women's education and sustainable livelihood.

23. Indo-U.S. Science and Technology Forum (IUSSTF)

- IUSSTF established under an agreement between the Governments of India and the United States of America in March 2000
- It is an autonomous bilateral organization jointly funded by both the Governments that promotes Science, Technology, Engineering and Innovation through substantive interaction among government, academia and industry.
- The Department of Science & Technology, GoI and the U.S. Department of States are respective nodal departments

- IUSSTF currently implements a portfolio of “four” broad program verticals - Scientific Networks, Innovation and Entrepreneurship, Research and Development and Visitation Programs.

24. South Asia, a fertile ground for ISIS

What makes ISIS different from other jihadist groups?

- The way it operates is different from other organizations.
- Al-Qaeda, the most powerful force in the global jihadist landscape till the rise of ISIS, is largely a hit-and-run outfit. Osama bin Laden didn't create a state. Nor did he declare himself as the Caliph of the world's Muslims. He was always at the mercy of foreign governments or intelligence agencies — Saudi Arabia and Pakistan during the Afghan civil war, Sudan in the early days of al-Qaeda, Taliban during the most important operational phase and again Pakistan in his final years.
- They operated from caves and deserts and used asymmetric forces against those whom they deemed enemies.
- Abu Bakr al-Baghdadi, on the other side, established a proto-state that at one point of time was as big as the United Kingdom, ruling over about 2 million people.
ISIS used both asymmetric and conventional warfare tactics in the battlefield.

Agenda

- The territories which the Caliph has direct control over make up the core of the world system
- It doesn't believe in nation states, but only in a perpetually expanding Caliphate

Allies

- In Nigeria, **Boko Haram**, the jihadist group that controls parts of the country, has declared allegiance to ISIS.
- In Libya, **a branch of the Islamic State controlled Sirte**, the assassinated former dictator Moammar Gaddafi's home town, for months and has presence in other cities and the country's deserts.
- In Afghanistan, ISIS members and sympathisers have already set up a **wilayat** called the **Islamic State of Iraq and the Levant** — Khorasan Province in the eastern Nangarhar province. The group has carried out several suicide attacks, mainly targeting Shias in the already troubled country.

Indian Operations

- It's from Khorasan that ISIS is handling its South Asia operations, including in India, Pakistan and Bangladesh.
- ISIS hasn't carried out any major terror attack in India, nor does the group have any organizational presence in the country. But it has lured dozens of Indians into its fold.

How ISIS choses a Place?

- The history of jihadist insurgency, high Muslim population and growing tensions between communities may all have prompted the group to focus on the region in its quest for expansion.
- Understandably, it chose Afghanistan, which has been at war with itself for decades, as its operation centre

India's Issues

- Some have gone from India to Khorasan, while
- Some others travelled from the Gulf countries they were working in to Iraq and Syria to live under the Caliphate.
- Indian authorities have arrested several people who they say were part of ISIS cells from different parts of the country.
- But surprisingly, one of the most-affected States by this ISIS influence was India's most socially advanced one. In fact, ISIS's India connect became national headlines when 21 people, including women and children, from the southern State of Kerala went missing in 2016.
- Most of the youth who went missing are educated professionals hailing from middle class or upper middle class families, nullifying the argument that lack of education and poverty drive extremist ideas among the youth.

All these developments, from establishing wilayats in Afghanistan and Libya to attracting youth from India and Pakistan, suggest that ISIS may have been weakened at its core but it's far from defeated

25. Code of Conduct (CoC)

- CoC is an agreement for treatment of diplomatic/ consular personnel signed in 1992 between India and Pakistan after a spate of incidents of harassment
- The CoC clearly lays down that the dignity and personal inviolability of diplomatic/ consular personnel of the Sending State and their families shall be guaranteed and fully respected by the Receiving State.
- It also states that intrusive and aggressive surveillance and actions such as verbal and physical harassment, disconnecting of telephone lines, threatening telephone calls, pursuit in cars and unauthorized entry into residences shall not be resorted to.

SOCIAL ISSUES

1. Annual Survey of India's City Systems (ASICS)

- The ASICS 2017, which uses 150 parameters to judge 23 cities, has placed Pune at the top and Bengaluru at the bottom of the rankings.
 - ASICS is a health diagnostic of our cities; the better a city scores, the better it stands to provide its citizens high quality of life in the medium to long term.
 - ASICS aims to provide a common frame of reference for political and administrative leaders, business and academia, media and civil society, in different cities to converge on their agenda for transformative reforms.
- The survey, carried out by the NGO Janaagraha Centre for Citizenship and Democracy.
- This was fifth edition

Criteria

- It broadly looks at urban planning and design, capacity and resources of Urban Local Bodies, the degree of empowerment of the civic body, and processes for transparency and citizen participation.

Details

- Pune scored 5.1 out of a maximum score of 10,
 - Pune overtook Thiruvananthapuram which had topped the previous two editions of the survey
 - Thiruvananthapuram dropped two ranks to be placed third out of 23 cities spread across 20 states
 - Top five-> (1) Pune, Kolkata, Bhubaneshwar and Surat
 - Bottom Five-> (23) Bengaluru, Chandigarh, Dehradun, Patna, Chennai
- Bengaluru got just 3 and was down seven places.
- But Indian cities lagged behind global cities like New York and London, which scored 8.8.
- Cities such as Surat and Ahmedabad moved up the rankings by 12 and seven positions respectively from 2016.
- Bhubaneshwar moved up by six spots, while Chennai dropped by 11 places.

Problems

- Half of the 23 ASICS 2017 cities, which comprise a fifth of India's urban population, do not generate enough revenue internally to even pay the salary of municipal staff.
- A third of municipal staff positions remains vacant.

- And the average tenure of a municipal commissioner is only 10 months.
- One reason for the persistence of poor delivery despite a wide consensus on the problems ailing India's cities is the lack of local democracy, with only two of the 23 cities putting in place ward committees and area sabhas at least on paper
- India's cities have virtually no platforms where citizens can participate in matters in their neighbourhood.
- Due to limited accountability, even the city budgets are largely "fictitious"
- Only 9 of the 23 cities had a citizen's charter, a powerful tool for accountability and grievance redress.
 - Even in the cities where such a charter exists, there is no mention of service levels, or timelines for service delivery, or mechanisms for obtaining relief when service levels are not met, the report said.
 - An ombudsman, specifically for resolving citizen's issues, is also missing in all but three Indian cities—Bhubaneswar, Ranchi and Thiruvananthapuram.

About Planning

- The report also pointed out that most Indian cities use town and country planning acts which were drafted decades before the economy was liberalized and the lack of a modern, contemporary urban planning framework may be costing India 3% of its GDP every year.

2. Child Rape

Context

- Amendments to the Indian Penal Code passed by Rajasthan and Madhya Pradesh introducing the death penalty as a possible punishment for the rape of a girl below the age of 12 years

Why was it initiated?

- first, there is the belief that harsher punishments will deter people from committing child rape;
- second, justice for child survivors demands that the law provide for the death penalty;
- Third, our abhorrence for the crime makes the perpetrator 'deserving' of the death penalty.

Can it act as deterrent?

- In 2012, the National Research Council of the National Academy of Sciences in the U.S. published a comprehensive analysis of deterrence studies and came to the conclusion that it is impossible to determine whether the death penalty is a deterrent or not.

- By diverting resources to the death penalty, we are taking away from developing strategies like risk assessment and management, cognitive behavioral treatment and community protection measures that have proven to have far greater preventive potential.

What is the real Problem?

- The lack of specialised investigators, prosecutors, judges, mental health professionals, doctors, forensic experts and social workers working on cases of child rape specifically has been repeatedly cited as the need of the hour.
- Further, our efforts to ensure justice for child survivors have suffered from grossly inadequate child protection and rehabilitation services, lack of compliance with child-friendly legal procedures, and no real system of positive measures to reduce vulnerabilities of children.

What could this lead to?

- Research on child sexual violence in India shows that a large proportion of perpetrators are family members or those close to or known to the family. This results in massive underreporting of such crimes.
- This concern will only intensify with the death penalty because we are effectively asking the child's family to risk sending a family member or a known person to the gallows.

Death Penalty and the poor

- The Death Penalty India Report of 2016 found that a very large proportion of death row prisoners (over 75%) are extremely poor and belong to marginalized groups with barely any meaningful access to legal representation.
- Thus the weakest sections of society bear the burden of the death penalty.
- While there is widespread agreement that child rape is a concern across all sections of society, by choosing the death penalty as a response we are focusing on a punishment that structurally targets the poor.

Way forward

Under our Constitution, a legislation has to always give a sentencing judge the option of choosing between life imprisonment and the death penalty; death penalty cannot be declared as the only punishment for any crime. The sentencing judges will have to make this choice in the context of child rape too.

3. Irula tribes

- They inhabit the area of the Nilgiri mountains, in the states of Tamil Nadu and Kerala
- People of Irula ethnicity are called Irular, and speak Irula, which belongs to the Dravidian family
- Irula tribesmen are world renowned for their ability to catch snakes.

4. National Building Construction Corporation (NBCC)

- It is a blue-chip Government of India Navratna Enterprise under the Ministry of Urban Development.
- NBCC, a public sector undertaking, has a specialised subsidiary to handle tasks from the government and from central PSUs. It is the sole land authorised agency for central undertakings.
- The Company's present areas of operations are categorized into three main segments, i.e. (i) Project Management Consultancy (PMC), (ii) Real Estate Development & (iii) EPC Contracting

Context

- The government is considering handing the task of maintaining, managing and earning revenue from immovable properties attached in money laundering cases to the NBCC

What was the need?

- The proposal to mandate NBCC to do the job was at the behest of the ED and mooted by the finance ministry
- It was felt that lack of proper maintenance led to decay of the properties and the agency had to continuously spend on their upkeep

Current Status

- ED manages the properties confiscated by it but does not have experience in how to do so and there is no provision under PMLA for rental to earn revenue

What would be done?

- The proposal is to manage the seized land, which can often measure several thousand acres, as well as numerous factories, flats, buildings and shops taken over by the ED
- The latest discussions could pave the way for NBCC to get similar contracts from intelligence and police establishments

5. Prohibition of Unlawful Assembly (Interference with the Freedom of Matrimonial Alliances) Bill, 2011

- It is a proposed legislation in India which intends to check honor killings
- The proposed bill seeks to prohibit any person or group of persons to gather and adjudicate or condemn any marriage, which is not prohibited by law, on the claims that it brings dishonour of a caste, locality or community
- It aims to criminalize the intimidation of consenting adults by kangaroo courts for same-gotra marriages, inter-caste, inter-community and inter-religious marriages
- The offences under it will be cognisable, non-bailable and non-compoundable. The trials will be decided by a session's judge or an additional session judge. Special courts which would be set by states in consultation with the High Courts will have the power of a session court

- This was presented by the Law Commission of India

Details

- The definition of murder in Section 300 of the Indian Penal Code would suffice "to take care of the situations leading to overt acts of killing or causing bodily harm to the targeted person who allegedly undermined the honour of the caste or community."
- The 2011 Bill defines "unlawful assembly" as a group of persons who congregate with the "view or intention to deliberate on or condemn any marriage on the basis that such marriage has dishonoured the caste or community tradition or brought disrepute to all or any of the persons forming part of the assembly or the family or the people of the locality concerned."
- "Marriage" under the draft legislation includes "proposed or intended marriage."

Punishments

- Participating in any unlawful assembly is punishable with imprisonment for a term of not less than six months but which may extend to one year and is also liable to a fine of up to 10,000.
- Making exhortations that endanger the liberty of a couple is punishable with imprisonment for a term of not less than one year but which may extend to two years and is also liable to a fine of up to 20,000.
- Criminal intimidation of the couple or their relatives or supporters is punishable with imprisonment for a term of not less than one year but which may extend to three years and is also liable to a fine of up to 30,000.
- The maximum punishment in case of actual harm or injury caused shall extend to seven years of imprisonment.
- The provisions under the proposed law do not negate the offences under IPC but only adds to them.

Issue Area

- So far, 23 States have responded to the Bill with suggestions; the other six have not responded yet.

So the Supreme Court has now stepped in to fill this legislative vacuum and is expected to frame guidelines in a judgment to protect adult couples from the fury of the mob.

6. Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989

- Art 17- Abolition of Untouchability
- This was enacted to prevent atrocities against scheduled castes and scheduled tribes.
- The Act is popularly known as POA, the SC/ST Act, the Prevention of Atrocities Act, or simply the Atrocities Act.
- This is to free Indian society from blind and irrational adherence to traditional beliefs and to establish a bias free society.

- It was made operational with the ostensible objective to remove humiliation and multifaceted harassments meted to the Dalits and to ensure their fundamental and socio-economic, political, and cultural rights.

Definition

- The term 'atrocities' was not defined until this Act was passed by the Parliament in 1989
- Atrocity is "an expression commonly used to refer to crimes against Scheduled Castes (SCs) and Scheduled Tribes (STs) in India".
- It implies "any offence under the Indian Penal Code (IPC) committed against SCs by non-SC persons, or against STs by non-ST persons. Caste consideration as a motive is not necessary to make such an offence in case of atrocity"

Implementation

- As 'police' and 'public order' are state subjects, primary responsibility for prevention of atrocities and maintenance of law and order rests with the State Governments

Amendment Act, 2015

- New offences of atrocities like tonsuring of head, moustache, or similar acts which are derogatory to the dignity of members of Scheduled Castes and Scheduled Tribes, garlanding with chappals, denying access to irrigation facilities or forest rights, dispose or carry human or animal carcasses, or to dig graves, using or permitting manual scavenging, dedicating a Scheduled Caste or a Scheduled Tribe women as devadasi, abusing in caste name, perpetrating witchcraft atrocities, imposing social or economic boycott
- Establishment of Exclusive Special Courts and specification of Exclusive Special Public Prosecutors also, to exclusively try the offences under the PoA Act to enable speedy and expeditious disposal of cases.
- Power of Special Courts and Exclusive Special Courts, to take direct cognizance of offence and as far as possible, completion of trial of the case within two months, from the date of filing of the charge sheet.
- Addition of presumption to the offences –If the accused was acquainted with the victim or his family, the court will presume that the accused was aware of the caste or tribal identity of the victim unless proved otherwise.

SC/ST Act being used for blackmail, says Supreme Court

Context

- The anti-atrocities law, which protects Scheduled Castes and Scheduled Tribes from casteist slurs and discrimination, has become an instrument to "blackmail" innocent citizens and public servants

What is the issue?

- The past three decades have seen complainants — who belong to the marginalized sections of society — use the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act of 1989 to exact “vengeance” and satisfy vested interests political opponents in panchayat, municipal or other elections, to settle private civil disputes arising out of property, monetary disputes, employment disputes and seniority disputes.
- Instead of blurring caste lines, the Act has been misused to file false complaints to promote caste hatred
- The law is therefore used to rob a person of his personal liberty merely on the unilateral word of the complainant

Stats

- Court also looked into National Crime Records Bureau (NCRB) data for 2015, which said that closure reports had been filed in 15-16 per cent of the complaints under the Act.
- And over 75 per cent of such cases taken up by the courts had resulted in acquittals/ withdrawal or compounding of the cases.

What does the law say?

- The 1989 Act penalizes cattiest insults and even denies anticipatory bail to the suspected offenders

Recommendation

Issuing a slew of guidelines to protect public servants and private employees from arbitrary arrests under the Atrocities Act,

- The court directed that public servants can only be arrested with the written permission of their appointing authority.
- In the case of private employees, the Senior Superintendent of Police concerned should allow it.
- A preliminary inquiry should be conducted before the FIR is registered to check whether the case falls within the parameters of the Atrocities Act and if it is frivolous or motivated. Supreme Court laid down stringent safeguards, including provisions for anticipatory bail and a “preliminary enquiry” before registering a case under the Act.

What else did the court say?

- The current working of Atrocities Act may even “perpetuate casteism” if it is not brought in line and the court needs to intervene to check the “false implication of innocent citizens on caste lines.”
- “The Act cannot be converted into a charter for exploitation or oppression by any unscrupulous person or by the police for extraneous reasons against other citizens. Any harassment of an innocent citizen, irrespective of caste or religion, is against the guarantee of the Constitution. This court must enforce such a guarantee. Law should not result in caste hatred,”

- Secularism is a basic feature of the Constitution. Irrespective of caste or religion, the Constitution guarantees equality in its preamble as well as other provisions including Articles 14-16. The Constitution envisages a cohesive, unified and casteless society. We are thus of the view that interpretation of the Atrocities Act should promote constitutional values of fraternity and integration of the society. This may require a check on false implication of innocent citizens on caste lines,”

Way forward

- The Supreme Court has sought to strike a balance between protecting individual liberty and preserving the spirit of a law in favour of oppressed sections.
- But what should be of concern is that some laws designed to protect the weakest and most disempowered people do not lose their teeth. Words of caution and rules against misuse may be needed to grant relief to the innocent. But nothing should be done to de-fang the law itself.

7. Suvridha

- Ministry of Chemicals and Fertilizers
- 100% Oxo-biodegradable Sanitary Napkin, under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)
- A special additive is added in the SUVIDHA napkin which makes it biodegradable when it reacts with oxygen after it is used and discarded.

8. Swatantra Sainik Samman Yojana (SSSY)

- It is a monthly Samman Pension to freedom fighters, as a token of respect for their contribution in the national freedom struggle and on their demise, to their eligible dependents viz. spouses and thereafter, unmarried and unemployed daughters and dependent parents, as per prescribed eligibility norms and procedure.

9. Tribal Diaries**What is it?**

- The Ministry of Tribal Affairs has developed an android based mobile application called Tribal Diaries for internal monitoring as also connecting with officers/ officials concerned with implementation of schemes / programmes for tribal development.

Details

- The application is for accredited users.
- This application provides an opportunity for visual feedback in terms of photographs, videos, uploading reports of official tours / inspections and sharing of best practices etc.

Assist Ekalavya Model Residential Schools (EMRSs)

- The application is being extensively used to get an overview of the EMRSs funded by the Ministry of Tribal Affairs.

- The principals of the EMRS are being encouraged to use the application and create projects highlighting the physical infrastructure of the schools, special achievement of the students and share success stories

10. Women Entrepreneurship Platform (WEP)

- Women Entrepreneurship Platform (WEP) would provide a vibrant entrepreneurial ecosystem where women do not face any gender-based barriers. The platform aspires to substantially increase the number of women entrepreneurs who will create and empower a dynamic New India.
- WEP will provide opportunities to women to realize their entrepreneurial aspirations, scale-up innovative initiatives and chalk-out sustainable, long-term strategies for their businesses.

The WEP shall aim to

- Promote women entrepreneurship by collaborating with various partner organizations
- Provide industry linkages & partner support to women entrepreneurs Increase the visibility of existing schemes, programmes & services across government and private sectors
- Identify and address issues and bottlenecks through appropriate channels
- Develop a national database through a centralized portal for registration of women entrepreneurs
- Provide evidence-based policy recommendations to develop a vibrant entrepreneurial ecosystem

Women Transforming India Awards 2018

- The theme of this year's campaign is 'Women and Entrepreneurship' which will be launched in partnership with United Nations. DICE Districts, an initiative that provides innovative financing opportunities for Social Entrepreneurs will also collaborate.

11. "#Yes I Bleed"

- The objective of the campaign called "#Yes I Bleed" is to create a holistic approach to the issue of menstruation, which is an experience that transcends culture, class, and caste.
- The United Nations has recognized menstrual hygiene as a global public health and a human rights issue yet across the globe. "Period poverty" as some call it, is a reality for millions of women and girls.
- The campaign called "#Yes I Bleed" will be initiated formally across all multi-media platforms, including Facebook and YouTube.

12. Indian Sign Language Dictionary of 3000 Words

- Initiated by Ministry of Social Justice & Empowerment
- The dictionary has been developed by Indian Sign Language Research & Training Centre (ISLR&TC) under Department of Empowerment of Persons with Disabilities (DEPwD)

- The basic aim of developing the ISL Dictionary is to remove communications barriers between the deaf and hearing communities as it is focused on providing more information in Indian sign language.
- Its aim is to give Deaf people the constitutional right to speech and opportunity of freedom of expression and also bringing them into the main stream of the society.

The ISL dictionary consists of words of five categories:

- Everyday Terms, Legal Terms, Academic Terms, Medical Terms and Technical Terms

13. Mottainai for Swachh Bharat

What is Mottainai?

- MOTTAINAI is a Japanese word that literally means "wasteful".
- It is used to express dismay at wasteful actions. This single word clearly conveys the feeling of veneration that the Japanese people have towards the environment, and their firm resolve to protect it

How is this taught to Children?

- In Japan, children are taught to eat every last grain of rice in their bowl, because even a single grain is too precious to be wasted, given the energy and resources invested in producing it.
- This attitude is deeply rooted into the ancient Japanese belief of Shintoism, which says that God is everywhere in nature, including the trees, mountains, and rice fields.

3R's in Japan:

- Japan has cultivated a culture that follows the 3Rs: reduce (garbage), reuse, and recycle.
- One practical example of the 3Rs is the segregation of garbage.
 - * In Japan, it is obligatory to sort garbage before throwing it away.
 - * All garbage must be segregated into combustible and non-combustible piles; recyclable items must also be separated.
 - * This has become a habit, and it is done naturally and autonomously by each family as a regular activity.

What should we learn?

- First and most importantly, to raise awareness and mobilise the public, no tool works more efficiently and effectively than the education system and the network it wields. To reinforce our commitment towards the environment as a precious entity on which our survival depends, the youth must be encouraged to imbibe the "mottainai" spirit.
- Environmental problems still exist in the world, but there are many previous examples that India can use as references
- Third, a key solution is technology.

- * During the period of heavy pollution in Japan, Japanese companies developed numerous state-of-the-art technologies to help reverse the situation.
- * The harnessing of biomass energy from agricultural residues is another area in which Japanese companies are making enormous headway.
- * Japan has also become a world leader when it comes to electric vehicles: It was the first country to start mass-producing the vehicles, and improved models

India Japan Cooperation

Blue Sky Initiatives

- Embassy of Japan in India launched the "Blue Sky Initiatives", which aim to mitigate air pollution by ensuring that the best and latest technologies will be made available to India.
- For instance, exhaust from coal thermal power plants is one of the primary causes of air pollution in India. Japanese companies have developed equipment that can filter out particulate matter.

Way forward

- Japan and India now enjoy an unprecedented level of mutual trust and friendship. With immense confidence in the ability and commitment of the Indian government and its people in combating environmental pollution, Japan is eager to deepen our cooperation in this field.
- By combining Indian resolve with the technological expertise of Japan, the two nations can win the fight against pollution and regain cleaner and greener environment.

14. Mukhyamantri Kalyani Sahayata Yojana

- It is a monthly pension scheme of Rs 300 to widows in the age group of 18-79 years besides financial assistance of Rs two lakh for their remarriage by the Madhya Pradesh Govt
- Those older would get a monthly pension of Rs 500.

15. 'WomenInTech' forum

Context

- There is gender gap in individuals pursuing STEM (Science, Technology, Engineering and Math) careers
- So to overcome the issue India has kicked start a collaborative industry initiative aimed at addressing the sharp lack of women in STEM careers by launching a new forum called 'WomenInTech', which will tackle the problem at various levels via a multi-pronged approach

Details

- The idea has been conceived by Royal Bank of Scotland (RBS) in collaboration with a number of technology corporates, academia, and NGOs.

- One of the prime purposes of the forum is to create funds in collaboration with a number of NGOs. The funds are to be used in the tertiary education of three economically underprivileged young women so that they can make it big in the field of engineering.
- The forum has been designed "to help accelerate the national agenda of Beti Bachao, Beti Padhao and further [to] work in alignment with the UN's focus area this year – 'Turning promises into action'

16. Honour Killing

Context

- The ruling came on a plea by NGO Shakti Vahini, which had moved the apex court in 2010 seeking protection of couples from honour killings by such panchayats.

Hammurabi's Code

- The Babylonian King Hammurabi fashioned a compendium of 282 laws that set standards of conduct and justice for his empire in ancient Mesopotamia.
- Hammurabi's Code is one of the most famous examples of the ancient precept of "lex talionis," or law of retribution, a form of retaliatory justice commonly associated with the saying "an eye for an eye." Under this system, if a man broke the bone of one his equals, his own bone would be broken in return.

Directions of SC

- Self-appointed, quasi-judicial and often all-male congregations of village elders trying to stop marriages between two consenting adults "guillotined" individual liberty and freedom of choice, and was having a "catastrophic effect on the society", the bench said while issuing directions for legislation and punitive measures.
- The Secretary, Home Department of the concerned States shall issue directives/advisories to the Superintendent of Police of the concerned Districts for ensuring that the Officer In charge of the Police Stations of the identified areas are extra cautious
- The bench also ordered creation of special cells in all districts to deal with complaints of couples under threat and the setting up of fast-track courts for hearing criminal cases against khap panchayat members.
 - * These Special Cells shall create a 24 hour helpline to receive and register such complaints and to provide necessary assistance/advice and protection to the couple
- The bench said state governments should identify districts, sub-divisions and villages where instances of honour killing or assembly of khap panchayats have been reported in the past five years. If there is any information about meetings of khap panchayats, states should deploy adequate police force for prevention of assembly of the proposed gathering.

Judgement

- “When two adults consensually choose each other as life partners, it is a manifestation of their choice which is recognized under Articles 19 and 21 of the Constitution”, held the Court

17. Centre opposes ‘creamy layer’ bar for SCs/STs**Context**

- The Mandal judgment had confined the exclusion of ‘creamy layer’ only to the OBCs and not the SC/STs.
- Now, the petition wants the same exclusion from quota benefits to the ‘creamy layer’ among the SC/STs too.

What did the Petition say?

- The petition filed by Samta Andolan Samiti, which represents the poor and downtrodden strata of the SC/ST communities in Rajasthan, contended that the rich among such communities were “snatching away” quota benefits while the deserving and impoverished among them continue to “bite the dust”.

What has this lead to?

- It is this lack of percolation of reservation benefits down to the poor and really backward among the SC/ST communities that had led to social unrest, Naxalite movements and perennial poverty, the petition

Lokur Committee

- The petition refers to the report of the Centre’s ‘Advisory Committee on the revision of the list of Schedule Castes and Schedule Tribes’, also known as Lokur Committee, set up in 1965, which said that “backwardness has a tendency to perpetuate itself and those who are listed as backward try to remain as such due to various concessions and benefits they derive. Thus, backwardness becomes a vested interest”.

18. Acid Attack**Why acid Attacks?**

- The study underscored that rejection in love and of marriage proposals were the motivating factor in 36% of all these attacks.
- Marital discord (13%).
- About 84% of the victims were known to the perpetrators.
- A significant number of victims were male (35%).

Acid Used

- While varieties of acid such as muriatic acid, sulphuric acid and hydrochloric acid are available in hardware shops, the chemical most commonly used in attacks is nitric acid, sourced from local goldsmith shops.

Home ministry

It has come up with guidelines against Acid-attacks on women;

- A web application which would enable registration of stockists and retailers

- Issue of licenses by the District administration
- Targeting sale of acid to individuals only after recording personal details like proof of identity and proof of address of the purchaser. This would aim at reducing unauthorised sale of acid in the country.
- Ministry wants to ensure that victims of acid attacks were treated by the hospitals in ‘a hassle free manner’ for which the MHA was in consultation with various stakeholders such as the Ministry of Health and Family Welfare, the Ministry of Finance and Insurance companies, so that victims of acid attacks were treated on cashless basis and the treatment amount was paid from the Central Victim Compensation Fund
- The Government has also proposed to bring suitable amendments in laws to fix the time frame for disposal of appeals by courts, especially in cases of heinous crimes including acid attacks, to ensure speedy justice.

Laws dealing with it

- Section 326A lays down the punishment for acid throwing. The minimum punishment is 10 years imprisonment. It can extend up to life imprisonment with fine.
- Section 326 B lays down the punishment for attempted acid throwing. The minimum punishment is 5 years imprisonment. It can extend up to 7 years imprisonment with fine.
- Before this, perpetrators were typically charged with causing hurt, which only invited a punishment of three years.

Supreme Court of India**Laxmi versus Union of India,**

- To Private Hospitals
 - * Full medical assistance should be provided to the victims of acid attack and that private hospitals should also provide free medical treatment to such victims
 - * No hospital/clinic should refuse treatment citing lack of specialized facilities.
 - * First-aid must be administered to the victim and after stabilization, the victim/patient could be shifted to a specialized facility for further treatment, wherever required.
 - * Action may be taken against hospital/clinic for refusal to treat victims of acid attacks and other crimes in contravention of the provisions of Section 357C of the Code of Criminal Procedure, 1973.
- To State Govt
 - * In its order, the apex court also ruled that state governments should hand over Rs 3 lakh as compensation for victims and ensure free treatment at any hospital.

Parivartan Kendra vs. Union of India

- The Supreme Court has directed all the States and Union Territories to consider the plight of Acid Attack victims and take appropriate steps with regard to inclusion of their names under the disability list.
- Apex court said that State shall upon itself take full responsibility for the treatment and rehabilitation of the victims of acid attack as per the Guidelines provided in Laxmi vs. Union of India

What guidelines were given?

- Dealers can now only sell the chemical after the buyer showed a government issued photo identity card and after specifying the purpose of purchase.
- The seller should submit the details of sale to the local police within three days of the transaction.
- Acid should not be sold to any person under 18 and all stocks must be declared with the local sub-divisional magistrate (SDM) within 15 days.

What have the states done?

- The compensation can be increased by state governments as has been done by UP, where up to Rs 10 lakh compensation is given depending upon the case
- In line with the SC ruling, in 2015, Punjab, Haryana and the Union Territory of Chandigarh launched the 'Victim Compensation Scheme', which provides a maximum compensation of Rs 3 lakh, and less if acid has not affected the face or vital organs of the body.
- It also provides for free treatment to victims. In case of death of a victim, a compensation of Rs 5 lakh is to be paid to the next of kin.

Criticism

The MHA data indicates that the number of incidents have increased from 83 in 2011 to 309 in 2014 is evidence of the lack of effective implementation of laws regulating the sale of acids.

- Large volume of acid sold via blackmarket. Barely 1 bottle required to attack someone. That much can be siphoned off even through registered acid-seller.
- To evade registration norms, chemical factories are changing the product-description; avoid labeling shipments as "Acid".
- Most acid attackers are spurned lovers. This type of medieval-mindset must be changed through gender sensitive, value-based moral education from primary school itself.

Bangladesh as Example

Bangladesh recorded the highest incidence of acid attacks in the world. It then passed two laws to curb such attacks:

- Acid Offence Control Act, 2002,
- Suppression of Offense by Acid Attack, 2002.

Before 2002, the country saw about 500 acid attacks a year. But with the legislation coming into force, along with other measures, the number of attacks came down to about 100 a year.

- These laws not only instituted a complete ban on over-the-counter sale of acid
- Mandated the setting up of tribunals to deal with acid attacks,
- The creation of a National Acid Control Council.
- Bangladesh has made it mandatory that investigation in these cases should be completed within 30 days.

SCIENCE AND TECHNOLOGY

1. Copernicus Programme

- Copernicus is the world's largest single earth observation Programme and is directed by the European Commission in partnership with the European Space Agency
- It aims at achieving a global, continuous, autonomous, high quality, wide range Earth observation capacity.
- Providing accurate, timely and easily accessible information to, among other things, improve the management of the environment, understand and mitigate the effects of climate change, and ensure civil security

Copernicus is based on two types of satellite missions,

- ESA's six families of dedicated Sentinel (space missions)
- Missions from other space agencies i.e. third party satellites, called Contributing space Missions.

Context

- India joins Europe's satellite data sharing pool
- Under this arrangement, the European Commission intends to provide India with free, full and open access to the data from the Copernicus Sentinel family of satellites using high bandwidth connections.
- Reciprocally the Department of Space will provide the Copernicus Programme and its participating states with a free, full and open access to the data from ISRO's land, ocean and atmospheric series of civilian satellites (Oceansat-2, Megha-Tropiques, Scatsat-1, SARAL, INSAT-3D, INSAT-3DR) with the exception of commercial high-resolution satellites data
- The arrangement also includes technical assistance for setting up high bandwidth connections with ISRO sites, mirror servers, data storage and archival facilities

Applications

- The space-based information will be used for forecasting disasters, providing emergency response and rescue of people during disasters; to glean land, ocean data; and for issues of security, agriculture, climate change and atmosphere
- Urban area management, sustainable development and nature protection, regional and local planning, agriculture, forestry and fisheries, health, civil protection, infrastructure, transport and mobility, as well as tourism.
- Data provided can be used to build statistics and topographic Maps

It helps Policymakers

- The main users of Copernicus services are policymakers and public authorities who need the information to develop environmental legislation and policies or to take critical decisions in the event of an emergency, such as a natural disaster or a humanitarian crisis.

Its help in the past

- The Copernicus emergency response mapping system was activated on at least two Indian occasions — during the 2014 floods in Andhra Pradesh in October 2014 and after the 2013 storm in Odisha.

2. Festival of Innovation and Entrepreneurship (FINE)

What is it?

- FINE an initiative to recognize, respect, showcase, reward innovations and to foster a supportive ecosystem for innovators, is being organized by Rashtrapati Bhavan in association with the Department of Science and Technology, Government of India and the National Innovation Foundation-India

What it intends to do?

- FINE will provide a platform for innovators for building linkages with potential stakeholders whose support can improve their prospects in coming years to develop their ideas into implementable projects for the larger social good.
- It will also help in promoting lateral learning and linkages among the innovators to enrich the ecosystem for sharing of ideas.
- It will provide a window to showcase creative and innovative solutions for social development through innovation emerging from grassroots, student ideas and other technologies.
- These innovations can positively impact fields such as agriculture, rural development, sanitation, health, women and child development, biotechnology and medicine.
- FINE also includes an "In-Residence" Program as part of which a batch of ten innovation scholars will stay within the President's Estate and will be provided mentoring as well as opportunities for idea sharing with key stakeholders.

3. Global Centre for Nuclear Energy Partnership (GCNEP)

- Global Centre for Nuclear Energy Partnership is World's first nuclear energy partnership centre at Bahadurgarh, Haryana
- This center will facilitate deliberation and discussions of international experts on various issues including innovation in nuclear reactors and the nuclear fuel cycle, development of proliferation-resistant reactors, security technologies and the effects of radiation exposure

The main objectives of the centre include

- Mark Development of **enhanced nuclear safeguards** to effectively and efficiently monitor nuclear materials and facilities.
- Mark Promoting the development of advanced, more proliferation resistant nuclear power reactors.
- Mark **Training manpower** in the field of Nuclear Security and Radiological Safety.
- Mark Educating in the field of Advanced Nuclear Energy Systems, Isotopes and Radiation Technologies, nuclear forensic.
- Mark Establishing accreditation facilities for **radiation** monitoring.

4. GLOBE Observer App

- NASA and the GLOBE program released the GLOBE Observer App
- It encourages the public to make environmental observations that complement NASA satellite observations.
- GLOBE Observer will soon make other features available, such as Land Cover and Mosquito protocols, providing scientists with additional observations that would be too expensive or time consuming to acquire by other means.
- The GLOBE Programme is offering this challenge to show people how important it is to NASA to have citizen scientist observations; observations from the ground up

5. Hammer (Hypervelocity Asteroid Mitigation Mission for Emergency Response)

- The spacecraft named Hammer is an eight tonne spaceship which could deflect a giant space rock.

Why?

- The 1,600-foot-wide asteroid Bennu is circling the sun at 63,000 mph. It is now at a comfortable 54 million miles from Earth.
- Bennu's impact would release "three times more energy than all nuclear weapons detonated throughout history"

6. India-based Neutrino Observatory (INO)

- It is to study fundamental particles called neutrinos.
- The project, which involves the construction of an underground laboratory, was initially to be located in the Nilgiris but later, on grounds that it was too close to tiger habitat, was moved to a cavern under a rocky mountain in the Bodi West Hills region of Theni district, about 110 kilometres west of Madurai in Tamil Nadu.

History

- India has been among the pioneers in neutrino research, the first of such laboratories having been established in the 1960s.

- We led neutrino research when our physicists used a gold mine at Kolar in Karnataka to set up what was then the world's deepest underground laboratory. This was called the Kolar Gold Field Lab. In 1965, it enabled researchers to detect atmospheric neutrinos.
- In 1992, when the mine became uneconomical, the laboratory was shut down. With that, we lost our advantage in understanding the most mysterious particle in the universe. INO may reclaim this advantage and our global leadership.
- The Magnetized Iron Calorimeter (ICAL) being set up at INO will be among the largest ever in the world, weighing over 50,000 tonnes.

What are Neutrinos?

- **Neutrinos, first proposed by Swiss scientist Wolfgang Pauli**, are the second most widely occurring particle in the universe, only second to photons, the particle which makes up light.
- Neutrinos are similar to the more familiar electron, with one crucial difference: neutrinos do not carry electric charge. Because neutrinos are electrically neutral, they are not affected by the electromagnetic forces which act on electrons.
- They are light, little mass or nearly massless, no charge particles that only interact with weak nuclear force.
- There are three models "**electron neutrino**" is associated with the electron, and two other neutrinos are associated with heavier versions of the electron called the **muon and the tau**
- 2015, the nobel prize in physics was awarded to **Takaaki Kajita and Arthur B. McDonald** for discovering neutrino oscillations demonstrating that neutrinos have mass.

Why Neutrinos?

- Neutrinos are very important for our scientific progress and technological growth for three reasons.
 - * First, they are abundant.
 - * Second, they have very feeble mass and no charge and hence can travel through planets, stars, rocks and human bodies without any interaction.
 - * Third, they hide within them a vast pool of knowledge and could open up new vistas in the fields of astronomy and astrophysics, communication and even in medical imaging, through the detector spin-offs.

Importance

- First, neutrinos may have a role to play in nuclear non-proliferation through the remote monitoring of nuclear reactors.
- Second, understanding neutrinos can help us detect mineral and oil deposits deep in the earth.
- Third, as we now know, neutrinos can pass right through the earth. They may open up a faster way to send data than the current 'around the earth' model, using towers, cables or satellites.

- Fourth, neutrinos are the information bearers of the universe — which are almost never lost in their path. India's effort in studying neutrinos at INO may help us unravel the deepest mystery of the universe

What do the critics say?

- Many argue, among other things, that the explosives used in construction are a threat to the highly sensitive ecology of the Western Ghats
- Rs. 1,500 crore used for the project is a waste of money
- The relevant radiation safety studies for carrying out the long baseline neutrino experiment in the second phase of INO have not been done.
- Construction of 2 km-long horizontal access tunnel has environmental impact leading to dust and noise
- neutrinos being radioactive particles and that the INO will double up the storage of nuclear waste

Can neutrinos cause cancer?

- Not at all! Neutrinos are the least harmful of all elementary particles, as they almost never react with solid bodies.
- The mass of a neutron is 1.67×10^{-27} kg while the mass of a neutrino is of the order of 1×10^{-37} kg. Hence, a neutrino is about 17 billion times lighter than a neutron. The two are incomparable.

Why should the laboratory be situated underground?

- Neutrinos are notoriously difficult to detect in a laboratory because of their extremely weak interaction with matter. The background from cosmic rays (which interact much more readily than neutrinos) and natural radioactivity will make it almost impossible to detect them on the surface of the Earth. This is the reason most neutrino observatories are located deep inside the Earth's surface.
- The overburden provided by the Earth matter is transparent to neutrinos whereas most background from cosmic rays is substantially reduced depending on the depth at which the detector is located.

Advantages to locals

- The construction contract will specify that local labour should be used, based on the skill levels, to the maximum extent possible.
- Furthermore, gainful employment will be there for a small number of people by way of sourcing of services and daily needs for the INO facility and for the upkeep of buildings and landscapes.
- A major benefit will be for schools and colleges in the region as the students interested in science can benefit from the outreach activities as well as doing projects at the lab.
- Efforts will be made to improve the infrastructure and academic standards of the surrounding schools as permitted by governing rules. Exhibitions and other similar facilities will be arranged to enhance the scientific spirit of the local youngsters, etc.

7. Indian Science Congress Association (ISCA)

It owes its origin to the foresight and initiative of two British Chemists, namely, Professor J. L. Simonsen and Professor P.S. MacMahon. It occurred to them that scientific research in India might be stimulated if an annual meeting of research workers somewhat on the lines of the British Association for the Advancement of Science could be arranged.

- To advance and promote the cause of science in India
- To hold an annual congress at a suitable place in India
- To publish such proceedings, journals, transactions and other publications as may be considered desirable.

Prime Minister Narendra Modi inaugurated the 105th Indian Science Congress

- Theme "Reaching the Unreached Through Science and Technology"

Why was the venue changed?

- The Indian Science Congress – the largest gathering of Indian scientists – was scheduled to be held at Osmania University in Hyderabad from January 3 to 7.
- For the first time in its history, it was rescheduled to March 16-March 20 and its venue was moved to the Manipal University after the Osmania University administration said it would not be able to host the event fearing agitations on campus.

Modi on R&D

- The time is ripe to redefine 'R&D' as 'research' for the 'development' of the nation

8. New Horizons Mission

- New Horizons was launched in 2006, and has been travelling through space for the past nine years.
- The New Horizons mission is helping us understand worlds at the edge of our solar system by making the first reconnaissance of the dwarf planet Pluto and by venturing deeper into the distant, mysterious Kuiper Belt – a relic of solar system formation.
- After its historic first-ever flyby of Pluto, NASA's New Horizons mission has received the green light to fly onward to an object deeper in the Kuiper Belt. NASA has extended its mission to go further into the Kuiper Belt to explore an ancient object, which is a remnant from the time when the planets in our Solar System first formed. The Kuiper Belt Object, the spacecraft is now heading for, is provisionally called 2014 MU69.

Ultima Thule

- It is New Horizons spacecraft's next flyby target
- It is an odd, mysterious object. In fact, scientists don't even know if it's a single body; it may be two close-orbiting objects
- It comes from medieval literature and refers to a distant, unknown world.
- Its official name is 2014 MU69.

- This lies about 1 billion miles (1.6 billion kilometers) beyond the orbit of Pluto. In the process, MU69 will become the most distant object ever observed up close.

9. Silver Copper Telluride (AgCuTe)

Context

- A novel compound that exhibits poor thermal conductivity in the 25-425 degree C range but shows good electrical conductivity has been developed by a team of researchers from Bengaluru's Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR).

Properties

- In the AgCuTe material, the silver atoms (cation) are weakly bound, giving rise to poor thermal conductivity due to the slow vibration of the lattice (soft lattice).
- At high temperatures, copper in the material further lowers the thermal conductivity along with silver.
- In contrast, the tellurium atoms (anion) are strongly bound and the lattice is very rigid. The strongly bound tellurium provides a conduction channel for holes thus rendering good electrical conductivity as seen in metals.

Significance

- The new material made from silver, copper, and tellurium shows high levels of thermoelectric performance that the scientists are hoping could someday be harnessed to extract electricity from waste heat of chemical, thermal, or steel power plants.

10. Vaterite

Context

- In a first, researchers have discovered on alpine plants a rare mineral that holds **potential as a new material for industrial and medical applications.**

What is it?

- The mineral vaterite, a form of calcium carbonate, is a dominant component of the protective silvery-white crust that forms **on the leaves of a number of alpine plants**

Occurrence

- Naturally occurring vaterite is rarely found on Earth. Small amounts of vaterite crystals have been found in some sea and freshwater crustaceans, bird eggs, the inner ears of salmon, meteorites and rocks.

Uses

- Improving the cements used in orthopedic surgery
- As an industrial application improving the quality of papers for inkjet printing by reducing the lateral spread of ink

11. GSAT-6A

Context

- ISRO will launch communication satellite GSAT-6A from the Satish Dhawan Space Centre

Details

- GSAT-6A weighs 2140kg, is a high-power S-band communication satellite, just like its predecessor GSAT-6.
- The satellite with a life span of around 10 years will be put into orbit by the Indian rocket, Geosynchronous Satellite Launch Vehicle (GSLV-F08)
- It is designated for the use of the Armed Forces and will not add any transponder capacity for general uses
- A special feature of the GSAT-6A is its 6-metre-wide umbrella-like antenna, which will be unfurled in once it is in space.
 - * The antenna is thrice as broad as the antennas generally used in ISRO satellites. It will enable mobile communication from anywhere via hand-held ground terminals.
 - * GSAT-6A will also have a smaller 0.8-metre antenna for communication in the C band.
 - * Regular communication satellites with smaller antenna require much larger ground stations
 - * The S-band's antenna was developed by ISRO's Space Applications Centre, Ahmedabad. The unfurl-able antenna, hand-held ground terminals, and network management techniques could be useful in future satellite-based mobile communication applications.

12. NGC1052-DF2

- A galaxy is a huge system of billions of stars, and clouds of dust and gases
- Every galaxy need Dark matter for its formation
- It has 400 times less dark matter than expected for an object of its size.
- It is located about 65 million light years away from Earth
- The galaxy also appears to be devoid of gas

Dark Matter Deficiency

- Dark matter is a form of matter whose presence is discernable only through its gravitational interactions with baryonic, or "normal," matter. The unseen matter seems to make up roughly 80 percent of the mass of the universe and is thought to play a key role in galactic evolution.
- The universe's ordinary matter includes things like gas, stars, black holes and planets, not to mention shoes, umbrellas, platypuses and whatever else you might see on Earth.

Ultra-Diffuse Galaxy

- It is about the same size as the Milky Way, but has roughly 250 times fewer stars: 400 million compared to the Milky Way's 100 billion stars.
- It is classified as an ultra-diffuse galaxy, a kind first recognized in 2015.
- It is an extremely low luminosity galaxy
- Such a galaxy may have the same size and mass as the Milky Way but a visible star count of only 1%. Their lack of luminosity is due to the lack of star-forming gas in the galaxy.

Hypothesis

- The scientists spotted NGC1052-DF2 using the Dragonfly Telephoto Array, a telescope in New Mexico.
- Scientists do not know how it formed, but have some hypotheses, including the possibility that a cataclysm within NGC1052-DF2 swept away all its gas and dark matter or that a massive nearby galaxy played havoc with it.

13. Svalbard Global Seed Vault

- It is a long-term seed storage facility, built to stand the test of time — and the challenge of natural or man-made disasters. The Seed Vault represents the world's largest collection of crop diversity.
- It is famously called the 'Doomsday' or the 'Apocalypse' Seed Bank or 'Noah's Ark for seeds'.
- It is owned by the Norwegian government.
- The facility is managed through an agreement between the Norwegian ministry of agriculture and food, the Nordic Genetic Resource Centre (NordGen), and the Crop Trust (formerly known as the Global Crop Diversity Trust).

Purpose

- The purpose of the Vault is to store duplicates (backups) of seed samples from the world's crop collections.
- Permafrost and thick rock ensure that the seed samples will remain frozen even without power. The Vault is the ultimate insurance policy for the world's food supply, offering options for future generations to overcome the challenges of climate change and population growth.
- It will secure, for centuries, millions of seeds representing every important crop variety available in the world today. It is the final back up.
- The Svalbard Global Seed Vault holds the most diverse collection of food crop seeds in the world, with over 60,000 samples from India.
 - * The first deposit from India at Svalbard had the pigeon pea or arhar dal.

India's Seed bank

- India has national seed bank at the National Bureau of Plant Genetic Resources (NBPGR) in Delhi
- India has its own mini version of the seed vault in Chang-La, about 75km from Leh. This National Permafrost Repository was started in 2009 by the DRDO, in collaboration with the NBPGR.
- While the national seed bank has more than 1,500 crop species in the form of almost 400,000 seeds, the repository at Chang-La holds close to 5,000 seed samples from different plant species.

Extreme Altitude Research Center- Changla

- It is India's doomsday vault.
- DRDO has established the world's highest terrestrial centre at 17,600 feet above sea level at Changla near Pengong lake in Ladakh.
- The centre will serve as a natural cold storage for preserving rare and endangered medical plants for generations to come.
- The centre will act as an important utility for research work in frontal areas of food and agriculture and bio-medical sciences for wellbeing of the soldiers deployed in high altitude cold desert.
- Other activities that are proposed to be undertaken here include human physiological work, designing, testing, validation and demonstration of mobile and portable greenhouses, soil-less micro-farming technologies for fresh food in remote landlocked posts besides conservation and propagation of endangered extreme altitude medicinal plants and others.

Why was the place chosen?

- Chang-La has the subzero temperatures and low humidity necessary to suspend seed life for future generations.
- It is a site carefully chosen. It is far from rising seas and tectonic plate movement but around 75 km from the Leh airport, it is close enough to human civilization today to deposit the country's agricultural heritage with ease

Challenges

- Security from the point of view of electricity and energy conservation, since gene banks rely heavily on artificial cooling systems.
- Since it is a big project will need inputs from not only scientists, but engineers, earth sciences experts

14. Transiting Exoplanet Survey Satellite/ TESS**Context**

- NASA's little spacecraft TESS will ascend on a Falcon 9 rocket of the SpaceX to go up in the space

Details

- It will discover thousands of exoplanets in orbit around the brightest stars in the sky.
- In a two-year survey of the solar neighborhood, TESS will monitor more than 200,000 stars for temporary drops in brightness caused by planetary transits.
- This first-ever space borne all-sky transit survey will identify planets ranging from Earth-sized to gas giants, around a wide range of stellar types and orbital distances. No ground-based survey can achieve this feat.
- TESS is the latest effort to answer questions that have intrigued mankind for the last 30 years to see if there is life outside the Earth

15. K2-229b

- It is a hot, metallic, Earth-sized planet orbiting a dwarf star located 260 million light years away.
- The planet is almost 20 per cent larger than Earth but has a mass which is over two-and-a-half times greater. It reaches a day side temperature of over 2000 degrees Celsius.
- It is located very close to its host star (0.012 AU, around a hundredth of the distance between the Earth and the Sun), which itself is a medium-sized active K dwarf in the Virgo Constellation. K2-229b orbits this star every fourteen hours.

How was it discovered?

- Using the K2 telescope Doppler spectroscopy technique was employed - also known as the 'wobble method' - to discover and characterize this faraway planet.
- The astronomers knew the planet was there due to dips in the light from its host star as it orbited, periodically blocking starlight.
- They then calculated the size, position and mass of K2-229b by measuring the radial velocity of the star, and finding out how much the starlight 'wobbles' during orbit, due to the gravitational tug from the planet, which changes depending on the planet's size

Origin

- The dense, metallic nature of K2-229b has numerous potential origins, and one hypothesis is that its atmosphere might have been eroded by intense stellar wind and flares, as the planet is so close to its star.
- Another possibility is that K2-229b was formed after a huge impact between two giant astronomical bodies in space billions of years ago - much like the theory that the Moon was formed after Earth collided with a body the size of Mars.

Significance

- Discovering details about far-flung planets across the universe gives us more clues as to how planets in our own solar system formed
- As K2-229b is similar to Mercury, knowing more about the former can potentially reveal more about the latter

16. ISRO's lithium-ion cells to set all-electric vehicles era rolling

- Indian Space Research Organization (ISRO) announced that it is ready to transfer lithium-ion (li-ion) batteries technology to private industry to help India realize the dream of completing the transition to electric vehicles by 2030.
- ISRO Chairman K Sivan told that space-grade li-ion batteries developed by Vikram Sarabhai Space Centre was an ideal candidate for use in electric vehicles, with certain modifications. Automotive Research Association of India (ARAI) had already tested the ISRO batteries and found them suitable for automotive systems.
- Government-level discussions are going on to find suitable industrial partners and manufacture commercial grade li-ion batteries, which are cost-effective. From our side, we are ready to share the technology.
- Currently, li-ion batteries are being imported from countries like China and Japan, which make the prices of electric vehicles less attractive.
- ISRO has been using in-house li-ion batteries to power satellites and launch vehicles.
- During Thursday's GSLV-F08 launch, li-ion batteries were used to power the new electro mechanical actuation system and their performance has been satisfactory prompting the Union government to see them as a 'game changer'.
- To meet ISRO's needs, a memorandum of understanding (MoU) has been signed with Bharat Heavy Electricals Limited (BHEL).
- Already, a panel headed by Cabinet Secretary P K Sinha had recommended commercial use of ISRO's li-ion battery technology under the 'Make In India' initiative for electric vehicles.
- In October last year, NITI Aayog member V K Saraswat had said India has to set up large lithium-ion battery manufacturing plants to become a global player in electric vehicles technology market.
- Several countries across the world are already turning the spotlight on electric vehicles.
- In Norway, 60 per cent of all cars sold are electric/hybrid. Denmark has declared full-conversion to electric vehicles by 2025. Sales in China have grown three-fold last year.

- In electric two-wheelers, China is the global leader with over 24 million sold a year and over 120 million in operation. A total of 80,000 electric buses were added last year, targeting 70 per cent of its entire fleet electrified by 2020

Key issues

- India faces challenges as privately-owned vehicles are the prime mode of transport in the country, reinforcing the importance of an alternative mobility future
- Nearly 50,000 new motor vehicles are registered in India per day, with a 10 per cent increase in vehicle registration annually in the past decade
- Despite a very low number of vehicles per capita, traffic congestion and pollution are already serious issues in India
- According to a 2016 World Health Organisation study, India is home to 10 of the world's 20 most polluted cities
- In 2015, India imported more than 80 per cent of its oil at a cost of Rs 4.2 lakh crore
- Traffic accidents cause around 1.5 lakh deaths per year on Indian roads. Shared, electric and connected mobility is future
- India can save 64 per cent of anticipated passenger road-based mobility-related energy demand and 37 per cent of carbon emissions in 2030 by pursuing a shared, electric, and connected mobility future.

This would result in a reduction of 156 million tonnes in diesel and petrol consumption for that year. At US \$52 per barrel of crude, this would imply a net savings of roughly Rs 3.9 lakh crore (approximately US \$60 billion in 2030).±

SECURITY AND DEFENSE RELATED

1. Defexpo India 2018

- Defexpo India 2018 - an international land, naval and internal homeland security systems exhibition - will be held in Chennai
- More than 80 countries will showcase their defence prowess during the expo.
- Till 2016, all defence expos had been held only in New Delhi. When Manohar Parikkar was defence minister, it was held in Goa (in 2017).

2. Ex Samvedna

- It is a Multilateral Air Force exercise, 'Ex Samvedna', is being spearheaded by Indian Air Force and conducted by Southern Air Command (SAC)
- 'Samvedna' means 'Empathy' and will ensure better understanding and sharing of response procedures between a numbers of friendly neighboring nations.
- It is the first composite HADR Air exercise in the South Asian region and would be focused on practicing Air Force centric HADR solutions in a Multi-national cooperative Disaster Management environment.
- Air Forces of Bangladesh, Sri Lanka, UAE and Myanmar have already committed resources and personnel for the exercise.

3. India's first coastal policing academy

- The country's first national academy to train police forces in effectively safeguarding the Indian shoreline will start functioning in Devbhumi Dwarka district of Gujarat
- To be run by a team of paramilitary and defence forces, the academy will sharpen the skills of marine forces of coastal States.
- Union Home Ministry sanctioned the launch of the National Academy of Coastal Policing (NACP) from a campus of Gujarat's Fisheries Research Centre located in coastal Okha.

4. IKinzhel (Dagger) Missile

- The Kinzhel (Dagger) missile was launched from a MiG-31 aircraft by Russia. MiG-31 is both extremely fast and high-flying — making it an ideal launcher for Kinzhel.
- This missile appears to be a heavily modified version of Russia's Iskander short-range ballistic missiles, which are nuclear-capable.
- After separating from the plane, Kinzha's engine ignites to propel it to 10 times the speed of sound.
- The missile can deliver nuclear and conventional warheads at a range of more than 2,000 kilometers by overcome air-defense systems.

- The country also tested a new heavy intercontinental ballistic missile, called Sarmat, with a range and number of warheads exceeding its predecessor

5. Navika Sagar Parikrama

- circumnavigate the globe on an Indian-built sail boat INSV Tarini.
- This is the first ever Indian circumnavigation of the globe by an all-women crew. The project is scheduled to commence in early Sep 17.

Additional aims of the Expedition are as follows:

- Nari Shakti: In consonance with the National policy to empower women to attain their full potential, the expedition aims to showcase 'Nari Shakti' on the world platform. This would also help to discard the societal attitudes and mindset towards women in India by raising visibility of participation by women in challenging environment.
- Environment and Climate Change: Sailing encourages the use of environment friendly non-conventional renewable energy resources which affects the life of women. The expedition thereby aims at harnessing the energy to optimize the livelihood of the women onboard.
- The voyage also aims to show case the 'Make in India' initiative by sailing onboard the indigenously built INSV Tarini.
- Meteorological/ Ocean/ Wave Data Observation: The crew would also collate and update Meteorological/ Ocean/ Wave data on a daily basis for subsequent analysis by research and development organizations.
- Marine Pollution: The crew would monitor and report marine pollution on the high seas.

INSV Tarini

- It is indigenously-built 56-foot sailing vessel which showcases the 'Make in India' initiative on the International forum
- It is named after the Tara-Tarini hill shrine in Ganjam district of Odisha. Tara-Tarini shrine is located on the Kumari hills on the banks of Rushikulya river in Puriushottampur block of Ganjam district. According to historians, this holy shrine may be linked to the worship of Tara, the primordial deity of the Mahayana Buddhism.
- In Sanskrit, the word Tarini means both boat and saviour. Tara-Tarini was the traditional patron deity for sailors and merchants of ancient Odisha, who worshipped it for safety and success at sea.
- Tara Tarini shrine represents reverence for mother deity and acceptance of mother nature as the protector.

6. Paschim Leher (XPL-18)

- The Western Naval Command of the Indian Navy concluded a large scale operational exercise in the Arabian Sea. The three week long exercise termed Exercise 'Paschim Leher' (XPL), tested the operational readiness of the Western Naval Command and the execution of its operational plans.
- The exercise will enable further refine the operational, logistics and administrative plans of the Western Naval Command

7. S-400

- S-400 'Triumf' long-range air defence missile system has the capability to destroy incoming hostile aircraft, missiles and even drones at ranges of up to 400 km.
- It is capable of firing three types of missiles, creating a layered defence, and simultaneously engaging 36 targets.
- India would be the second customer after China

8. Seeker in Brahmos

Context

- Supersonic cruise missile BrahMos was successfully flight-tested for the first time with an indigenous seeker.
- So far, the seeker, a critical technology in missiles, had come from Russia.

Details

- The seeker was developed by Research Centre Imarat (RCI), Hyderabad, in collaboration with other DRDO labs.
- Seeker determines the accuracy of a missile

Significance

- Mastering it is a significant milestone in missile technology and would reduce import dependence.

9. Uttar Pradesh Control of Organised Crime Bill (UPCOCB)

- The proposed legislation, on the lines of Maharashtra Control of Organised Crime Act (MCOCA), seeks to curb organized crime and deal strictly with those trying to foment terror or dislodge the government forcibly or through violent means.
- The UPDOC Bill, 2017, also seeks to act sternly against those using explosives or firearms or any other violent means or damaging life and property or involved in any anti-national or destructive act.

Features of the UPDOCA:

- The UPDOCA law would give special powers to the police to arrest offenders and members of the crime syndicates.
- The State would be empowered to seize the property of such people after taking the consent of a special court constituted to hear the cases.

- Properties acquired through illegal activities and organized crime would also be seized.
- Some of the crimes defined under the UPDOCA are: land grab [government and non-state property], illegal mining, manufacture and sale of illegal medicines and illicit liquor, money laundering, wildlife smuggling, extortion, abduction syndicate, hafta collection, murder and conspiracy to murder and white-collar offences.
- If found guilty, offenders would face a minimum jail term of three years and a maximum of life imprisonment or even death sentence.
- The accused will not be granted bail for six months after the arrest

What do the opposition say?

- Opposition expressed apprehension that the UPDOC Bill could be misused against political adversaries and the press and demanded that it be sent to the select committee of the House for scrutiny.

10. India's arms imports from U.S. up by 550%: report

- The U.S. recorded a blazing growth in its arms exports to India, recording over 550% growth in 2013-17 compared with the previous five years and become India's second supplier.
- Russia continued to be India's largest arms supplier, accounting for 62% of India's arms imports between 2013 and 2017.
- India was the world's largest importer of major arms in 2013-17 and accounted for 12% of the global total. Its imports increased by 24% between 2008-12 and 2013-17.
- India spent more than \$100 billion on buying new weapons and systems during 2008-17, with imports accounting for around 60-65% of the country's military requirements.
- Russia, the country's top arms supplier, accounted for 62% India's arms imports in 2013-17, followed by the US (15%) and Israel (11%)

Chinese arms

- While India continues to depend on imports for its arms requirements,
- China's arms imports fell by 19 per cent between 2008-12 and 2013-17.
- While it was the world's fifth largest arms importer in 2013-17, China has also emerged as the fifth largest arms exporter, with exports rising by 38% between 2008-12 and 2013-17.
- A majority of these weapons have been procured by countries in India's neighbourhood.

Stockholm International Peace Research Institute

- It is an international institute based in Sweden
- It is dedicated to research into conflict, armaments, arms control and disarmament.

- SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

11. Facebook, Cambridge Analytica and Data Mining

What is Cambridge Analytica?

- Cambridge Analytica is a UK-based data analytics firm, whose parent company is Strategic Communication Laboratories. It describes itself as specializing in data, analytics and strategy.
- This data firm is partly owned by the family of Robert Mercer, a billionaire American hedge fund manager and Republican donor
- Cambridge Analytica helps political campaigns reach potential voters online. The firm combines data from multiple sources, including online information and polling, to build "profiles" of voters. The company then uses computer programs to predict voter behavior, which then could be influenced through specialized advertisements aimed at the voters.

What did Cambridge Analytica do?

- In 2014, Dr Aleksandr Kogan, a psychology professor at Cambridge University, was allegedly paid \$800,000 by CA to develop an application, thisisyourdigitallife, to harvest data of Facebook users.
- Although the app was downloaded by 270,000 people (these people granted permission for data collection), it extracted personal information of each of the users' friends without consent.
- This app offered personality predictions to users while calling itself a research tool for psychologists.
- The app asked users to log in using their Facebook account. As part of the login process, it asked for access to users' Facebook profiles, locations, what they liked on the service, and importantly, their friends' data as well.
- The problem, Facebook says, is that Kogan then sent this user data to Cambridge Analytica without user permission, something that's against the social network's rules.

Where does Trump's campaign fit in?

- The Trump campaign hired Cambridge Analytica to run data operations during the 2016 election.
- CA performed a variety of services including designing target audiences for digital advertisements and fund-raising appeals, modeling voter turnout, buying \$5 million in television ads and determining where Trump should travel to best drum up support. It also helped with strategic communication, like what to say in speeches.
- It helped the 'Leave' side in the Brexit referendum.

Was Facebook aware of the data breach?

- Facebook said it removed the app in 2015, when the violations came to light for the first time.

Implications

- Facebook's shares tumbled about 5 per cent in the first few hours of trading as US stock markets reacted to media reports
- Lawmakers from the US and the UK have called for action following the reports of the data leak of the Facebook users.
- Brian Acton, co-founder of WhatsApp asked users to "delete" the social media platform, Facebook.
- Artificial intelligence (AI) tools will be deployed by Facebook to detect fake accounts trying to manipulate news and influence the elections.
 - * Such a tool was deployed for the first time in the French elections in 2017.
- Mr. Zuckerberg said Facebook would restrict developers' data access even further to prevent other kinds of abuse.
- Facebook would show a tool at the top of their News Feed with the apps they have used and an easy way to revoke those apps' permissions to their data.

Issue Area

- The first issue at stake is what consent means in the new information order.
 - * The conceit, and attraction of the modern information order is that it does things with our consent, in our name, ostensibly to satisfy our desires.
 - * But given the complexities of data-sharing, possible third-party uses, or use by friends, through whom your data can be accessed, it is not very clear what we are consenting to, and whether the terms of that consent can be enforced.
- In the present Information architecture a handful of large private players can exercise near monopoly power, with very little accountability on how this power is used.
- Companies have been collecting data and tailoring marketing campaigns accordingly. The issue here is particularly prickly because politics and elections are involved.
- Technology is evolving at a rapid pace, raising the question whether laws need to be reframed mandating an opt-out approach universally rather than an opt-in approach. Individuals often share their data without being aware of it or understanding the implications of privacy terms and conditions.

What should be done?

- Data localization conditions can ensure that user data collected within a country must be kept within it.
- Regulations can also compel businesses to adopt privacy by design principles that foreground user choice and consent.

- The European Union's General Data Protection Regulation (GDPR), which takes effect from 25 May this year, has adopted this approach. Perhaps the most stringent data protection regime globally
- There must be clear laws on the ownership of data and what data need to be protected. Personal data cannot be the new oil. Individuals must own it, have a right to know what companies and governments know about them and, in most cases, that is, when there are no legitimate security or public interest reasons, have the right to have their data destroyed.

India

Stats

- Statista, an online data portal, estimates that India had 281.81 million mobile phone Internet users in 2016 and would have an estimated 492.68 million mobile phone Internet users by 2022.
- In 2019, there would be around 258.27 million social network users in India, up from 168.1 million in 2016.
- Facebook is projected to reach close to 319 million users in India by 2021.

This proliferation of digital networking has provided an incredible platform for people to communicate, but its flip side is that individual users are increasingly viewed as legitimate targets for mining personal and metadata.

How Has India reacted to FB data breach?

- Union Information and Technology Minister Ravi Shankar Prasad has warned Facebook of "stringent action", including "summoning" Zuckerberg to India, if data of Indian users is stolen.
- Any attempt "to covertly or overtly influence free and fair elections through means that are undesirable" will "neither be appreciated nor permitted", and would attract charges under the IT Act.

Where is the issue?

- In India, Cambridge Analytica's parent company Strategic Communications Laboratories (SCL) partners with a company called Ovleno Business Intelligence (OBI).
- OBI lists BJP, Congress and Janata Dal (United) as its political clients on its website.
- The company is owned by Amrish Tyagi, the son of the senior JD(U) leader K C Tyagi.

Current Status

- India does not have a separate law for data protection, though Section 43A of the Information Technology Act provides a measure of legal protection of personal information.
- In 2012, the Justice A.P. Shah Committee recommended a set of principles for a legal framework for protecting privacy.

Data protection framework: Srikrishna Committee

European Union's General Data Protection Regulation, 2016

- It is a regulation by which the European Parliament, the Council of the European Union and the European Commission intend to strengthen and unify data protection for all individuals within the European Union
- It also addresses the export of personal data outside the EU. The GDPR aims primarily to give control back to citizens and residents over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU.
- GDPR will explicitly ban companies from soliciting personal data for one reason and then using it for another. It will slap potentially stratospheric fines on those who sell people's information without those people's consent, and place strict limitations on companies that want to create and use profiles of individuals.
 - * GDPR hugely increases the ceiling for the fines that can be levied on transgressors. It sets a blanket limit of either €20 million (\$24.5 million) or 4% of global annual revenue, whichever is higher.ⁱ
- The new regulation explicitly asserts EU jurisdiction over any company that operates on its turf by serving European users. So, even if a company has no physical presence in the region, it will have to bend to the EU's rules if it wants to retain access to that market.

12. China to build 'world's fastest' wind tunnel

- The revelation comes as the race among the world's leading military nations to develop hypersonic technology intensifies.
- China has announced it is building the world's fastest wind tunnel to develop a new generation of super-fast airplanes, but it could also be used for hypersonic missile technology. Wind tunnels test how air will pass over a solid object, helping designers improve aerodynamics or reduce stress points for objects as they reach high speeds.
- To compare, the current fastest generation of fighter jets can travel up to speeds of around 2.5 Mach. The revelation comes as the world's leading military nations embark on a race to develop the next generation of hypersonic weapons, from missiles and spy planes to railguns, that can beat conventional defence systems.
- Earlier this month, Russia's president Vladimir Putin boasted his nation had developed a new generation of "invincible" hypersonic missiles in his state of the nation address, sparking anger in the U.S. and other NATO countries.

- While experts are deeply sceptical about how close to operational such a missile might actually be, U.S. officials in recent weeks have sounded growing alarm about the potential threat from hypersonic weapons – defined as weapons that can travel at five times the speed of sound or more.
- Such weapons can beat regular anti-missile defences as they are designed to switch direction in flight and do not follow a predictable arc like conventional missiles, making them much harder to track and intercept

13. Babur/ Hatf VII (Cruise Missile)

- It is a short range turbojet powered subsonic cruise missile that can be launched from land or mobile underwater platforms.
- It has a range of 450 KMs.
- It is in service with the Pakistan Army since 2005, and Pakistan Navy since 2017.

ENVIRONMENT AND ECOLOGY

1. Anshupa Lake

- It is a fresh water lake on the left bank of the Mahanadi river
- Ansupa is the wintering ground of 32 species of migratory birds.
- Its water used to be so clean that it was serving both as a drinking water and irrigation supply source for villagers.
- The lake being an ox-bow lake, an offshoot of the Mahanadi, was dependent on freshwater supply from the river during the rainy season.

Context

- Ansupa is silted by drastic reduction of water inflow from the Mahanadi
- So Chilika Development Authority, the nodal agency, has taken up restoration measures under funding from National Plan for Conservation of Aquatic Ecosystems.

2. Crotolaria species

- Crotolaria is a genus of flowering plants commonly known as rattlepods
- They are small shrubs bearing bright yellow blooms and are common across the Indian countryside.
- Indian botanists have just discovered two rattlepod species — woody and multi-bracted rattlepods — that survive only in the hill tracts of Maharashtra.

Where are they seen?

- Of the 85 species of rattlepods or Crotolaria found in India, 73 survive only in peninsular states.
- Many of these are concentrated along the Western Ghats
- Crotolaria suffruticosa ('suffruticose' means woody at its base, but herb-like above). This 'woody' rattlepod is found in grasslands and forest edges in two localities in Kolhapur's Karul Ghat.
- Crotolaria multibracteata (named after its several bracts – small modified leaves at the bases of flowers) or the 'multi-bracted' rattlepod survives on rocky and dry surfaces in just one locality in the nearby Panhala region.

Issue

- This limited geographical distribution necessitates that both plants be classified as 'endangered' as per the criteria set by the IUCN, write the authors.

Threat

- Anthropogenic activities such as clearing and burning of forests and grasslands in the non-protected areas where we found them could threaten their existence

3. Global Learning and Observations to Benefit the Environment (GLOBE) program

- GLOBE Program is an international science and education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process, and contribute meaningfully to our understanding of the Earth system and global environment.
- Announced by the U.S. Government on Earth Day in 1994, GLOBE launched its worldwide implementation in 1995
- MoEFCC and US Government signed an agreement on 25th day of August 2000 to implement the Globe programme in India.
- Indian Environmental Society is an implementing agency for Globe in India.
- The goals of Globe are to enhance the environmental awareness of individuals throughout the world, to contribute to scientific understanding of the Earth and to help all students reach higher levels of achievement in science and mathematics.

4. Hirakud Dam

- It is built across the Mahanadi River in Odisha. Behind the dam extends a lake, Hirakud Reservoir, 55 km long.
- It was commissioned in 1957.

What is the issue?

- Cities and towns like Sambalpur, Hirakud and Burla can suffer a likely disaster in the event of breach of the dam.
- Apart from that, the water resulting from a breach can travel down the Mahanadi river, affecting the districts of Cuttack, Jagatsingpur, Khurda, Kendrapara and many others.

Solution

The construction of the "spill channel" will involve diversion of 9.44 hectare of forest area of Lamedungri forest range and at least "3,595 numbers of local species of trees are likely to be felled during construction".

- A spillway is a structure used to provide the controlled release of flows from a dam or levee into a downstream area, typically the riverbed of the dammed river itself.
- Other uses of the term "spillway" include bypasses of dams or outlets of channels used during high water, and outlet channels

Issue

- Merits
- New look will attract tourism prospect. The expanded activities will increase the source of income for the resettled families
- Construction of additional spillway on the left dyke of Hirakud dam will considerably relieve the pressure of reservoir operation
- Approach roads will be modernized with avenue plantation and lighting facilities]

5. Macrophytes

- A macrophyte is an aquatic plant that grows in or near water and is either emergent, submergent, or floating, and includes helophytes (a plant that grows in marsh, partly submerged in water, so that it regrows from buds below the water surface).
- In lakes and rivers macrophytes provide cover for fish and substrate for aquatic invertebrates, produce oxygen, and act as food for some fish and wildlife.

Role of Macrophytes

- A decline in a macrophyte community may indicate water quality problems and changes in the ecological status of the water body.
- Such problems may be the result of excessive turbidity, herbicides, or salinization.
- Conversely, overly high nutrient levels may create an overabundance of macrophytes, which may in turn interfere with lake processing.

What are the functions in ecology?

- Macrophytes perform many ecosystem functions in aquatic ecosystems and provide services to human society.
- One of the important functions performed by macrophyte is uptake of dissolve nutrients (N and P) from water.
- Macrophytes are widely used in constructed wetlands around the world to remove excess N and P from polluted water.
- Beside direct nutrient uptake, macrophytes indirectly influence nutrient cycling, especially N cycling through influencing the denitrifying bacterial functional groups that are inhabiting on roots and shoots of macrophytes.
- Macrophytes promote the sedimentation of suspended solids by reducing the current velocities, impede erosion by stabilizing soil surfaces.
- Macrophytes also provide spatial heterogeneity in otherwise unstructured water column.
- Habitat complexity provided by macrophytes like to increase the richness of taxonomy and density of both fish and invertebrates.

6. Newton-Bhabha Fund for arsenic research in Ganga basinContext

- An India-UK Joint Team has won the Newton-Bhabha Fund for a project on Groundwater Arsenic Research in Ganga River Basin

Newton Bhabha Fund

- The Newton Bhabha Fund, provided by the British Council, aims to bring together the UK and Indian scientific research and innovation sectors to find joint solutions to the challenges facing India in economic development and social welfare.

Issue

- The Department of Science and Technology has undertaken the project with the Natural Environment Research Council, UK, to find solutions to the water challenges faced in the pervasively arsenic-affected Ganga River Basin.

Details

- The Indian team comprises representatives of the IIT Kharagpur, the National Institute of Hydrology, the IIT Roorkee and the Mahavir Cancer Sansthan and Research Centre of Patna, the statement said here today.
- The UK team consists of representatives of the University of Manchester, the British Geological Survey, the University of Salford and the University of Birmingham.

What will they do?

- The team members involved with the project will try to assess how the problem of arsenic poisoning can get aggravated in the next 25 to 30 years and influence groundwater management practices and suggest water remedial technologies accordingly.

7. Plastics in drinking water

- Plastics are now widely present in the environment, as visible waste along coastlines, in lakes and rivers, and even in the soil.
- The recent finding that microplastic particles are found even in 'safe' bottled water indicates the magnitude of the crisis.
- There is little doubt that the global production of plastics, at over 300 million tonnes a year according to the UN Environment Programme, has overwhelmed the capacity of governments to handle what is thrown away as waste.

What are Microplastics?

- Microplastics are particles of less than 5 mm that enter the environment either as primary industrial products, such as those used in scrubbers and cosmetics or via urban waste water and broken-down elements of articles discarded by consumers.
- Washing of clothes releases synthetic microfibres into water bodies and the sea.

What is the health impact?

- The health impact of the presence of polypropylene, polyethylene terephthalate and other chemicals in drinking water, food and even inhaled air may not yet be clear, but indisputably these are contaminants.
- Research evidence from complementary fields indicates that accumulation of these chemicals can induce or aggravate immune responses in the body. More studies, as a globally coordinated effort, are necessary to assess the impact on health.
- WHO has come forward to commission a review of the health impact of plastics in water.

What is the solution?

- Last December in Nairobi, UN member-countries resolved to produce a binding agreement in 18 months to deal with the release of plastics into the marine environment.
- The problem is staggering: eight million tonnes of waste, including bottles and packaging, make their way into the sea each year. There is now even the Great Pacific Garbage Patch of plastic debris.

Indian Context

- India has a major problem dealing with plastics, particularly single-use shopping bags that reach dumping sites, rivers and wetlands along with other waste.
- The most efficient way to deal with the pollution is to control the production and distribution of plastics. Banning single-use bags and making consumers pay a significant amount for the more durable ones is a feasible solution.
- Enforcing the Solid Waste Management Rules, 2016, which require segregation of waste from April 8 this year, will retrieve materials and greatly reduce the burden on the environment. Waste separation can be achieved in partnership with the community, and presents a major employment opportunity.
- The goal, however, has to be long term. As the European Union's vision 2030 document on creating a circular plastic economy explains, the answer lies in changing the very nature of plastics, from cheap and disposable to durable, reusable and fully recyclable.
- There is consensus that this is the way forward. Now that the presence of plastics in drinking water, including the bottled variety, has been documented, governments should realise it cannot be business as usual.

8. Ptilomera nagalanda Jehamalar and Chandra

- Scientists from the Zoological Survey of India (ZSI) have discovered a new species of water strider from Nagaland.
- The species, named *Ptilomera nagalanda* Jehamalar and Chandra, was found in the river Intanki, Peren district.

What are water striders?

- Water striders are a group of insects adapted to life on the surface of water, using surface tension to their advantage.

Details

- What is unique about *Ptilomera* is that they are only found in rocky, fast flowing streams and rivers that are not exposed to a lot of sunlight.
- So far, only five species of water striders under the subgenus *Ptilomera* were known in India.
- These includes *Ptilomera agriodes* found in peninsular India, *Ptilomera assamensis* found in northeastern India, *Ptilomera laticaudata*, northern and northeastern India, *Ptilomera occidentalis* from Uttarakhand and *Ptilomera tigrina* found in the Andaman islands.
- With the discovery of *Ptilomera nagalanda* the number of species of water striders belonging to the subgenus has increased to six.

Importance

- Other than being a good indicator of water quality, water striders also play an important role in the food chain by feeding on mosquito larvae.

9. Stubble Burning**What Is Stubble Burning?**

- Stubble burning is, the act of removing paddy crop residue from the field to sow wheat.
- It's usually required in areas that use the 'combine harvesting' method which leaves crop residue behind.

What is combine harvesting?

- Combines are machines that harvest, thresh i.e. separate the grain, and also clean the separated grain, all at once.
- The problem, however, is that the machine doesn't cut close enough to the ground, leaving stubble behind that the farmer has no use for.
- There is pressure on the farmer to sow the next crop in time for it to achieve a full yield. The quickest and cheapest solution, therefore, is to clear the field by burning the stubble.

Why do Farmers Burn?

- Cost Factor: The straw management equipment is costly and process is time consuming. Also, the cost of stubble management is not taken into account while determining the minimum support price (MSP).
- Increasing mechanization of agriculture: Stubble problem was not as severe when paddy was harvested manually because the farmers used to cut it as close to the ground as possible. Due to mechanization the crop residue that remains in the field is of larger quantity;
 - * Labour costs are very high now

- * Combine harvester machines to tide over the labour scarcity- The machine appears to be the key reason behind the problem because it only reaps the grains, leaving stalks or stubble of around 40 cm. Those who want fodder have to get the stubble removed manually or use specialised machines to do the job. But that is costly. For every 0.4 ha of wheat crop, the cost of renting a combine harvester is just Rs 800. Once the machine has harvested, the cost of getting the stubble removed is Rs 3,500/ha.
- Time Factor: Delay in sowing means yield decline, this leaves very little time to clear the farm for sowing.
- Monoculture of wheat and paddy. In Andhra, bean gram and black gram are planted while rice stubble decomposes on its own.
- Unlike wheat stalks that are used as animal fodder, the paddy straw has high silica content that animals can't digest.

Since farmers need to sow wheat within a fortnight of harvesting paddy, they burn the straw, or paraali, to save time, labour and money.

Laws

- National Policy for Management of Crop Residue(NPMCR)
 - * Under this policy each state needs to have an action plan to stop residue burning by involving people at different levels—from communities to panchayats to state governments.
 - * It also calls for a mechanism to alert to cases of crop burning.
 - * The 2014 national policy envisages adoption of technical measures, including diversified uses of crop residue, capacity building and training.
 - * It also talks about extending central financial assistance for various interventions.
 - * The NPMCR emphasises that the crop residues can be gainfully utilized for livestock feed, composting, power generation, biofuel production and mushroom cultivation besides several other uses like thatching, mat-making and toy making.
- Crop residue burning is punishable under the Air (Prevention and Control of Pollution) Act, 1981.
- National Green Tribunal (NGT) banned crop residue burning in states of Rajasthan, Uttar Pradesh, Haryana and Punjab.

Other Countries

- In 1999, the Association of Southeast Asian Nations started a "zero burning" initiative, but no country was enthusiastic to roll out the plan.
- Among the developed countries, the United Kingdom enacted the Crop Residues (Burning) Regulations Act in 1993 that prohibits people from burning residue, except for purpose of education or research or to eliminate pests.

- China, however, devised an interesting way to deal with the problem. It banned stubble burning in 1999 and penalizes officials under whose jurisdictional area the burning is detected. The fines go up to \$80,000.

* In 2015 in Henan county government collected \$ 37 million in such penalties.'

But Why Is This Only a Problem in the Northern States?

- India relies on its northern states of Punjab, Haryana, western Uttar Pradesh and Uttarakhand for wheat.
- Now, states in the south use combine harvesting too. But the clinching difference is that they don't have the urgency to remove the stubble to make it ready for the next crop.
- To sow wheat right after paddy, the field has to be harvested and readied for the next crop. In the Punjab-Haryana-UP belt, the crucial time for the wheat crop to mature is in mid-April, when the temperature is about to cross 35 degree celsius. For the wheat crop to reach full maturity and give maximum yield by then, the farmer has no option but to sow the crop latest by 15 November, so that it grows for a full 140-150 day duration.
- Add to this complication the Punjab Preservation of Subsoil Water Act 2009 — Punjab's water-saving law — which bans sowing of paddy before 15 May and transplanting it before 15 June. This leaves the farmer with very little time to sow and reap paddy, and then ready the field for wheat in just about 20 days.

But Is Burning the Only Solution?

- Not really, but it is the easiest and cheapest method available to farmers as of now.
- The most efficient technology to counter crop burning at the moment, seems to be the Turbo Happy Seeder (THS).
- The THS is basically a machine mounted on a tractor that not only cuts and uproots the stubble, but can also drill wheat seeds on the soil that has just been cleared up. The straw is simultaneously thrown over the sown seeds to form a mulch cover.
- The THS can also be fitted with the Super-Straw Management System (S- SMS) that spreads the straw evenly.
- Lemken hal, a plough that goes deeper than a traditional plough and brings up the stubble to bury it in the field.

Other Use for the Stubble

- Traditionally, crop residue had a lot of benefits like thatching, or making beds for livestock and cattle.
- They can till the stubble and straw back into the ground using a variety of machines
- One option is to produce biomass with the residue to generate power.
- The straw can similarly be used to make pellets that serve as the sub-strata for mushroom cultivation, but the problem is not in finding alternatives to paddy straw, as there are many.

- The real issue is who cuts and collects the crop residue, and then takes responsibility for transporting them? As of now, the farmer has no incentive to take the pains of extracting crop residue from the earth.

Examples

- Meerut farmers stopped burning crop residue, paddy waste and sugarcane leaves; instead, their farmers have started making organic manure from the remains.
- Punjab government directed manufacturers to install a straw management system in combined harvester machines. The straw management system cuts and mulches the leftover crop into the same field.
- Haryana government issues directive to local officials to Report stubble burning cases within 30 minutes

The Centre and state governments could adopt methods to incentivize farmers, rather than penalizing them. If production of other crops, like maize, are made more lucrative, then farmers will switch to growing those. Subsidy to buy and use machines.

10. Taliperu Project

- Taliperu Reservoir is a medium irrigation project constructed across the Taliperu River, a tributary of Godavari River located at Cherla Village and Mandal, Khammam District, Telangana.
- The river has been harnessed for agricultural purposes through extensive canal systems developed in that region

Government approves Plastic Park to be set up in Deoghar District, Jharkhand

- It will come under Ministry for Chemicals & Fertilizers.
- The project would be set up at a cost of Rs. 120 crores in an area of 150 acres and a range of polymer products including woven sacks, moulded furniture, water tanks, bottles, pipes mosquito nets, etc would be manufactured

Significance

- The project is likely to provide direct employment generation to about 6000 people and indirect employment to over 30000 people.
- A Central Institute for Plastic Engineering & Technology (CIPET) will be set up alongside the Plastic Park so that invaluable human resource may be trained thereto become plastic engineers and technicians.

11. World Water Day

- It is celebrated on 22 March every year, is about focusing attention on the importance of water
- The theme for World Water Day 2018 is 'Nature for Water' – exploring nature-based solutions to the water challenges we face in the 21st century.
- The United Nations General Assembly designated 22 March 1993 as the first World Water Day, and this year it's the 25th World Water Day.

- Sustainable Development Goal 6 commits the world to ensuring that everyone has access to safe water by 2030, and includes targets on protecting the natural environment and reducing pollution.

Importance

- Damaged ecosystems affect the quantity and quality of water available for human consumption. Today, 2.1 billion people live without safe drinking water at home; affecting their health, education and livelihoods.

12. Conserve every drop

Water Scarce Cities Initiative

- It is one of the programs of World Bank
- Create awareness of integrated and innovative approaches to managing water resources and service delivery.
- Building resilience against climate change

Water requirement

- India's current water requirement is estimated to be around 1,100 billion cubic metres per year, which is projected to touch 1,447 billion cubic metres by 2050.
- According to a forecast by the Asian Development Bank, India will have a water deficit of 50% by 2030.

Problems it could lead to

- India's water needs are basically met by rivers and groundwater.
- Water scarcity can lead to disastrous consequences impacting food production as most of the farming is rain-fed.
- With ground water catering to about 60% of the country's irrigation, 85% of rural water drinking requirements, and 50% of urban water needs, replenishing the aquifers has to be accorded top priority.

Access to safe drinking water

- According to the United Nations, 2.1 billion people lack access to safely managed drinking water services; water scarcity already affects four out of every 10 people; 90% of all natural disasters are water related; 3.4 lakh children under five die every year from diarrhoeal diseases; agriculture accounts for 70% of global water withdrawal; and 80% of wastewater flows back into the ecosystem without being treated or reused.
- Millions across India still do not have access to safe drinking water and this problem has to be tackled
- In 2010, the UN General Assembly recognized the right of every human being to have access to sufficient water for personal and domestic uses (between 50 and 100 liters of water per person per day).
- It has to be safe, acceptable and affordable (water costs should not exceed 3% of household income) and also physically accessible (within 1,000 meters of home).

Atal Bhujal Yojana

- It is a water resources ministry initiative for water conservation.
- It is Rs 6,000 crore worth project
- Half of the total cost of this central scheme, named Atal Bhujal Yojana, **will be supported by the World Bank as loan while the remaining half (Rs 3,000 crore) will be funded by the government.**

Objective

- The scheme would seek to bring in innovative and successful practices to revive water bodies, improve ground water levels as well as conserve water
- The emphasis of the scheme will be on recharge (of ground water sources) and efficient use of water by involving people at the local level.

Laws on Groundwater

- The Centre does not have any control over groundwater. The only law that deals with groundwater – the Indian Easements Act – dates back to 1882.
 - * An 'easement' is a right that the owner or occupier of certain land possesses, for beneficial enjoyment of that land.
 - * This law states that water below the surface belongs to the land owner.
 - * The owner of a piece of land **does not, "own" the groundwater** under the land or surface water on the land; he only has the right to collect and use the water.
 - * **Water falls under the State List of the Constitution.** This implies that state legislative assemblies can make laws on the subject.
- This law states that water below the surface belongs to the land owner. In the past several years, 13 states have bought their own law to regulate groundwater extraction but implementation has been patchy.

Plachimada Coca-Cola Case –

- Plachimada is a sparsely populated tribal hamlet in Perumatty panchayat in Palakkad district. Palakkad is also known as the rice bowl of Kerala.
- The Coca cola plant was situated in the midst of agricultural land, which has historically belonged to the Adivasis.
- The Plachimada panchayat, which had granted an exploitation license to the Coca Cola Company, decided not to renew it because of the lowering of the water table and decreasing water quality. Detailed sampling of the water collected from the region revealed high concentration of calcium, and magnesium ions.
- Also the colloidal slurry that was generated as a by-product was initially sold to villagers as fertilizer.

* Samples of slurry that was being deployed as fertilizer were found to contain dangerous levels of toxic metals and the known carcinogen, cadmium.

- The Panchayat also ordered the closure of the plant on the ground that over-exploitation of water by the Company had resulted in acute shortage of drinking water.
- The company challenged the authority of the Panchayat before the High Court of Kerala. The major legal issue was the right of a landowner to extract groundwater from his land and the power of the Panchayat (or local bodies in general) to regulate the use of groundwater by private individuals

Permatty Grama Panchayat v state of Kerala

- The Court recognized that the State as a trustee is under a legal duty to protect natural resources. It considered that these resources, meant for public use, cannot be converted into private ownership.
- The residing judge, Justice K Balakrishnan Nair, asserted that the government had a duty to act to "protect against excessive groundwater exploitation and the inaction of the State in this regard was tantamount to infringement of the right to life of the people guaranteed under Article 21 of the Constitution of India."
- The High Court ordered the plant to stop drawing the groundwater within a month, ruling that the amount of water extracted by the plant was illegal.
- But at the same time, it ordered the Village Council to renew the licence and not interfere with the functioning of the Company as long as it was not extracting the prohibited ground water.
- The 12-year-old case finally reached closure after much wrangling, when Coca-Cola relinquished its license, stating in the SC that it did not intend to resume production from Plachimada.

What needs to be done?

- Another important issue that needs to be addressed, particularly in urban areas, is the leakage of pipes providing water. Putting in place an efficient piped supply system has to be top on the agenda of policymakers and planners.
- Although India receives an average rainfall of 1,170 mm per year, it is estimated that only 6% of rainwater is stored.
- Micro irrigation practices like drip and sprinkler systems have to be promoted in a big way for efficient use of water for agriculture.
- Sustained measures should be taken to prevent pollution of water bodies, contamination of groundwater and ensure proper treatment of domestic and industrial waste water. Reduce, reuse, and recycle must be the watchwords if we have to handover a liveable planet to the future generations.

- In fact, our culture always believed in treating nature with reverence and most of our rivers are considered sacred so we need to use different types of indigenous water harvesting systems.

* The Pat system, in which the peculiarities of the terrain are used to divert water from hill streams into irrigation channels, was developed in the Bhitada village in Madhya Pradesh. Diversion bunds are made across a stream near the village by piling up stones and then lining them with teak leaves and mud to make them leak-proof.

Anurag Tewari was known as 'waterman' in Karnataka's Bidar

- Hyderabad-Karnataka region of the state and shares its border with Maharashtra and Telangana — was facing severe water crisis. There was acute shortage of drinking water while farmers were left with no water for irrigation and fodder for their cattle.
- Bidar, which was ruled by several kingdoms, has Surang Bwavi or karez (aqueduct). The 3.1km-long water tunnel was built by the Behamani kings to provide water for people. But over the years, it was covered with mud and had almost vanished.
- Tewari kick-started the revival of the centuries-old underground aqueduct, apart from cleaning and dredging of over 130 tanks/ponds and 110 open wells across the district.

13. Biomedical Waste

Context

- A study conducted jointly by industry body ASSOCHAM and Velocity has said that India is likely to generate about 775.5 tonnes of medical waste per day by 2022 from the current level of 550.9 tonnes daily

Definition

- The 1988 Medical Waste Tracking Act defines it as waste generated during medical research, testing, diagnosis, immunization, or treatment of either human beings or animals.
 - * Some examples are culture dishes, glassware, bandages, gloves, discarded sharps like needles or scalpels, swabs, and tissue.
 - * This waste is generated during diagnosis, treatment or immunisation in hospitals, nursing homes, pathological laboratories, blood bank, etc.

Key challenges in bio-medical waste management

- Speed of data availability,
- Under-reporting of waste generated and handling capacity,
- Operation of healthcare facility without authorization under Biomedical Waste Management Rules,
- Lack of awareness among various sections of the staff among others.

What could this lead to?

- Inadequate waste management can cause pollution,
- growth and multiplication of vectors like insects and rodents and may lead to transmission of diseases like typhoid, cholera and AIDS through syringes and needles.
- This will further impact the environment, especially the developing countries

Bio-Medical Waste Management Rules

The major salient features of BMW Management Rules, 2016 include the following:-

- The ambit of the rules has been expanded to include vaccination camps, blood donation camps, surgical camps or any other healthcare activity;
- Phase-out the use of chlorinated plastic bags, gloves and blood bags within two years;
- Pre-treatment of the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by WHO or NACO;
- Provide training to all its health care workers and immunise all health workers regularly;
- Establish a Bar-Code System for bags or containers containing bio-medical waste for disposal;
- Report major accidents;
- Procedure to get authorisation simplified. Automatic authorisation for bedded hospitals.
- The new rules prescribe more stringent standards for incinerator to reduce the emission of pollutants in environment;
- Inclusion of emissions limits for Dioxin and furans;
- State Government to provide land for setting up common bio-medical waste treatment and disposal facility;
- No occupier shall establish on-site treatment and disposal facility, if a service of common bio-medical waste treatment facility is available at a distance of seventy-five kilometer.
- Operator of a common bio-medical waste treatment and disposal facility to ensure the timely collection of bio-medical waste from the HCFs and assist the HCFs in conduct of training
- Bio-medical waste has been classified in to 4 categories instead of 10 to improve the segregation of waste at source;

14. Swajal Community Approach to Rural Water

- The Ministry of Drinking Water and Sanitation organized a National Consultation on Swajal Community Approach to Rural Water
- Swajal is a model for self-ownership and self-management of water resources in a community by members of the community itself.

- The Swajal model was first tried in the Uttarakhand area of undivided-UP around 20 years back, and is now being scaled up at national level with special focus on water-scarce areas.

Re-launch

- The main objective of the re-launch of the initiative, is to make an effort to deliver tapped water to every household in the country through decisions made by the community, for the community, of the resources of the community.

15. Uranium- Fluorimeter

Context

- An instrument to measure traces of uranium in water has been developed by a unit of the Department of Atomic Energy (DAE)
- It has been developed by the Raja Ramanna Centre for Advanced Technology (RRCAT), an Indore-based unit of the DAE.

Details

- The device, costing Rs 1 lakh, would help in detecting traces of uranium in water.
- It will be especially helpful in areas like Punjab where uranium traces in water sources have been found to be at dangerous levels
- It can be easily taken anywhere and water can be taken from any source for testing.
- The instrument is capable of examining traces of uranium in a sample of water from 0.1 PPB (Parts-per-billion) unit to 100 PPB

Problems of Uranium in water

- Drinking water with high levels of uranium traces increase radiological and chemical risks to human health
- Uranium is a radioactive element. If in any source of water its quantity is more than the permissible limit, then use of such water may cause thyroid cancer, blood cancer, depression and other serious ailments
- Even kids face the threat of cancer (if they consume uranium-laced water for long)

So what should be done?

- Experts have said people should avoid using water from sources where uranium traces are more than the limit set by the AERB.

16. Demand for many plant and animal ingredients today is driven by nothing other than superstition.

- The brains of endangered vultures are smoked in South Africa to boost foresight and predict lottery numbers.
- Giraffe marrow bone for curing AIDS in Africa, and powdered chimpanzee bone to boost virility.
- AIDS-curing properties of Tokay geckos, or the virility boost provided by tiger bone.

- The scales of the pangolin, or scaly anteater, are sold raw or fried in Asia for as much as \$500 per kilogram for treating asthma and migraines, or stimulate milk production in breast-feeding women.
- Bear bile was found to contain an ingredient called ursodeoxycholic acid, effective in treating a liver disease
- The antimalarial artemisinin, was originally extracted from the wormwood plant, and an ingredient of the African Cherry tree is used to make prostate medicine.
- Rhino horn originally was prescribed by traditional healers as a treatment for fever

17. How information on a fire reaches the authorities and the ways in which firefighting can be improved

Relaying information

- When a fire anywhere in the world is detected by NASA's MODIS (Moderate Resolution Imaging Spectroradiometer) and VIIRS (Visible Infrared Imaging Radiometer Suite) satellites, the Forest Survey of India (FSI) analyses the data by overlaying the digitized boundaries of forest areas to pinpoint the location to the exact forest compartment.
- The resolution of these satellites are up to 375m x 375m, which means that such fires can be detected if their extent is above half the pixel, i.e. about seven hectares. The FSI relays news of the fire to the concerned State, so that the Divisional Forest Officer (DFO) in charge of the forest where the fire is raging is informed.
- A few years ago, the time lapse between spotting the fire and the news reaching the DFO was five to six hours, but this has been reduced to about two hours recently. The frequency of the two satellites orbiting the earth has also been increased from twice daily to once in three hours.
- Meanwhile, news of the fire would have reached the DFO from his guards in watchtowers and on patrol. The DFO decides whom to deploy. Usually, there is a master fire control room which is informed and which sends firefighters from local fire crew stations to fight the blaze.

There are four approaches to fighting forest fires.

- The first is what may be called technological, where helicopters or ground-based personnel spray fire retardant chemicals, or pump water to fight the blaze.
 - * These are expensive methods and make sense when one is protecting a human community, but are usually not practiced in India.
- The second is to contain the fire in compartments bordered by natural barriers such as streams, roads, ridges, and fire lines along hillsides or across plains. .

- * A fire line is a line through a forest which has been cleared of all vegetation. The width depends on the type of forest being protected. Once the blaze has burnt out all combustibles in the affected compartment, it fizzles out and the neighbouring compartments are saved.
- The third is to set a counter fire, so that when a fire is unapproachable for humans, a line is cleared of combustibles and manned.
 - * One waits until the wildfire is near enough to be sucking oxygen towards it, and then all the people manning the line set fire to the line simultaneously. The counter fire rushes towards the wildfire, leaving a stretch of burnt ground. As soon as the two fires meet, the blaze is extinguished.
- The fourth approach, which is the most practical and most widely used, is to have enough people with leafy green boughs to beat the fire out. This is practised in combination with fire lines and counter fires.

The lesson to be learnt is that if combustibles are removed or burnt under supervision, a fire can be controlled. This is why there are usually no deaths from burns among personnel fighting forest fires.

Issue Area

- The danger is asphyxiation, since a vast quantity of smoke is generated, and the lack of oxygen in the immediate vicinity of tall flames can cause breathlessness. Once a person loses consciousness due to asphyxiation, the danger of being burnt alive becomes real, especially if one is alone.
- Dehydration is also an issue when fighting flames more than a metre high.
- The British introduced a system of controlled burning of undergrowth in safe seasons, so that by summer there would be nothing left to burn. This is an extremely destructive practice, since it wipes out insects, small reptiles, seeds, herbs and bushes.

Mitigating damage

- We need to vastly increase the number of firefighters as well as equip them properly with drinking water bottles, back-up supplies of food and water, proper shoes or boots, rakes, spades and other implements, light, rechargeable torches, and so on.
 - * They could also be paid better.
 - * Seasonal labour could be contracted during the fire season. With adequate training, they would serve to fill gaps along the line. Local villagers would be the best resource.
- **Vast amounts of funds are used for frivolous purposes like 'planting forests'.** In practice, they are mostly diverted to corrupt officials and political parties.

- * After more than half a century of planting forests there is little to show for the funds spent on this activity. Instead, those funds would be more than sufficient to cover the cost of a well-equipped and well-paid forest protection force.

Way forward

- Therefore, the Forest Act of 1927 is urgently in need of revision, since at present it embodies the spirit of colonialism. Conversely, there is no need for paved paths or tourist 'facilities' within reserve forests. These are not tourist attractions. Mass tourism can be nothing but detrimental to forests.
- Increasing the field staff of Forest Departments by discontinuing the claimed 'forest plantations' would help control forest fires, which in turn would help rejuvenation of fire-stressed forest ecosystems.

18. HC issues notices to Gujarat, Centre on death of 184 lions in 2 years

Context

- Death of 184 lions in the state in the last two years
- The court sought to know the reasons behind the high number of deaths and the steps being taken by the authorities concerned to prevent it.

Figures

- As per the figures given by the Gujarat government to the assembly, 12 lions died of unnatural causes in 2016, and 20 in 2017.
- Besides, 92 carnivores died of natural causes in 2016 and 60 last year.
- Gujarat is the only home to lions in Asia. As per the 2015 census, there were 523 lions in the State.

Four reasons behind the "unnatural" death of lions-

- Road accidents,
- Railway tracks passing through the forest areas,
- Wells with damaged or no parapets,
- Electric fences around agricultural lands.

19. Water Privatization

- Private sector participation in the provision of water services and sanitation where private corporations buy or operate public water utilities – is called water Privatization

What necessitated the move of Privatization?

- Lacunae include losses, inefficiency, unreliability, corruption, issues of quality, and mismanagement. All of these are symptoms; the root cause is lack of democratic governance.

- In 2002, the government implemented National Water Policy. As per the policy, "Private sector participation should be encouraged in planning, development and management of water resources projects for diverse use, wherever feasible. Private sector participation may help in introducing innovative ideas, generating financial resources and introducing corporate management and improving service efficiency and accountability to users.

International Declarations

- Mar Del Plata Declaration (1977) states that all people have right to drinking water in quality and quantity, irrespective of the level of economic development of the native country and stage of development.
- Agenda 21, UN Conference on Environment and Development (1992) calls for provision of safe drinking water and environmental sanitation for poverty alleviation.

Judiciary

Judicial pronouncements it emerges that the right to life in the Constitution means rights to water and sanitation as well. Courts have not only termed right to water as a fundamental right but also have defined water as a 'social asset'.

- Article 14 has been interpreted by the judiciary as guaranteeing inter-generational equity i.e. the right of each generation of human beings to benefit from natural and cultural inheritance from past generations. This therefore requires conserving the biological diversity and the sustainable use of other renewable and non-renewable natural resources (including water) for future generations.
- In 1991, the Supreme Court—in Subhash Kumar vs the State of Bihar—ruled that the right to water is an essential component of the fundamental right to life.
- On sanitation issues also courts have given verdicts interpreting it as a right under Article 21. In 1988 the Rajasthan High Court ordered the Jaipur municipality to ensure proper sanitation

Privatization is good:

- Water is a basic need of life and even the United Nations (UN) has recognized this need as a human right.
 - * The UN World Water Report of 2006 notes that "there is enough water for everyone" and "water insufficiency is often due to mismanagement, corruption, lack of appropriate institutions, bureaucratic inertia and a shortage of investment in both human capacity and physical infrastructure".
- Fears over water scarcity and the need to manage water efficiently by giving it an economic value is the starting point from where privatization is pushed.
- Critics of public supply of water insisted on the state's inability to operate efficiently and created a case for a shift towards market-based water governance.

Privatization is bad

- Critics however, contend that private sector participation led to tariff increases and has turned a public good into a private good
- Many believe that the privatization of water is incompatible with ensuring the international human right to water.
- By privatizing water and sewer systems, local government officials abdicate control over a vital public resource.
- Privatization limits public accountability. Multinational water corporations are primarily accountable to their stockholders, not to the people they serve.
- Loss of transparency. Private operators usually restrict public access to information and do not have the same level of openness as the public sector.
- The objectives of a profit-extracting water company can conflict with the public interest. Because a water corporation has different goals than a city does, it will make its decisions using a different set of criteria, often one that emphasizes profitability. This can create conflict.
- Private water companies are unlikely to adopt the same criteria as municipalities when deciding where to extend services. They are prone to cherry-picking service areas to avoid serving low-income communities where low water use and frequent bill collection problems could hurt corporate profits.
- As a result of price hikes, service disconnections, inadequate investment and other detrimental economic consequences, water privatization often interferes with the human right to water.
- Empirical evidence indicates that there is no significant difference in efficiency between public and private water provision.

India's experience:

- In 2012, municipal body in Nagpur handed over its water supply to a subsidiary of the French water corporation, Veolia, for 25 years.
 - * Since then, the project has seen allegations of corruption, four increases in water tariffs, cost overruns, and delays in plugging leaks.
 - * The municipal body's financial losses from water works has reportedly increased by Rs 60 crore per annum, leading to demands, from both opposition parties and the local community, for the ouster of the private player.
- **Nagpur was the first large city in India to hand over its entire water service to a private firm.**
 - * Smaller experiments in privatization in Khandwa, Mysore, and Aurangabad, among others, have followed similar trajectories.
 - * Social mobilization against the introduction of PPP (Public-Private Partnership) projects in metros such as Mumbai, Delhi and Bangalore have led to the plans being aborted.

Global experience:

- Food and Water Watch, a champion for healthy food and clean water for all, reviewed 18 communities across the US that reclaimed public management of water or sewer services and found that public operation was an average of one-fifth cheaper than private operation.
- A report by the Transnational Institute (TNI), Public Services International Research Unit (PSRU) and the Multinational Observatory, a prime international research and advocacy organisation working on international water and other social development issues suggests that 180 cities and communities in 35 countries across the globe have “remunicipalised” their water systems in the last 15 years.
- Remunicipalisation is defined as the transfer of water services from private companies to municipal authorities. It is a way to show that the public sector can outperform the private sector and can be an efficient water provider anywhere in the world

Then, what role should the private sector play?

- From developing new technologies to providing construction crews for new treatment plants, the private sector plays an important role in protecting our water resources and finding innovative solutions to the water crisis.
- Although the public and private sectors work well together in many areas, businesses should not operate, manage or own public drinking water or wastewater systems.
- Those duties should fall under the purview of local governments, who have a responsibility to ensure safe and affordable service for all.

What can be done?

- Instead of privatizing water systems, municipalities can partner together through public-public partnerships. Public partners are more responsive, reliable and cost-effective than private water companies. Inter municipal cooperation, inter local agreements and bulk purchasing consortiums can improve public services and reduce costs, while allowing communities to retain local control.
- Thus, the Public Trust Doctrine enunciated by the Supreme Court, rather than privatization or nationalization, is the answer to India's water problems.

Way forward

- We need a democratic, transparent, accountable and participatory governance in a bottom-up approach, on each aspect of the urban water sector where water privatization is advocated.
- Article 51-A classifies duties towards self, duties towards the environment and towards the nation. Article 51 A (g) states that ‘it shall be the fundamental duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.’

20. India's first insect museum

- It was established in Tamilnadu
- It would display insects preserved as specimens as also live ones depicting their different developmental stages, images, videos and models of their unique behaviour, habits and habitats.ss

21. Floodplains

- A floodplain or flood plain is an area of land adjacent to a stream or river which stretches from the banks of its channel to the base of the enclosing valley walls and which experiences flooding during periods of high discharge

Importance

- When inundated with water, floodplains act as natural filters, removing excess sediment and nutrients, which can degrade water quality and increase treatment costs.
- It can replenish underground water sources (or aquifers), which serve as a primary source of water for many communities and which are critical for irrigation that grows much of the world's crops.
- Floodplains are home to some of the most biologically rich habitats on Earth. They provide spawning grounds for fish and critical areas of rest and foraging for migrating waterfowl and birds.
- Many outdoor recreational activities – like fishing, hunting, camping, hiking, wildlife watching and boating – are made possible by or greatly enhanced by the natural processes of rivers and healthy floodplains.
- If we conserve and use the floodplain, it can be a self-sustaining aquifer. This ensures that the groundwater level in the floodplains remains steadily above that in the river in the lean non-monsoon months when the river is often polluted.
- Floodplains ‘conserve and use’ scheme, which is a socio-economic-environmental scheme, can provide water to urban centres along rivers; it can also engage farmers by providing them an assured income and restore rivers to a healthy condition.

Issues

- Construction of dams and levees
- Destruction of properties
- Financial losses

What should be done?

- Rivers should be given elbow room
- Levees should be far away from river

22. MoU between India and SACEP

- The Union Cabinet has approved signing of MoU between India and South Asian Cooperative Environment Programme (SACEP) for cooperation on the response to Oil and Chemical Pollution in the South Asian Seas Region.

Impact

- The MoU intends to promote closer cooperation between India and other maritime nations comprising the South Asian seas region namely Bangladesh, Maldives, Pakistan and Sri Lanka for protection and preservation of marine environment in the region.

Implementation

- Indian Coast Guard (ICG) will be the Competent National Authority and national operational contact point for implementation of "Regional Oil Spill Contingency Plan" under the MoU and shall respond to oil and chemical spills on behalf of Government of India.
- Further, ICG Maritime Rescue Coordination Centres (MRCCs) will be the national emergency response centre for marine incidents.

SACEP

- In order to promote and support protection, management and enhancement of the environment in the South Asian region, the Governments of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka established the SACEP in 1982 in Sri Lanka.
- The SACEP jointly with the International Maritime Organisation (IMO) developed a "Regional Oil Spill Contingency Plan" to facilitate international co-operation and mutual assistance in preparing and responding to a major oil pollution incident in the seas around the Maritime States of Bangladesh, India, Maldives, Pakistan and Sri Lanka.

HEALTH ISSUES

1. Diabetes is actually five separate diseases, research suggests

The results, published in The Lancet Diabetes and Endocrinology, showed the patients could be separated into five distinct clusters.

- Cluster 1 - severe autoimmune diabetes is broadly the same as the classical type 1 - it hit people when they were young, seemingly healthy and an immune disease left them unable to produce insulin
- Cluster 2 - severe insulin-deficient diabetes patients initially looked very similar to those in cluster 1 - they were young, had a healthy weight and struggled to make insulin, but the immune system was not at fault
- Cluster 3 - severe insulin-resistant diabetes patients were generally overweight and making insulin but their body was no longer responding to it
- Cluster 4 - mild obesity-related diabetes was mainly seen in people who were very overweight but metabolically much closer to normal than those in cluster 3
- Cluster 5 - mild age-related diabetes patients developed symptoms when they were significantly older than in other groups and their disease tended to be milder

2. Euthanasia

What is euthanasia?

- Euthanasia is a medical term meaning 'easy death'. It is the act of deliberate or voluntary end of someone's life to prevent any further suffering or pain to the person.
- Active euthanasia entails the use of lethal substances or forces to kill a person such as with lethal injection given to a person with terminal cancer who is in terrible agony. e.g. sodium pentothal which causes a person deep sleep in a few seconds, and the person instantaneously and painlessly dies in this deep sleep.
- Passive euthanasia entails withholding of medical treatment for continuance of life, such as withholding of antibiotics where without giving it a patient is likely to die, or removing the heart lung machine, from a patient in coma.
- Voluntary euthanasia is where the consent is taken from the patient, whereas
- Non voluntary euthanasia is where the consent is unavailable eg when the patient is in coma, or is otherwise unable to give consent.

In India active euthanasia is illegal and a crime under section 302 or at least section 304 IPC. Physician assisted suicide is a crime under section 306 IPC (abetment to suicide).

Living Will

- "Living will" where, an adult in his conscious mind, is permitted to refuse medical treatment or voluntarily decide not to take medical treatment to embrace death in a natural way.

What did the court say?

- The court stated the rights of a patient would not fall out of the purview of Article 21 (right to life and liberty) of the Indian Constitution.
- The Bench led by Chief Justice of India Dipak Misra concluded that the 2011 judgment was based on a wrong reading of the ruling in the Gian Kaur case in 1996.

"In Gian Kaur vs. State of Punjab, a five judge Constitutional Bench held that the "right to life" is inherently inconsistent with the "right to die" as is "death" with "life". In furtherance, the right to life, which includes right to live with human dignity, would mean the existence of such a right up to the natural end of life. It may further include "death with dignity" but such existence should not be confused with unnatural extinction of life curtailing natural span of life." In progression of the above, the constitutionality of Section 309 of the I.P.C, which makes "attempt to suicide" an offence, was upheld, overruling the judgment in P. Rathinam's case. The factor of immense significance to be noted here is that suicide, euthanasia, mercy killing and the like amount to unnatural ebbing of life. This decision thereby overruling P.Rathinam's case establishes that the "Right to life" not only precludes the "right to die" but also the right to kill.

What should the written document contain?

- It should clearly indicate the decision relating to the circumstances in which withholding or withdrawal of medical treatment can be resorted to. Specific terms should be mentioned and instructions must be absolutely clear and unambiguous.
- It should have a clause stating that the executor may revoke the instructions/authority at any time.

How it all happened?

- 2005: SC takes note of PIL of NGO 'Common Cause' seeking nod to allow terminally-ill persons to execute a living will for passive euthanasia. It seeks the Centre's response on the plea which seeks declaration of 'right to die with dignity' as a Fundamental Right under Article 21 (right to life) of the Constitution.
- 2006: Law Commission suggests a draft bill on passive euthanasia and says such pleas be made to HCs which should decide after taking experts' views.
- 2011: SC, on a separate plea on behalf of Aruna Shanbaug, allows passive euthanasia for the nurse lying in vegetative state

- 2016: Centre says that it is deliberating the issue.

Worldwide practice:

- Euthanasia has been criminalized by the likes of Philippines, Australia, New Zealand and the United Kingdom. These nations saw several failed attempts to legalize euthanasia.
- Euthanasia is legal in Colombia, Luxembourg, Canada and Belgium..

Merits:

- It provides a way to relieve extreme pain.
- It provides a way of relief when a person's quality of life is low.
- Frees up medical funds to help other people.
- It is another case of freedom of choice.

Merits:

- Euthanasia devalues human life.
- Euthanasia can become a means of health care cost containment.
- Physicians and other medical care people should not be involved in directly causing death.
- There is a "slippery slope" effect that has occurred where euthanasia has been first been legalized for only the terminally ill and later laws are changed to allow it for other people or to be done non-voluntarily.

3. Muscular Dystrophy

- Muscular dystrophy (MD) is a group of muscle diseases that results in increasing weakening and breakdown of skeletal muscles over time
- A group of genetic diseases that cause progressive weakness and loss of muscle mass.
- They are due to mutations in genes that are involved in making muscle proteins
- There is no cure for muscular dystrophy

4. Stop TB Partnership

- It is a unique international body with the power to align actors all over the world in the fight against TB.
- They include international and technical organizations, government Programmes, research and funding agencies, foundations, NGOs, civil society and community groups and the private sector.
- They operate through a secretariat hosted by UNOPS in Geneva, Switzerland and seven working groups whose role is to accelerate progress on access to TB diagnosis and treatment; research and development for new TB diagnostics,

Mission

- To ensure that every TB patient has access to effective diagnosis, treatment and cure.
- To stop transmission of TB

Kochon Prize

- The 2017 Kochon Prize was awarded to the Indian Council of Medical Research for building a tradition of excellence in TB research and development.
- The \$65,000 Prize is awarded annually by Stop TB Partnership to individuals and/or organizations that have made a significant contribution to combating TB.

5. World Hearing Day

- World Hearing Day is held on 3 March each year to raise awareness on how to prevent deafness and hearing loss and promote ear and hearing care across the world
- With the theme "Hear the future", World Hearing Day 2018 will draw attention to the anticipated increase in the number of people with hearing loss around the world in the coming decades.
- It will focus on preventive strategies to stem the rise and outline steps to ensure access to the necessary rehabilitation services and communication tools and products for people with hearing loss.
- The main reasons for this increase is exposure to loud sounds through personal audio devices and in entertainment venues and workplaces.

Stats

- Currently 466 million people worldwide suffer from disabling hearing loss, 34 million of whom are children. This is up from 360 million people five years ago.
- Some 900 million people could suffer from disabling hearing loss by 2050

6. Autism

- Autism is a developmental disorder characterized by troubles with social interaction and communication, and by restricted and repetitive behavior.
- There is no definitive cure.
- Autism spectrum disorder impacts the nervous system and affects the overall cognitive, emotional, social and physical health of the affected individual.
- The effect of autism can be minimized by early diagnosis and with the right interventions.

National Workshop on Autism Tools INCLEN and ISAA

Context

- A meeting of Master Trainers from all parts of the country was recently held at the 'National Training Workshop on Autism using International Clinical Epidemiology Network (INCLEN) and Indian Scale of Assessment of Autism (ISAA) Tools'. It was organized by the **Ministry of Social Justice & Empowerment**.

Aim

- The aim of the workshop is to train and empower health care professionals like paediatricians, psychologists & psychiatrists to be trained as Master Trainers. These Master Trainers will further train required number of professionals in their respective States.

In this workshop, in order to maintain uniformity and standard in assessment of autism, two types of assessment tools are being recommended,

- One is INCLIN Tool developed under INCLIN study – “Neuro Developmental Disorder in Children in India”
- The other tool is ISAA developed by the Ministry of SJ&E through NIMH, as a research project.

7. Protein that prevents spread of cancer cells in liver discovered

Context

- Researchers have discovered a new protein that prevents the uncontrolled proliferation of cancer cells in the liver.
- The protein, called LHPP, can serve as a biomarker for the diagnosis and prognosis of liver cancer**

Details

- The researchers show that the loss of LHPP promotes tumour growth and reduces the chance of survival of cancer patients.
- The incidence of liver cancer, also known as hepatocellular carcinoma, is steadily increasing
- Hepatocellular carcinoma is usually diagnosed at a very late stage when the liver is already severely damaged and hence overall prognosis is poor.
- Detection of the anti-cancer protein LHPP as a biomarker may allow clinicians to provide better treatment options.

8. National Anti-TB Drug Resistance Survey report

Context

- The first-ever survey of drug-resistant (DR) tuberculosis (TB) has found **that over a quarter of patients in India could be resistant to one or more drugs that can cure them.**
- Among the 4,958 patients on whom drug susceptibility testing (DST) was conducted (necessary to find out if a person has drug resistant TB), 28% had resistance to one or the other anti-TB drug, while 6.19% had multi-drug resistant (MDR) TB.

Stats

- India is home to 2.8 million TB patients, the largest in the world.
- With 879 XDR patients, Maharashtra has the highest number of such patients.
- Uttar Pradesh has the highest number of cases of drug-resistant TB (9,138)

No private sector data

- The survey was done at designated microscopy centres (DMCs) within the laboratory network of the Revised National Tuberculosis Control Programme (RNTCP), and provides a conservative estimate of India's actual disease burden.
- The survey does not reveal the national burden of DR-TB as it does not include data from patients being treated in the private sector.

Targets

- India has set itself the target of eliminating TB by 2025, five years ahead of the global target set under the Sustainable Development Goals.
- To reach the ‘elimination’ target, the country will have to restrict new infections to less than one case per 100,000 people as against the current rate of 211 new infections per 100,000 people.

9. Non-reporting of Tuberculosis (TB)

Context

- The government recently passed a gazette notification making the non-reporting of tuberculosis (TB) cases a punishable offence, with even a jail term of up to two years.
- The move comes against the backdrop of the Prime Minister's call to end TB in India by 2025, ushering in a ‘mission mode’ approach to defeat the disease.

Under-reporting of cases

- The TB Programme continues to face the challenge of under-reporting of cases from the private sector, which caters to a majority of cases.
- A study in The Lancet in 2016 estimated that as many as 22 lakh cases of TB were treated in the private sector in 2014; in the public sector, the figure was 14 lakh.
- Despite efforts in the past decade to encourage higher case notifications, the private sector reported just over three lakh cases in 2016.
- Going by The Lancet's estimates, almost 19 lakh cases are still ‘missing’, a term used to define the gap between the estimated cases in the private sector and those reported to the government.

What is the harm if a patient is not reported to the government and is being diagnosed and treated in the private sector?

- First, not being reported to the government means the true burden of the disease remains unknown.
 - * What cannot be measured, therefore, cannot be improved upon.
- Second, the absence of drug distribution controls and poor treatment practices accentuate the emergence of drug-resistant TB.
 - * Anti-TB drugs are widely available without prescription at numerous pharmacy outlets.

- * Also, limited usage of the Standards for TB Care in India (STCI), which are the standard protocols to be adhered by providers, leads to incorrect diagnosis and improper treatment.
- * This in turn delays the commencement of treatment and can even contribute to drug resistance.
- Finally, TB is five times more common among the economically weaker sections of society and the disease can have devastating financial and social consequences.
 - * In order to address these issues, the government has proposed innovative measures which include a 'direct benefit transfer' for nutritional support and free diagnosis and treatment, particularly to patients being treated in the private sector.

Using Nikshay

- A web-based application called 'Nikshay' was launched in 2012 to help providers notify cases to the authorities.
- Doctors need to download the app. The data of the patients entered in the app will be linked to a server in CTD. This will help avoid its duplication
- Apart from web based technology, SMS services have been used effectively for communication with patients and monitoring the programme on a day-to-day basis.
- It has been developed by National Informatics Centre (NIC)
- However, low awareness about this portal among private providers and technical difficulties in the software resulted in its low use.

Considering that punitive action can be taken against providers for not reporting cases, it is imperative that the reporting process itself becomes more accessible.

Way forward

- Collaboration with forums such as the Indian Medical Association should also be explored to conduct sensitization workshops to improve knowledge among private providers.
- Thus, the notification policy, supplemented by the comprehensive strengthening of the public health system, greater engagement with the private sector, the simplification of the reporting process and more awareness among public and health-care providers, is sure to reach the goal of a TB-free India.

EDUCATION

1. Issue of fee regulation

- The issue of skyrocketing tuition fees has confronted parents.
- Adding to their burden is the annual and steep hike in tuition fees along with additional costs such as fees for transport, extra-curricular activities and sports.
- Every academic year sees the media reporting instances of unhappy parents expressing their anger against what they perceive to be unjust hikes.

What do schools say?

- The managements of such schools claim that these hikes are reasonable and justified as the costs of maintaining a fully functional private school with quality teaching and world-class infrastructure are quite steep.

Judgements in the past

- In T.M.A. Pai Foundation v. State of Karnataka (2002), the Supreme Court held that regulatory measures imposed on unaided private educational institutions must, in general, ensure the maintenance of proper academic standards, atmosphere and infrastructure and the prevention of mal-administration by the school management.
- In Islamic Academy of Education and Anr. v. State of Karnataka and Ors (2003), a Constitution Bench of the Supreme Court held that these institutions have the autonomy to generate "surplus" which must be used for their betterment and growth.

While private schools are 'entitled to a reasonable surplus for development of education and expansion of the institution, there has to be a balance between autonomy of such institutions and the measures taken to prevent commercialization of education'. However, there is not much clarity on what the terms "surplus", "reasonable surplus" or "commercialization of education" entail.

Laws dealing with it

- States such as Tamil Nadu follow the fee fixation model whereby a government committee is empowered to verify and approve fee structures proposed by private schools.
- Karnataka is for a formula that caps fees for schools by way of framing rules under its school education legislation.
- Maharashtra has a weakly enforced legislation to regulate fees and has multiple government bodies to approve school fees. Recently, the Maharashtra government's decision to cap proposed fee hikes at 15% was widely criticized by schools.

- A recent order of the Gujarat High Court upholding the validity of the Gujarat Self-Financed Schools (Regulation of Fees) Act, 2017 is now being reconsidered by the Supreme Court. The Court has directed the Government to not take any coercive steps against schools in the interim period.

CAG Report

- In 2010, the Comptroller and Auditor General slammed 25 well-known private schools in Delhi for arbitrary fee hikes.
- According to the report, money was being collected from parents under false heads, while at the same time, teachers were being underpaid, and accounts misrepresented.
- Existing legislative efforts have made an incomplete assessment of the deeper problems with financial management and accounting practices adopted by private schools.

Way forward

- In Modern School v. Union of India (2004), the Supreme Court recommended accounting standards for private schools.
- Further, measures such as regular government supervised audits, generating capacity in State-level Departments of Education, regular inspections, and stricter sanctions for fraudulent reporting could be considered.
- Legislative and executive efforts must weigh in on all of the above.

2. Smart India Hackathon

- It is the World's largest Nation-Building Digital Initiative of the HRD ministry and was conceptualized to harness the creativity and energy of bright young students for the development of our nation
- Through this it is keen on reaching out to all technology institutions in India and challenge students to offer innovative solutions to some of the daunting problems faced by our nation.
- It will aim to find digital solutions to problems in the areas of power, education, health, water, finance, agriculture, energy, urban & rural development, aviation & shipping, transport, sanitation, sports, law & justice, skill development & entrepreneurship, defence, textiles, tourism, etc.

3. Integrated Scheme for School Education

Context

- The Cabinet Committee on Economic Affairs has approved the proposal of Department of School Education and Literacy to formulate a Integrated Scheme on School Education by subsuming Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE)

Vision

- The vision of the Scheme is to ensure inclusive and equitable quality education from nursery to senior secondary stage in accordance with the Sustainable Development Goal for Education.
- The main emphasis of the Integrated Scheme is on improving quality of school education by focusing on the two T's - Teacher and Technology.

Objectives

- Provision of quality education and enhancing learning outcomes of students;
- Bridging Social and Gender Gaps in School Education;
- Ensuring equity and inclusion at all levels of school education;
- Ensuring minimum standards in schooling provisions;
- Promoting vocationalization of education;
- Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and
- Strengthening and up-gradation of State Councils for Educational Research and Training (SCERTs)/State Institutes of Education and District Institutes for Education and Training (DIET) as nodal agencies for teacher training.

Impact

- The Scheme gives flexibility to the States and UTs to plan and prioritize their interventions within the scheme norms and the overall resource envelope available to them.
- It will help improve the transition rates across the various levels of school education and aid in promoting universal access to children to complete school education.
- The Scheme, by providing quality education, aims to equip the children with varied skills and knowledge essential for their holistic development and prepare them for the world of work or higher education in the future.
- It would lead to an optimal utilization of budgetary allocations and effective use of human resources and institutional structures created for the erstwhile Schemes

Benefits

- Holistic approach to education
- Inclusion of senior secondary levels and pre-school levels in support for School education for the first time
- An integrated administration looking at 'school' as a continuum
- Focus on Quality of Education- Emphasis on improvement of Learning Outcomes

4. Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

Financial Problems for State Universities

- India is estimated to have over 800 universities (over 40,000 colleges are affiliated to them).
- About 94% of students of higher education study in 369 State universities.
- But the Central government's slant toward premier institutions has continued ever since the Eleventh Five Year Plan (2007-12), where in spite of a nine-fold increase in Budget Allocation State institutions have been left to fend for themselves with funding mainly directed towards starting more Indian Institutes of Technology (IITs), Indian Institutes of Management and Central universities.
- Today about 150 Centrally-funded institutions (less than 6% of students study in them) — corner almost the entire funding by the Ministry of Human Resource Development (MHRD).
- To make things worse, investment by State governments has been also dwindling each year as higher education is a low-priority area.
- The University Grant Commission's system of direct releases to State institutions which bypasses State governments also leads to their sense of alienation. Though they are the face of higher education in India, State institutions have been getting short shrift.

It was to address these critical concerns that the MHRD launched RUSA.

What is it?

- It is a centrally sponsored scheme launched in 2013 to provide strategic funding to eligible State higher educational institutions.
- Despite being voluntary, all States except a Union Territory (Lakshadweep) are a part of RUSA

Funding

The central funding is in the ratio of

- 60:40 for general category States
- 90:10 for special category states
- 100% for union territories

Funding is conditional to performance

The salient objectives of RUSA are to:

- Ensure reforms in the affiliation, academic and examination systems.
- Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment.
- Create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations.
- Improve equity in higher education by providing adequate opportunities of higher education to SC/STs and socially and educationally backward classes; promote inclusion of women, minorities, and differently abled persons.

So the scheme is largely based on the conditional release of funds linked to reforms in the key areas of governance, learning-teaching outcomes, reaching out to the unreached and infrastructure support.

Advantage

- RUSA is a process-driven scheme.
- Its design and conceptualization were **finalized through extensive consultations with all key stakeholders, especially State governments.**

Preparatory grants were released to States to have the required systems, processes, and the technical support in place.

Tools to check the performance

It is critical to have a robust monitoring and evaluation system in place.

- Geo-tagging, introduction of a public financial management system, a fund tracker and reform tracker system and regular video conferences have proved effective tools

What are the reforms initiated?

- State Higher Education Councils (SHECs) which have eminent academics, industrialists and other experts have been created, playing a major role, from an academic and professional point of view, in the formulation of medium- and long-term State perspective plans.
- A search-cum-select committee will select vice-chancellors to avoid arbitrariness
- To mitigate the bane of the affiliation system there has been a reduction in the number of colleges affiliated per university by creating cluster universities and promoting autonomous colleges
- To improve learning-teaching outcomes, there is an effort towards improving pedagogy by capacity-building of faculty, selecting teachers in a transparent manner, adopting accreditation as a mandatory quality-assurance framework, implementing a semester system, and involving academics of repute and distinction in decision-making processes.

Performance review by IIT Bombay

- The funding linked to reforms has had a visible impact on higher education.
- When RUSA began, the gross enrolment ratio (GER) was 19.4%, faculty vacancies were at a shockingly high level of 60%, and a large number of universities were bloated with a teacher-student ratio of 1:24.
 - * Today, the GER is 25.2%, faculty vacancies are down to 35%, the ban on faculty recruitment by States has been lifted, and the teacher-student ratio is now 1:20.
- There has been an improvement in the number of institutions accredited and their scores.

Way forward

- So in the future the scheme should be administered impartially by the MHRD and the State Higher Education Councils should be given elbow room to work efficiently by State governments

ART AND CULTURE

1. Danda Nata or Danda Jatra

- It is one of the most important traditional dance festivals organized in different parts of South Odisha and particularly in the Ganjam District, the heartland of ancient Kalinga Empire.
- The Danda Nata festival is being held in the month of Chaitra of every year
- The Participants of Danda are called Danduas (also known as Bhoktas) and they pray Goddesses Kali and Shiva
- Only male persons take part in this festival.
- As per ritualistic belief, Danduas should not sleep during night. So, cultural performances are organized throughout the night to keep them awake and entertained.
- The Kalinga Emperors organised this Chaitra festival for their Ista devi, Taratarini.

2. Kuthiyottam Ritual

- The Kuthiyottam ritual is usually performed every year during the Pongala festival at the Attukal Bhagavathy Temple in Thiruvananthapuram, Kerala
- The Attukal Pongala festival is the largest congregation of women for a festival in the world. Pongala, which means 'to boil over', is a ritual in which women prepare a pudding made from rice, jaggery, coconut and plantains cooked together, and offer it to the goddess. The ritual can only be performed by women, and the streets of the city are known to be jam packed with devotees during the festival.

Issues

- The boys have to observe strict discipline and stay inside the temple for seven days. The rigours include sleeping on the floor, strict diet restrictions, and bathing three times a day. They also have to prostrate 1,008 times before the deity
- The ritual also reportedly involves piercing the child's side with a small hook and knotting a thread through it to symbolize their bond with the Goddess
- The problem here is that consent of the boys is not taken

3. Nabakalebara

- The term Nabakalebara is a combination of two Odia words "Naba" (new) and "kalebara" (body) that means change of the physical form.
- The Nabakalebara (re-embodiment) of the four deities, replacing the old idols with new ones - is an elaborate process in which they relinquish their old bodies and assume a new one.

- The Nabakalebara is observed in a gap of 12 to 19 years. The last time Nabakalebara happened in 1996.
- Four Badagrahis (body protector-cum-servitors) transfer soul from the old idols into the new idols of Lord Jagannath, Lord Balabhadra, Goddess Subhadra and Lord Sudarshan made from neem wood
- These are made from a special type of Neem wood known as Daru (wood log) Bramha.

4. National Cultural Audiovisual Archives (NCAA)

- It is a project of the Ministry of Culture
- It is implemented by Indira Gandhi National Centre for the Arts (IGNCA)

Objective

- The primary objective of the NCAA is to identify and preserve the cultural heritage of India available in audiovisual form through a process of digitization and making it accessible to the people.

Speciality

- It has been certified as the world's first Trusted Digital Repository as per ISO 16363:2012 standard, granted by Primary Trustworthy Digital Repository Authorisation Body Ltd. (PTAB), United Kingdom.
- NCAA digital repository is established with and powered by DIGITALAYA which is developed by C-DAC Pune in compliance with Open Archival Information System (OAIS)

5. Nowruz

- Nowruz, also spelled as Navroz, is the Iranian New Year celebrated by ethnic Iranian people.
- Nowruz is a Persian word that consists of the words now and ruz. Now means 'new' and Ruz means 'day', so Nowruz signifies "new day". It coincides with the Spring Equinox
- Nowruz promotes peace and solidarity in families. It's a day that promotes friendship among peoples and different communities.
- In India, the Parsi community, who follow Zoroastrianism, celebrate Navroz with full fervour.

6. Dravidian language family is 4,500 years old

Context

- Researchers from the Max Planck Institute for the Science of Human History in Germany, and the Wildlife Institute of India in Dehradun in a study revealed Dravidian language family, consisting of 80 varieties spoken by nearly 220 million people across southern and central India, originated about 4,500 years ago
- The researchers used data collected first-hand from native speakers representing all previously reported Dravidian subgroups

Details

- South Asia, reaching from Afghanistan in the west and Bangladesh in the east, is home to at least six hundred languages belonging to six large language families, including Dravidian, Indo-European and Sino-Tibetan.
- The Dravidian language family's four largest languages — Kannada, Malayalam, Tamil and Telugu — have literary traditions spanning centuries
- the geographical origin of the Dravidian language nor its exact dispersal through time is known with certainty.
- The consensus of the research community is that the Dravidians are natives of the Indian subcontinent and were present prior to the arrival of the Indo-Aryans (Indo-European speakers) in India around 3,500 years ago.

Significance

- The study of the Dravidian languages is crucial for understanding prehistory in Eurasia, as they played a significant role in influencing other language groups

7. India Convention Promotion Bureau (ICPB)

- ICPB has been set up under the patronage of the Ministry of Tourism
- It will promote India as a venue for International Conferences and Exhibitions.
- The Ministry of Tourism has recognized Meetings, Incentives, Conventions and Exhibitions (MICE) as a 'Niche Tourism' product in order to overcome the aspect of 'seasonality' and to promote India as a 365 day' destination and attract tourists with specific interests to India.
- This non-profit organization has members comprising national airlines, hotels, travel agents, tour operators, tourist transport operators, conference organizers, etc. participate in International MICE Tourism trade fairs like IMEX in Frankfurt and Las Vegas, EIBTM-Barcelona and AIME- Melbourne along with the India tourism overseas offices.

8. Madhavpur Mela

- It is an initiative of Ministry of Culture
- Madhavpur Mela was a festival held in Gujarat
- It had a first ever cultural integration with the North-East under Ek Bhart Shrestha Bharat

MISCELLANEOUS NEWS

1. Acheulean and Soanian

- Acheulean tools were produced during the Lower Palaeolithic era across Africa and much of West Asia, South Asia, and Europe, and are typically found with *Homo erectus*
- They manufactured distinctive oval and pear-shaped "hand-axes"
- It is thought that Acheulean technologies first developed in Africa

Soanian

- Soanian is an archaeological culture of the Lower Palaeolithic in the Siwalik region of the Indian subcontinent
- Soanian sites are found along the Siwalik region in present-day India, Nepal and Pakistan

Context

- Researchers from the Anthropological Survey of India (AnSI) have discovered a number of Acheulian artefacts (dated to about 1, 500,000–1, 50,000 years ago) along with contemporary Soanian ones from an unexplored site at Ghumarwin in Bilaspur district of Himachal Pradesh.

Details

- This is the first time that the AnSI has found a large number of Acheulian artefacts along with the Soanian tools at a same site.
- The oldest dated Acheulian sites in India are those at Attirampakkam in Tamil Nadu, dating to 1.5 million years ago, whereas recent assessments of the South Asian Paleolithic (Stone Age culture) records have suggested that most Soanian assemblages are younger than Acheulian evidence in the Siwalik region.
- Present Acheulian discovery from unexplored site at Ghumarwin indicates that the river Sutlej and its tributaries have been a prehistoric corridor for the peninsular Acheulian man into the Siwalik region

Significance

- The stretches between Bilaspur and Ghumarwin hold answers to how our ancestors survived million of years ago in the Siwalik ranges

Threats

- They are under threat due developmental work such as road and bridges, and also agriculture.

2. Geological Survey of India

- It is a Ministry of Mines organization
- The main functions of GSI relate to creation and updation of national geoscientific information and mineral resource assessment.
- These objectives are achieved through ground surveys, air-borne and marine surveys, mineral prospecting and investigations, multi-disciplinary geoscientific, geo-technical, geo-environmental and natural hazards studies, glaciology, seismotectonic study, and carrying out fundamental research.
- GSI, headquartered at Kolkata.

3. Jackfruit to be Kerala's state fruit

- Elephant is the state animal of Kerala,
- 'Great Hornbill' the bird
- 'kanikkonna' the official flower.
- pearl spot popularly known as 'karimeen', as its official fish

Details

- The government also conducts 'Jack Fruit Fest' every year to popularise the fruit and its products among public.
- Besides the taste and nutritious quality, the timber value of jack fruit tree is also high.
- Compared to many other trees, it plays a great role in fighting greenhouse gases

4. Regional Integrated Multi-Hazard Early Warning System (RIMES)

Context

- The Odisha government has initiated steps to strengthen the quality and ability to predict and increase the response capacity of Orissa Disaster Management Authority (OSDMA) with an 'integrated multi-hazard early warning system'.
- So it would collaborate with RIMES, a UN-registered agency

RIMES

- RIMES, an inter-governmental body registered under the United Nations, is owned and managed by 45 collaborating countries in Asia Pacific and African Region.

- RIMES evolved from the efforts of countries in Africa and Asia, in the aftermath of the 2004 Indian Ocean tsunami, to establish a regional early warning system within a multi-hazard framework for the generation and communication of early warning information, and capacity building for preparedness and response to trans-boundary hazards.
- RIMES operates from its regional early warning center located at the campus of the Asian Institute of Technology in Pathumthani, Thailand.

What will it do?

- The agency will provide technical support to OSDMA regarding analysis of data to be generated through automatic weather stations being installed in all the gram panchayats, validation of the forecast, early warning and preparedness for lightning, heat wave, flood, drought and Tsunami.
- It would also enhance the warning response capacities of the OSDMA by imparting specialised expert training. The RIMES will help to develop a one-stop risk management system for all OSDMA needs-integration of multiple data database/servers.

Advantages

- The collaboration will strengthen OSDMA for more effective management during natural disasters.
- The association would also help in transfer of best practices among different countries of the world in handling natural disasters

5. Krem Puri: World's Longest Sandstone Cave Found in Meghalaya

- Meghalaya now boasts of the longest sandstone cave in the world
- The cave named Krem Puri was discovered near the village of Laitsohum in Mawsynram area of East Khasi Hills district.
- It is 6,000m longer than the current listed sandstone cave in the world, Cueva El Samán, (18,200m) in Venezuela.

6. National Physical Laboratory

- CSIR-National Physical Laboratory (CSIR-NPL) is the custodian of Indian Standard Time (IST) and has the responsibility for realization, establishment, maintenance and dissemination of IST through an act of Parliament.

7. National Samosa Week

- In this event participants will make, sell, and consume the popular Indian snack to raise money for charity.
- It is the brainchild of a Leicester-based media personality who believes that the popularity of the triangular-shaped savoury snack transcends all barriers and can become a means to unite different communities in the U.K.

- During the event activities including samosa-eating contests, pop-up samosa shops and tastiest samosa awards would be taken up.
- Some of the winners of the National Samosa Week's prize draw will win tickets to the Leicester Curry Awards 2018, to be held in Leicester on April 22 where over 30 of the city's shortlisted restaurants will compete for the top prize.

Why is it being conducted?

- The proceeds from the sale in Leicester are aimed at two charities — mental health charity LAMP and Care of Police Survivors (COPS) — dedicated to helping the families of police officers who have lost their lives in the line of duty.

PRACTICE QUESTIONS

1. Consider the following statements:

1. Ozone is a greenhouse gas which is a key component of smog.
2. Ethane and propane escape into the air from leaks during natural gas extraction and distribution.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

2. Consider the following statements:

1. Fracking is the process of drilling down into the earth and fracturing rock to extract shale gas.
2. Methane is a potent greenhouse gas which is emitted from natural gas sources.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

3. Consider the following statements:

1. A macrophyte is an aquatic plant that grows in or near water and is only submergent.
2. In lakes and rivers macrophytes produce oxygen, and act as food for some fish and wildlife.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

4. Consider the following statements:

1. A decline in a macrophyte community may indicate water quality problems.
2. Low nutrient levels may create an overabundance of macrophytes, which may interfere with lake processing.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

5. Consider the following statements:

1. La Nina — a weather condition that generally brings heavy rains to India.
2. According to IMD, a monsoon is normal when the total amount of rainfall in the country between June and September is within 10 per cent (plus or minus) of the average rain over a long period.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

6. Consider the following statements about Emissions Trading Scheme (ETS):

1. An ETS is a market-based mechanism.
2. Under this mechanism a cap is set on the amount of carbon dioxide or other greenhouse gases that can be emitted by covered entities.
3. The emitters can only buy additional allowances from other entities to compensate for their deficiency.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

7. Consider the following statements:

1. National Science Day is celebrated on February 28.
2. It is celebrated to mark Dr. C.V. Raman's discovery of the scattering of light, also known as the Raman Effect.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

8. Consider the following statements:

1. The Indian Regional Navigational Satellite System (IRNSS) is a regional satellite navigation system.
2. IRNSS was renamed Navigation Indian Constellation (NAVIC).
3. IRNSS will be an independent and autonomous regional navigation system aiming a service area of about 1500 kilometres around India.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

9. Consider the following statements:

1. Intermediate-Range Nuclear Forces Treaty is a nuclear-arms-control accord reached by the United States and the Soviet Union.
2. Those two nations agreed to eliminate their stocks of intermediate-range and shorter-range or medium-range missiles.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

10. Consider the following statements:

1. The Gwadar port is being considered by India, Iran and Afghanistan as a gateway for trade with central Asian countries.
2. The Chabahar Port in the Balochistan province is being built by China.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

11. Consider the following statements:

1. The United Nations Convention on the Rights of the Child is a human rights treaty which sets out the civil, political, economic, social, health and cultural rights of children.
2. The Convention defines a child as any human being under the age of eighteen, unless the age of majority is attained earlier under national legislation.
3. India ratified UNCRC in 1992, agreeing in principle all articles except with certain reservations on issues relating to child labor.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

12. Consider the following Statements with reference to Indian Council of Medical Research (ICMR)

1. It comes under Ministry of Science under Department of Biotechnology
2. It is one of the oldest and largest medical research bodies in the world

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

13. Nexavar is used to treat

- A. Tuberculosis
- B. Heart issue
- C. Cancer
- D. Diabetes

14. Prasar Bharati is under the control of

- A. Ministry of Information and broadcasting
- B. Ministry of Science and Tech
- C. Ministry of Electronics
- D. None of the above

15. With reference to Shangri-La Dialogue (SLD), consider the following statements:

1. It is a Track two diplomacy
2. It gets its name from Shangri la hotel in Japan
3. It is an economic summit to arrest funding to Terrorist outfits

Select the incorrect answer using the code given below.

- A. Only 1 and 2
- B. Only 2 and 3
- C. Only 1 and 3
- D. All of the above

16. Which of the above states do not share border with Myanmar?

- A. Arunachal Pradesh
- B. Meghalaya
- C. Manipur
- D. Nagaland

17. Consider the following statements about Currency

1. A currency war refers to a situation where a number of nations seek to deliberately depreciate the value of their domestic currencies.
2. Currency wars are also known as competitive devaluations.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

18. Consider the following statements:

1. In the floating exchange rates, currency values are determined by central bank.
2. Currency depreciation is usually done by a nation's central bank.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

19. Consider the following statements about Prasar Bharthi:

1. It is an autonomous body set up by an Act of Parliament.
2. It does not include AIR and Doordarshan TV network

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

20. Which of these establishments promote responsible exploration of Solar system?

- A. Planetary Protection System -NASA
- B. Responsible Space Exploration – Russia
- C. Peaceful Space Environment -China
- D. Global Space Station

21. Consider the following statements about UNICEF:

1. United Nations Children's Fund is a United Nations (UN) programme headquartered in New York City.
2. It is not a member of the United Nations Development Group.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

22. Consider the following statements about Liquidity Adjustment Facility:

1. This arrangement allows banks to respond to liquidity pressures.
2. LAF includes only reverse repo agreements

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

23. Consider the following statements about Safeguards Duty:

1. Safeguards give domestic producers a period of grace to become more competitive vis-à-vis imports.
2. Safeguards usually take the form of increased duties to higher than bound rate or standard rates or quantitative restrictions on imports.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

24. India by the Nile festival is organised in which of the countries?

- A. Mexico
- B. Egypt
- C. Israel
- D. Saudi Arabia

25. Consider the following statements:

1. Stubble burning is the act of removing paddy crop residue from the field to sow wheat.
2. Combines are machines that harvest, thresh i.e separate the grain, and also clean the separated grain, all at once.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

26. Consider the following statements:

1. European Bank for Reconstruction and Development (EBRD) is an international financial institution.
2. EBRD is a multilateral developmental investment bank.
3. EBRD uses investment as a tool to build market economies..

Which of the above statements are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

27. Consider the following statements about Tiangong-1/ Heavenly Palace 1:

1. It is a prototype space station.
2. It is launched by China.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

28. Consider the following statements about Trade War:

1. A trade war happens when one country puts up a trade barrier, like strict tariffs.
2. It is done to protect its economy from foreign competition.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

29. Consider the following statements about Pritzker Prize:

1. It is awarded annually to honor a living architect or architects.
2. It is awarded to work which has produced consistent and significant contributions to humanity and the built environment through the art of architecture.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

30. Consider the following statements about Swatantra Sainik Samman Yojana (SSSY):

1. It is a pension to freedom fighters.
2. It is a token of respect for their contribution in the national freedom struggle and on their demise, to their eligible dependents.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

31. Consider the following statements:

1. NAM is a grouping against the power blocs of cold war era.
2. NAM is headquartered in Jakarta

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

32. Consider the following statements about H1B Visa:

1. The H-1B allows U.S. employers to employ domestic workers.
2. It applies for speciality occupations.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

33. Consider the following statements:

1. Passive euthanasia is a condition where there is withdrawal of medical treatment.
2. Active euthanasia is the use of lethal substances or forces, such as administering a lethal injection.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

34. Consider the following statements about Bedaquiline and Delamanid:

1. Delamanid is a bactericidal drug that kills Tuberculosis bacteria.
2. It will be included in the Revised National TB Control Program (RNTCP).
3. Bedaquiline was launched by the ministry of health in 2016.

Which of the statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

35. Consider the following statements:

1. Irula tribes inhabit the area of the Nilgiri mountains.
2. They are spread over the states of Karnataka and Kerala.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

36. Consider the following statements:

1. Serious Fraud Investigation Office (SFIO) is setup to investigate corporate frauds.
2. It is under the jurisdiction of the Ministry of Corporate Affairs.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

37. Consider the following criteria about Vanishing Companies:

1. It should have failed to file returns with Registrar of Companies (ROC) or with Stock Exchange for a period of two years.
2. None of its Directors are traceable.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

38. Among the following, which is the oldest living animal in the world?

- A. Chameleon
- B. Gastrotrichs
- C. Corals
- D. Mayflies

39. Consider the following statements with reference to the concept of a 'Seed Village':

1. It revolves around Cutting down the seed replacement rate.
2. Replacing artificial exotic HYV seeds with existing local seed varieties.
3. Engaging trained group of farmers in production of seeds.

Select the correct answer using the codes below:

- A. 1 and 2 only
- B. 3 only
- C. 2 only
- D. 1, 2 and 3

40. Consider the following statements:

1. World Monuments Fund (WMF) is a private, international, non-profit organization dedicated to the preservation of historic architecture and cultural heritage sites.
2. WMF publishes the World Monuments Watch two year once.

Choose the correct answer from the options given below:

- A. 1 only
- B. 2 only
- C. Neither 1 nor 2
- D. Both 1 and 2

41. "JIGYASA", recently seen in news is a

- A. Interstellar exploration programme of ISRO
- B. Student- scientist connect programme
- C. Earth core drilling programme of Ministry of Earth Sciences
- D. Biodiversity documentation programme in the western Ghats

42. An economy heats up due to

1. Demand deficit
2. Excess supply
3. High liquidity infusion

Select the correct answer using the codes below

- A. 1 and 2 only
- B. 2 only
- C. 3 only
- D. 2 and 3 only

43. The constitution of India is republican because it

- A. provides for an elected Parliament
- B. provides for adult franchise
- C. contains a bill of rights
- D. has no hereditary elements

44. Consider the following statements:

1. Hodaigiri is the harvest dance associated with Reang tribes.
2. Jhum cultivation is one of the primary occupations of Reang tribes.
3. Majority of Reang population are literates.

Choose the correct statements:

- A. 1 and 3
- B. 1 and 2
- C. 2 and 3
- D. All are correct

45. From which of the countries, Constitution of India has adopted fundamental duties?

- A. USA
- B. Canada
- C. Erstwhile USSR
- D. UK

46. Ever greening of patents is done by

- A. Citing another use of the same product
- B. Citing another process of forming the same product
- C. Applying for extension of patent term
- D. Citing another product with same use

47. Chauth and Sardeshmukhi were paid by

- A. Mughlai
- B. Pilgrims
- C. Foreign visitors
- D. Mansabdars

48. Consider the following statements about Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006:

1. It seeks to recognise forest rights of forest dwelling Scheduled Tribes (FDSTs) who have been occupying the land.
2. The land may be allocated in all forests except the core areas of National Parks and Sanctuaries

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

49. Consider the following statements about Scheduled Tribes and Other Traditional Forest , Dwellers (Recognition of Forest Rights) Act of 2006:

1. The Gram Panchayat is empowered to initiate the process of determining the extent of forest rights that may be given to each eligible individual or family.
2. Communities who depend on the forest for survival and livelihood reasons, but are not forest dwellers or Scheduled Tribes, are also included from the purview of the Bill.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

50. Consider the following statements about Indian Ocean Rim Association (IORA):

1. As per the membership criteria, only littoral states can be part of IORA.
2. France is a dialogue partner of the Indian Ocean Rim Association (IORA).

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

51. Consider the following statements about Indian Ocean Commission:

1. It is an intergovernmental organization to strengthen the ties of friendship for the entire population of the African Indian Ocean region.
2. The COI is composed of five African Indian Ocean nations: Comoros, Madagascar, Mauritius, Réunion (an overseas region of France), and Seychelles.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

52. Consider the following statements:

1. It is built across the Mahanadi River in Odisha.
2. Taliperu Reservoir is a medium irrigation project constructed across the Taliperu River, a tributary of Godavari River.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

53. Consider the following statements about Stockholm International Peace Research Institute:

1. It is an international institute based in Sweden
2. It is dedicated to research into conflict, armaments, arms control and disarmament.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

54. Consider the following statements about Geological Survey of India:

1. It is under Ministry of Mines.
2. The main functions of GSI relate to creation and updation of national geoscientific information and mineral resource assessment.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

55. Consider the following statements about Stop TB Partnership:

1. It is a unique international body with the power to align actors all over the world in the fight against TB.
2. They include international and technical organizations, government Programmes, research and funding agencies, foundations, NGOs, civil society and community groups and the private sector.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

56. Consider the following statements about Chemical Weapons Convention (CWC):

1. India has signed CWC.
2. It is administered by the Organisation for the Prohibition of Chemical Weapons (OPCW).

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

57. Consider the following statements about India-based Neutrino Observatory (INO):

1. It is to study fundamental particles called neutrinos.
2. The project involves the construction of an underground laboratory.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

58. Consider the following statements about GLOBE Observer App:

1. NASA and the GLOBE program released the GLOBE Observer App
2. It encourages the public to make environmental observations that complement NASA satellite observations.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

59. Ultima Thule is a:

- A. Spacecraft
- B. Meteor
- C. Galaxy
- D. An object in space\

60. Consider the following statements about LOU:

1. A LoU is an assurance given by one bank to another to meet a liability on behalf of a customer.
2. LoUs are used in international banking transactions.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

61. Consider the following statements about Fugitive Economic Offenders Bill, 2018:

1. The Bill would help in laying down measures to deter economic offenders from evading the process of Indian law by remaining outside the jurisdiction of Indian courts.

2. A Fugitive Economic Offender is a person against whom an arrest warrant has been issued in respect of a scheduled offence and who has left India so as to avoid criminal prosecution, or being abroad, refuses to return to India to face criminal prosecution. Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

62. Consider the following statements about National Financial Reporting Authority (NFRA):

1. As per the Companies Act, 2013 the NFRA is tasked with the job of recommending accounting and auditing standards, ensuring compliance with them and overseeing the quality of service of the accounting and audit professions.

2. It has also been given the power to investigate matters of professional misconduct by chartered accountants or CA firms, impose penalty and debar the CA or firm for up to 10 years.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

63. Consider the following statements about Electricity Act, 2003:

1. Creation of an open market for electricity.
2. In an open market, anyone could produce power anywhere and sell it to anyone else at mutually agreed prices.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

64. Consider the following statements about Index of Industrial Production (IIP) and the Manufacturing Purchasing Managers' Index (PMI):

1. PMI is a private sector survey while the IIP is gauged by the government.
2. While the IIP is a measure of output, PMI, as the name suggests, measures activity at the purchasing or input stage.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

65. Consider the following statements about Cross-subsidy surcharge (CSS):

1. This is a surcharge that a discom levies on a customer for defraying costs of free or subsidised power to some sections of the society.
2. The Electricity Act allows CSS.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

66. Which of these is India's biggest gas marketing firm?

- A. GAIL
- B. BPCL
- C. IOC
- D. ONGC

67. Consider the following statements about India-based Neutrino Observatory (INO):

1. The observatory is to come up in Bodi West Hills in Theni district.
2. The project has become controversial on environmental grounds, given the proposed site's proximity to the Mathikettan Shola National Park in Kerala's Western Ghats.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

68. Consider the following statements about Neutrinos:

1. Neutrinos are subatomic particles.
2. They are extremely difficult to detect.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

69. Consider the following statements about Bezbaruah Committee:

1. The Ministry of Home Affairs constituted this Committee.
2. This committee was constituted to look into concerns of the persons hailing from the North-Eastern states who are living in different parts of the country.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

70. Consider the following statements about Copernicus Programme:

1. Copernicus is the world's largest single earth observation Programme.
2. It is directed by the European Commission in partnership with the European Space Agency.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

71. Consider the following statements about Sariska Tiger Reserve:

1. It is a national park and a tiger reserve.
2. It is a part of the Aravalli Range.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

72. Consider the following statements about Ranthambore National Park:

1. Ranthambhore wildlife sanctuary is known for its Bengal tigers.
2. It is bounded to the north by the Banas River and to the south by the Chambal River.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

73. Consider the following statements about Merchandise Exports from India Scheme (MEIS):

1. It was introduced to promote exports.
2. The idea is to offset the infrastructural inefficiencies faced by exports of specified goods and to provide a level playing field.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

74. Which of these schemes fall under export promotion schemes in India?

1. Export promotion capital goods scheme
2. Special economic zones
3. Duty-free import authorisation scheme

- A. 1 and 2 only
- B. 1 and 3 only
- C. 1 only
- D. All of the above

75. Consider the following statements about Water Scarce Cities Initiative:

1. It is one of the programs of World Bank.
2. Building resilience against climate change is one of the objectives of the initiative.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

76. Consider the following statements about Atal Bhujal Yojana:

1. It is a water resources ministry initiative for water conservation.
2. It will be supported by the World Bank.
3. The emphasis of the scheme will be on recharge of ground water sources and efficient use of water.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

77. Consider the following statements about World Water Day:

1. The theme for World Water Day 2018 is 'Nature for Water' – exploring nature-based solutions to the water challenges.
2. Sustainable Development Goal commits the world to ensuring that everyone has access to safe water by 2030.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

78. Consider the following statements about Nowruz:

1. In India, the Parsi community, who follow Zoroastrianism, celebrate Navroz.
2. Now means 'new' and Ruz means 'day', so Nowruz signifies "new day". It coincides with the Spring Equinox.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

79. Consider the following statements about Lithium:

1. It powers electric vehicles (EVs).
2. Lithium is used primarily in batteries, glass and ceramics, with other uses including rocket fuel and lasers.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

80. Consider the following statements about Seeker Technology in Brahmos:

1. Seeker determines the accuracy of a missile.
2. Supersonic cruise missile BrahMos was successfully flight-tested for the first time with an indigenous seeker.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

81. Consider the following statements about Smart India Hackathon:

1. It is the World's largest Nation-Building Digital Initiative of the HRD ministry.
2. It will aim to find digital solutions to problems in the areas of power, education, health, water, finance etc.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

82. Consider the following statements about Microplastics:

1. These pellets are made of polyethylene and polypropylene, and a few of them were unidentified polymers.
2. Microplastics include things like films, fibres, fragments and pellets.
3. Due to the short residence time of microplastics in the sea and on the beaches, they tend to adsorb various pollutants.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

83. Soyuz MS-08 spacecraft is a manned spacecraft launched by which of the following countries?

- A. Russia
- B. China
- C. France
- D. Germany

84. Consider the following statements about GSAT-6A:

1. The satellite will provide a platform for developing technologies such as handheld ground terminals and network management techniques.
2. These are useful in satellite-based mobile communication applications

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

85. Consider the following statements

1. Melting glaciers have a little influence on the development of sea level rise.
2. In the Paris Agreement, 195 member states of the United Nations Framework Convention on Climate Change agreed to limit the rise in global average temperature to significantly below 1.5 degrees Celsius

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

86. Consider the following statements about Waste Management:

1. Inadequate waste management can cause pollution, growth and multiplication of vectors like insects and rodents.
2. Biomedical waste is any kind of waste containing infectious (or potentially infectious) materials

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

87. Consider the following statements:

1. Maharashtra was the first State to introduce the institution of Lokayukta.
2. The Administrative Reforms Commission headed by Late Morarji Desai in 1966 recommended the setting up of the institution of Lokayukta.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

88. Which of the following are Refractory ceramics?

1. Tantalum carbide
2. Silver Copper Telluride (AgCuTe)
3. Sodium Nitrite
4. Hafnium carbide (HfC)

Which of the statements are correct?

- A. Only 1 and 2
- B. Only 1
- C. Only 1 and 4
- D. 1,2 and 3

89. Mishmi Tribe belong to which state?

- A. Madhya Pradesh
- B. Himachal Pradesh
- C. Arunachal Pradesh
- D. Andhra Pradesh

90. Consider the following statements, with reference to the National Conference on Drug Law Enforcement

1. It was initiated by both Punjab Govt and Ministry of health
2. This was in collaboration with World Narcotics body and WHO

Which of the statements are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

91. World Happiness Index is published by

- A. World Economic Forum
- B. World Bank
- C. United Nations Sustainable Development Solutions Network
- D. Trans world pacific Group

92. Look at the following statements about "Office of profit"

1. It is defined in the constitution
2. The president has the final powers in terms of disqualification and the court cannot look into the decision
3. 15 Percent clause for the cabinet was part of original constitution

Which of the statements are correct?

- A. All of the above
- B. Only 2 and 3
- C. None of the above
- D. Only 1 and 2

93. Consider the following statements about Seeker Technology in Brahmos:

1. European Union has an advanced data protection framework, named as the General Data Protection Regulation (GDPR).
2. India currently provides data protection under Information Technology Act, 2000.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

94. Consider the following statements with respect to Forest Fire in India:

1. Forest Survey of India (FSI) analyses the data by overlaying the digitised boundaries of forest areas.
2. The FSI relays news of the fire to the concerned State.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

95. Consider the following statements::

1. At present, up to 49% FDI is allowed through the automatic route, though no significant investment has come into the sector.
2. Draft Defence Production Policy, 2018 has suggested further liberalisation of Foreign Direct Investment (FDI), by permitting up to 90% FDI under the automatic route.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

96. Consider the following statements:

1. Indian Neutrino observatory is promoted by the Tata Institute of Fundamental Research.
2. INO is planned to be located in Theni District of Kerala.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

97. Consider the following statements:

1. Cephalosporins and linezolid are classes of antibiotic drugs.
2. India's antibiotic consumption rate is one of the highest in the World.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

98. Consider the following statements:

1. INS Tarkash is the fifth Talwar-class frigate.
2. These ships use stealth technologies and a special hull design to ensure a reduced radar cross section.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

99. Consider the following statements about Google Street View:

1. It displays panoramic views of public spaces where the images captured by Google's moving vehicles, adding a layer of depth and reality to the maps.
2. The application allows users to explore places around the world through 360 degree panoramic street level imagery and view public area.

Which of the above statements are incorrect? W

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

100. Consider the following statements about Rashtriya Uchchatar Shiksha Abhiyan (RUSA):

1. It is a centrally sponsored scheme launched in 2013 to provide strategic funding to all State higher educational institutions.

2. It is a voluntary scheme.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

101. Consider the following statements about Google Street View:

1. It displays panoramic views of public spaces where the images captured by Google's moving vehicles, adding a layer of depth and reality to the maps.

2. The application allows users to explore places around the world through 360 degree panoramic street level imagery and view public area.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

102. Consider the following statements:

1. Autism is a developmental disorder characterized by troubles with social interaction and communication, and by restricted and repetitive behavior.
2. Autism spectrum disorder impacts the nervous system and affects the overall cognitive, emotional, social and physical health of the affected individual.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

103. In the assessment of autism, two types of assessment tools are being recommended, consider the following statements:

1. One is International Clinical Epidemiology Network INCLIN Tool developed under INCLIN study – “Neuro Developmental Disorder in Children in India”
2. The other tool is Indian Scale of Assessment of Autism (ISAA) developed by the Ministry of SJ&E.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

104. Consider the following statements about S-400:

1. It is a long range air defence missile system.
2. It can destroy incoming missiles and aircraft including drones.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

105. Consider the following statements:

1. GSAT-6A, which will provide mobile communication to India through multi beam coverage facility
2. ISRO's GSLV-F08 rocket launched the satellite, marking its 12th flight sixth flight with indigenous Cryogenic upper stage.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

106. Consider the following statements:

- 1 High-thrust Vikas engine and electromechanical actuation system will be inducted into GSAT 6.
2. The high-thrust Vikas engine and other systems would be eventually used in the future missions, including India's second moon mission, Chandrayaan-II.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

107. Consider the following statements:

1. ISRO's second mission to the moon, Chandrayaan-II, will be launched in the year 2020.
2. GSAT-6A is a high-power S-band communication satellite.

Which of the statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

ANSWER KEYS

Question No	Answer Keys
1.	C
2.	C
3.	B
4.	A
5.	C
6.	A
7.	C
8.	D
9.	C
10.	D
11.	D
12.	B
13.	C
14.	D
15.	D
16.	B
17.	C
18.	B
19.	A
20.	A
21.	A
22.	A
23.	A
24.	B
25.	C

Question No	Answer Keys
26.	D
27.	C
28.	C
29.	C
30.	C
31.	B
32.	B
33.	C
34.	D
35.	A
36.	C
37.	C
38.	C
39.	B
40.	D
41.	B
42.	C
43.	D
44.	B
45.	C
46.	C
47.	A
48.	A
49.	D
50.	C

Question No	Answer Keys
51.	C
52.	C
53.	C
54.	C
55.	C
56.	C
57.	C
58.	C
59.	D
60.	C
61.	C
62.	C
63.	C
64.	C
65.	C
66.	A
67.	C
68.	C
69.	C
70.	C
71.	C
72.	C
73.	C
74.	D
75.	C

Question No	Answer Keys
76.	D
77.	C
78.	C
79.	C
80.	C
81.	C
82.	A
83.	A
84.	C
85.	D
86.	C
87.	C
88.	C
89.	C
90.	C
91.	C
92.	C
93.	C
94.	C
95.	C
96.	A
97.	C
98.	C
99.	C
100.	B

Question No	Answer Keys
101.	C
102.	C
103.	C
104.	C
105.	C
106.	C
107.	B

MAINS PRACTICE QUESTIONS

Paper- 1

1. Is death Penalty an answer to Child rape? Critically Analyze. Also discuss Justice Verma committee recommendation and its recommendations on Rape
2. Empowering people with disability requires providing them employment and self-respect. In the light of this statement enumerate the steps taken by Govt to advance this goal.

Paper- 2

1. Afghanistan needs to resolve its crisis without letting other countries interfere in its internal matters. Discuss the role played by India in the neighbourhood of Afghanistan
2. The study in India Initiative will help in increasing India's Soft Power. Discuss the importance of the initiative and problems that need to be addressed to make it a success.
3. The Kabul Process is a Futile Exercise. Critically Analyze.
4. India's "Think West" policy is progressively getting robust and vigorous. Explain.
5. The UN-backed study that was published by the BBC says there is not a single lake in Bengaluru that is fit for Human consumption. Explain this with reference to Bellanduru Lake and suggest measures
6. With China increasing its Defense Budget what are the possible implications for India and the world? Analyse
7. The energy drinks that are consumed are not only doses of high energy but a path to increased health Hazard. Comment.
8. India is slowly losing the grip over its neighbors and needs to reinvent its Foreign Policy from Big brother to elder Brother Attitude. Voice your opinion and suggest Suitable Measures.
9. There is need to revise, refine and improve reservation policy in India depending upon its dynamic needs. Critically Examine.
10. With India-Seychelles Military Agreement leaking online and protests against India, discuss the importance of Assumption Island to India
11. The Trump's administration call for imposing high tariff barriers sparks global trade war. What are its implications for India? How should this Problem be handled?
12. India Vietnam ties have been elevated from "strategic" to a "comprehensive strategic" partnership. Explain the importance of Vietnam to India and its growing relationship.
13. Is France India's new Russia? Critically comment.
14. Discuss the various issues involved when a Practicing lawyer also works as a Parliamentarian.
15. Will death Penalty to child rapist act a deterrent? Examine.
16. India and China started with similar levels of defence production but with decades past India looks stranded while China becomes leading exporter. What can India learn from China in this process?
17. India has recently been admitted to number of Weapon conventions, how is it going to advance the Indian dream of preventing proliferation? Also comment if the Chemical weapons convention been truly able to curb the menace?
18. What is a Neutrino ? What are the objectives of INO? Also explain why was the project opposed in spite of its importance.
19. With passive euthanasia judgment helping one die with dignity, should the courts also look into active euthanasia? Critically comment.
20. Discontinuation of LoU by RBI was a knee jerk reaction. Discuss the implications and suggest suitable measures.
21. Although India and Pakistan face hurdles in bilateral relations, there should be a continuous engagement at the diplomatic level. Critically evaluate.
22. Why was the Bezbaruah Committee appointed? what are its recommendations and suggest measures to overcome the bias?
23. Shimla Agreement could have settled the Kashmir Conflict but rival strategies and its constructivist approach of internal transformation of Pakistan made India return empty. Critically analyze.
24. Poor standards of tertiary education are a drag on India's competitiveness. Elucidate. What has the Govt done in the past to overcome this issue? Also, suggest suitable reforms.

25. Non-appointment of Lokayukta is as good as non-availability of a legal mechanism to tackle corruption. Discuss.
26. Bio-medical waste is a serious health hazard that needs to be addressed immediately. What are the measures that need to be taken in this regard.
27. Indian Govt Mission for eliminating TB by 2025 requires a networked approach from laws to IT, from regulation to awareness. Examine.
28. Some tenets of Muslim personal law like polygamy, 'nikah halala' are against Women and subjugates them to whims and fancies of Men. Discuss its implications.
29. What is Enemy Property Act? Explain the various concerns raised and also the features of the act in detail.
30. The SC judgment in the Khap panchayat case establishes that law of land needs to be respected and Vigilantism cannot be tolerated. In the light of this what are the directions given by SC to curb the menace of Honor Killing?

Paper- 3

1. Critically assess India's progress in making financial inclusion a reality.
2. Is AI a danger to humanity? Critically Comment.
3. Is contract farming a panacea to farming community? Justify your View. If not what should be done to address these issues?
4. Trade Wars and Protectionism is seen as a natural response of countries to protect their own economies. To what extent does it harm the principles of globalization and free trade.
5. India's Solar power generation plans are ambitious but achievable. However, there are some challenges in the implementation. Discuss.
6. As much as AI can help Indian defense forces it can also harm them. What should India do to address this issue?
7. What is Stubble burning? What are the laws present to look into the issue? What measures need to be taken to overcome this issue?
8. The Pesticide Management Bill, 2017 addresses important issues but fails to meet the demand of all stakeholders. Critically Analyse.
9. Forest fires are not only destructive in nature but rejuvenating and revitalizing. Also comment on various laws in India and steps to be taken to overcome this issue.
10. Indian Railways has witnessed deterioration in operational and financial metrics. Suggest measures to overcome this plight.
11. Although Open Market in Electricity was envisaged by the Electricity Act, 2003, it is still far from reality. Discuss.
12. Is it time for India to move away from export subsidies and invest in trade-related infrastructure and trade facilitation measures. Examine.
13. Water conservation is the need of the hour. Illustrate with examples how water conservation can be revived by using traditional mechanisms.
14. Explain the chemical properties of Lithium and its uses. Also, comment on its geographical spread.
15. Data is the new oil. Comment on the various issues arising as a result of data breach and discuss the various initiatives taken by Govt to address this issue
16. Do you think the economy has recovered after measures like demonetization and GST? Critically examine.
17. Conservation is the need of the hour with the constant changes in Climate. Explain in reference to Svalbard Global Seed Vault and similar such initiatives in India.
18. Forest Fires have become a frequent phenomena in India. Suggest some measures to address this issue
19. The slogan "Jai Jawan Jai Kisan" is a myth in Indian economy with respect to farming. Farmers going on a protest march is a reflection of government's apathy towards farmers. What are the issues faced by farmers in India and suggest some remedies in this regard.
20. The Google Street View has been through a lot of scrutiny in many countries but continues with some restrictions. Is India right in rejecting the rollout? Critically comment

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